

**Information collection and impact assessment of
possible requirements for environmental
inspections in the area of EU legislation on
water, nature protection and trade in certain
environmentally sensitive goods**

Final Report

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Contents

EXECUTIVE SUMMARY.....	7
ABBREVIATIONS	12
1 INTRODUCTION.....	16
1.1 Purpose of the report	16
1.2 Environmental inspections and implementation of the EU environmental acquis 16	
1.3 Concepts and definitions	19
2 BASELINE ANALYSIS OF THE MEMBER STATES	22
2.1 Introduction	22
2.2 The public consultation.....	23
2.3 Baseline: lessons from the literature.....	25
2.4 Baseline analysis: water.....	36
2.4.1 <i>Introduction</i>	36
2.4.2 <i>Institutional framework</i>	37
2.4.3 <i>Strategic approach to inspection</i>	38
2.4.4 <i>Undertaking inspections</i>	39
2.4.5 <i>Follow-up, including use of sanctions</i>	41
2.4.6 <i>Capacity</i>	42
2.4.7 <i>Costs of inspection</i>	43
2.4.8 <i>Review and effectiveness of inspection</i>	44
2.4.9 <i>Conclusions: recommendations regarding the options</i>	48
2.5 Baseline: Nature Directives	54
2.5.1 <i>Introduction</i>	54
2.5.2 <i>Legislative and policy framework</i>	54
2.5.3 <i>Inspection requirements</i>	56
2.5.4 <i>Inspection planning</i>	57
2.5.5 <i>Administrative Arrangements</i>	57
2.5.6 <i>Inspection and follow-up activities</i>	58
2.5.7 <i>Awareness raising</i>	60
2.5.8 <i>Inspection capacity, review and reporting</i>	60
2.5.9 <i>Effectiveness of the inspection system</i>	62
2.5.10 <i>Costs of inspection</i>	63
2.5.11 <i>Recommendations regarding the options</i>	64
2.6 Baseline analysis of Trade in endangered species (CITES)	69
2.6.1 <i>Legislative framework</i>	69

2.6.2	<i>Inspection planning and process</i>	70
2.6.3	<i>Inspection capacity</i>	71
2.6.4	<i>Inter-institutional arrangements</i>	72
2.6.5	<i>Inspection review and reporting</i>	74
2.6.6	<i>Effectiveness of the inspection system</i>	75
2.6.7	<i>Costs of inspections</i>	77
2.6.8	<i>Conclusions and recommendations for the options</i>	78
2.7	Conclusions on the baseline for the three study subject areas	82
3	IDENTIFICATION OF OPTIONS	86
3.1	Introduction	86
3.2	The range of action in the control chain	86
3.2.1	<i>Inspection of stationary sites to check compliance with operational conditions</i> . 87	
3.2.2	<i>Incident response inspection of a stationary activity</i>	87
3.2.3	<i>Inspection to ensure certain activities are not undertaken</i>	88
3.2.4	<i>Control of transported objects</i>	88
3.2.5	<i>Product standards</i>	89
3.2.6	<i>Conclusion</i>	89
3.3	Why joined up inspection should be encouraged	89
3.4	What should an inspection address?	90
3.5	Risk-based inspection	91
3.6	Who inspects?	92
3.7	Delivering environmental outcomes through inspection under other regimes ..	93
3.8	Follow-up	93
3.9	Awareness raising.....	95
3.10	Co-ordination between institutions	95
3.11	Capacity of enforcement institutions	96
3.12	Public access to information and transparency.....	96
3.13	Evaluation of performance	96
4	THE OPTIONS	97
4.1	Introduction	97
4.2	Option 1 - Baseline	97
4.3	Option 2 – Non-legislative measures	97
4.4	Option 3 – Upgraded Recommendation	98
4.5	Option 4 – General binding instrument on criteria on control mechanisms in Member States.....	100

4.6	Option 5 – Binding instrument setting out detailed requirements for control in the Member States.....	101
4.7	Option 6 - Combined option including elements of the previous options	103
4.8	Elements of the options to address the whole control chain.....	103
4.9	Example of a binding legal instrument	104
5	IMPACT ASSESSMENT OF THE OPTIONS.....	113
5.1	Introduction	113
5.2	The impacts of implementing the control chain as a whole.....	114
5.3	Administrative costs	116
5.4	Other impacts of the elements of the control chain.....	127
5.5	The effectiveness and efficiency of options for instruments to take forward the control chain	158
6	CONCLUSIONS.....	165
6.1	Introduction	165
6.2	Implementation and enforcement problems and best practice common to all Member States analysed	165
6.3	Main conclusions on the impacts and effectiveness of the options	167
6.4	The implications of the options for the Member States	170
6.5	The implications of the options for the different legal areas of the study	173
	ANNEX: CASE STUDIES	176
7	GERMANY.....	177
7.1	Water: Drinking water	177
7.2	Germany: Water: Land spreading of fertilisers	181
7.3	Germany: Nature Directives.....	185
7.4	Germany: CITES	191
8	POLAND.....	208
8.1	Poland: Drinking Water	209
8.2	Poland: Water: Waste water treatment	218
8.3	Poland: Nature Directives	225
8.4	Poland: CITES.....	230
9	SPAIN	240
9.1	Spain: Drinking water	242
9.2	Spain: Abstraction of water	248
9.3	Spain: UWWT	259
9.4	Spain: Habitats and Species	265
9.5	Spain: CITES.....	271

9.6	Conclusions on Spain baseline	278
10	SWEDEN	280
10.1	Sweden: Water: Non-IED Emissions, Urban Wastewater Treatment and Farm Infrastructure	284
10.2	Sweden: Nature protection.....	294
10.3	Sweden: CITES	298
11	UNITED KINGDOM	304
11.1	UK: Drinking water	306
11.2	UK abstraction of water	318
11.3	UK landspreading of fertilisers and farm infrastructure	331
11.4	UK Urban Waste Water Treatment	344
11.5	UK Habitats and protected areas.....	354
11.6	UK Species Protection.....	371
11.7	UK: CITES.....	385

EXECUTIVE SUMMARY

The objectives of the report were to provide information on how inspections are currently being undertaken for selected Member States in the policy areas of water, nature protection and CITES so as to identify their strengths and weaknesses. Furthermore, combined with information from other studies, the study developed options that could be taken forward at EU level to strengthen inspection and control and it assessed the impacts of those options.

This study examined the enforcement processes for the three environmental themes in five Member States (DE, ES, PL, SE and UK). The overall conclusions of this baseline analysis are set out below and formed the baseline for impact assessment of the options developed to address the enforcement gaps. The assessment of inspection and enforcement processes, structures and capacities was undertaken within the concept of the 'control chain' - a holistic approach to understanding compliance assurance, consisting of inspection/surveillance, enforcement and compliance promotion. In essence the following elements are necessary to ensure that the control chain is effective:

- Establishing an implementation and enforcement strategy
- Compliance promotion and awareness raising
- Sufficient capacity of enforcement institutions
- Inspection and enforcement planning
- Co-ordination of control activities within Member States
- Co-ordination and co-operation across borders
- Follow-up to control actions
- Transparency and the role of the public
- Evaluation of performance of the control strategy and national inspection bodies

The compliance gap in Member States may arise from failure to adequately apply EU law (e.g. invest in infrastructure or designate sufficient areas, etc.) or from inadequate enforcement of obligations on regulated entities. It is also clear that where there is very limited enforcement capacity the levels of non-compliance are not properly known. Therefore, there is a need to increase enforcement capacity and action in some areas to address this compliance gap and deliver the benefits of the EU environmental acquis.

The structure of the enforcement authorities varies significantly across the Member States. Federal states have highly devolved structures, as do Member States such as Sweden. This presents challenges for inter-institutional working – horizontally between authorities at the same governance level and vertically between national and regional levels. The baseline identified examples of good practice in the co-ordination of enforcement work between institutions (e.g. on wildlife crime in the UK). However, challenges remain.

Enforcement institutions may be responsible for wide areas of the environmental acquis (e.g. regional authorities in Poland and Sweden or the Environment Agency in the UK). This provides opportunities for joined-up thinking on enforcement, including assessment of risk to drive actions across different areas of law. However, it also means that it can be difficult to identify the level of capacity, etc., allocated to enforcement of individual aspects of the acquis. Other institutions may be largely or entirely focused on one Directive (e.g. the Drinking Water Inspectorate in the UK). This allows for clear identification of enforcement obligations and capacity, but presents issues for inter-institutional working.

The baseline also highlighted the importance of institutions that are not primarily environmental in scope, such as the customs and police. There are good examples of their role in enforcing the environmental acquis, such as on CITES. However, even in the most active cases, environmental enforcement remains a small part of the function of these institutions and sits alongside other, often more pressing, priorities.

Inspection planning to varying degrees is widely seen. The level of planning depends on the predictive nature of the enforcement activity. Where this is focused on investigation of incidents, planning tends to rely on past experience, while for regular surveillance, other factors can be taken into account. Risk-based inspection is widely reported as the basis for control activities and is important in targeting limited resources to deliver increased enforcement outcomes.

Within the baseline there are very different types of inspection or control activity. These include:

- Reliance on self-monitoring and reporting by regulated entities with minimal site based intervention by regulators (e.g. for drinking water in Germany).
- Routine inspections to check compliance with operational conditions (the basis for much industrial inspection, urban waste water treatment, nitrates, etc.).
- Incident-based controls, responding to reported cases of non-compliance, environmental quality problems, concerns by citizens (e.g. poisoning of species, pollution incidents, etc.).
- Intelligence-led investigation, e.g. for CITES, wildlife crime and waste shipment.

The baseline identified issues of compliance with some key areas of EU law (e.g. for Urban Waste Water Treatment due to inadequate planning for investment) and with the adequacy of the controls (inspection, enforcement, compliance promotion, etc.) needed to ensure some areas of EU law were complied with. In many cases this was an issue of institutional capacity.

The effectiveness of enforcement institutions depends on the resources available to them and whether these are sufficient to address the enforcement challenges they face. The baseline analysis found very different conclusions on the sufficiency of the capacity of

institutions in the Member States. For example, the UK Drinking Water Inspectorate reports sufficient staffing and budgetary capacity. Conversely, there are severe constraints in Member States with budgetary problems, such as Spain and Poland. The nature of budgetary stability also affects capacity. For example, funding for the police wildlife crime unit in the UK was reviewed and its absolute value is limited, but of further concern was the fact that such funding was only confirmed one year ahead undermines its ability to attract staff. In conclusion, there is without doubt a need to address the capacity of enforcement institutions across many Member States.

Compliance promotion is widely seen as necessary to ensure regulated entities understand their obligations and to reduce incidents of non-compliance. The baseline found a number of compliance promotion examples, from working with the public and traders for CITES, with farmers on application of fertilisers, etc. While most enforcement authorities recognise the value of compliance promotion, the challenge is how best to target this. A key lesson is to target compliance promotion to deliver the maximum outcome where resources are limited.

The transparency of enforcement activity across the Member States varies. There are variations in how far enforcement decisions are published. For some this is proactive, for others information is on request. There is a need to enhance the proactive transparency of enforcement activity as well as to increase the facility for stakeholders to participate in inspection planning.

The baseline analysis found good examples of review of enforcement activity, such as reviews by Parliamentary Committees and National Audit Office in the UK and of County Administrative Boards in the Sweden. Furthermore, such reviews tend to ask questions about the effectiveness of inspection and enforcement as well as wider issues of compliance promotion. Additionally, they can examine issues of regulatory burdens and links to better regulation principles. Such reviews deliver conclusions that lead to improving the focus of inspection and enforcement, increasing effectiveness and can provide the basis to re-examine capacity constraints and whether budgets should be addressed. Greater use of such reviews would enhance the effectiveness of enforcement of the EU environmental acquis as well as providing a more transparent assessment of enforcement for stakeholders as well as for interested bodies such as the European Commission.

Across the control chain within the baseline analysis there were many examples of good practice, but also severe constraints on effective enforcement of the environmental acquis in the Member States. There is, therefore, a need to enhance enforcement institutions, practice and capacity in many instances. EU level intervention may, therefore, be appropriate to address these shortcomings and the options that could be taken forward at EU level appropriate to these challenges. The following options were developed to address the gaps and deficiencies in inspection and enforcement of the environmental acquis:

1. A baseline 'do nothing' option, which leaves the obligations on control actions as they are (specified in some EU environmental law and implicit in the rest) to deliver implementation of the legislative requirements.
2. A non-legislative approach, whereby the Commission supports enforcement in informal ways, e.g. through guidance or through support to existing networks of Member State enforcement bodies.
3. An upgraded Recommendation on environmental inspections replacing the 2001 RMCEI to provide a clearer, structured approach with extensive non-binding criteria addressing all key aspects of the control chain and covering the wider environment acquis. It would also provide a basis for reporting by the Member States and would increase transparency to some extent.
4. The adoption of a new general binding instrument setting out general requirements to address the different elements of the control chain. It would be applicable to the entire environmental acquis and, therefore, would need to address all of the different types of control activities, situation and compliance obligations arising from implementation of the different instruments of the acquis.
5. The adoption of a binding instrument setting out detailed requirements for control in the Member States. The detailed criteria would likely need to be elaborated for different parts of the environmental acquis. Some criteria could be set out in the body of an instrument, while others may be better described in annexes.
6. A combined option including elements of the previous options as the preceding options are not mutually exclusive. In particular option 2 can be taken forward with any of the other options.

The Impact Assessment began by assessing the impacts of taking forward the control chain and did this in two ways. The first was of the impacts of the specific elements of the control and then the control chain as a whole. Costs of individual inspection actions and planning activities are provided, as are examples of compliance promotion costs.

This analysis was followed by a consideration of the effectiveness and efficiency of the six options, i.e. the consequences of seeking to take forward the control chain within different instrumental settings. The consequences of the type of instrument chosen would not be due the impact of control chain, but the efficiency and effectiveness of implementing the control chain due to the type of instrument. The following table provides a summary of the advantages, disadvantages, effectiveness and efficiency of the options.

Option	Advantages	Disadvantages	Effectiveness	Efficiency
1 - Do nothing	<ul style="list-style-type: none"> • No costs 	<ul style="list-style-type: none"> • No progress on implementation • No information on performance 	<ul style="list-style-type: none"> • Very low 	<ul style="list-style-type: none"> • Very low
2 – Non-legislative option	<ul style="list-style-type: none"> • No extra costs for efficient systems • Little other extra costs • Promotion of best practice 	<ul style="list-style-type: none"> • Underfunded agencies would probably not engage • Progress would leave out the worst cases 	<ul style="list-style-type: none"> • Limited positive impact due to focus on better performers 	<ul style="list-style-type: none"> • Very low costs
3 – Enhanced Recommendation	<ul style="list-style-type: none"> • Provides a framework for authorities on how to measure the quality of control systems 	<ul style="list-style-type: none"> • It will still be difficult to involve the worst quality control systems • Some administrative costs 	<ul style="list-style-type: none"> • Higher than option 2 	<ul style="list-style-type: none"> • Higher than option 2
4 – Binding instrument	<ul style="list-style-type: none"> • Provides flexibility to tailor the criteria to national systems • Provides incentive for the least quality control systems to improve 	<ul style="list-style-type: none"> • Increased costs due to compulsion • Higher administrative costs 	<ul style="list-style-type: none"> • High 	<ul style="list-style-type: none"> • High
Option 5 – Binding instrument with detail prescription	<ul style="list-style-type: none"> • Sets out detailed requirements to ensure application in the MS • Should ensure greater harmonisation between the MS 	<ul style="list-style-type: none"> • Difficult to ensure all details cover the acquis in its entirety • Potential issues of integration of detailed prescription between horizontal instrument and sectoral instruments 	<ul style="list-style-type: none"> • Relatively high, but possible problems in interaction between instruments 	<ul style="list-style-type: none"> • Generally high, but issues with possible unintended additional costs in some MS
6 – Combination of options	<ul style="list-style-type: none"> • Legislation makes networking more effective 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • High 	<ul style="list-style-type: none"> • High

ABBREVIATIONS

AC	Autonomous Community (ES)
ACPO	Association of Chief Police Officers (UK)
AEUAS	National Association of Groundwater Users (ES)
ARIMR	Agency for Restructuring and Modernisation of Agriculture (PL)
BAT	Best Available Techniques
BfN	Bundesamt für Naturschutz (DE)
BMU	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (DE)
CAMS	Catchment Abstraction Management Strategy (UK)
CAP	Common Agricultural Policy
CAESAR	Certificates for Efficient Allocation of Shares Adjusted to Retention (SE)
CCSAT	Cross Compliance Self-Assessment Tool (UK)
CEMA	Customs and Excise Management Act 1979 (UK)
CITES	Convention on International Trade in Endangered Species
CJEU	Court of Justice of the European Union
CLIC	Local Information and Dialogue Committees (FR)
COTES	The Control of Trade in Endangered Species (Enforcement) Regulations 1997 (UK)
CPS	Crown Prosecution Service
Defra	Department of Environment, Food and Rural Affairs (UK)
DNRED	National Department for Intelligence and Customs Investigations (FR)
DWD	Drinking Water Directive
DWI	Drinking Water Inspectorate (UK)
DWWTS	Domestic Waste Water Treatment Systems
EA	Environment Agency
EC	European Commission
EEA	European Environment Agency
EEP	European Enforcement Project
EIA	Environmental Impact Assessment
EMAS	Eco-Management and Audit Scheme
ENDWARE	European Network of Drinking Water Regulators
ENPE	European Network of Prosecutors for the Environment
EPA	Environmental Protection Agency (IE)
E-PRTR	European Pollutant Release and Transfer Register
EU	European Union
EUFJE	European Union Forum of judges for the environment
FMP	Fixed Monetary Penalty
FVO	Food and Veterinary Office
GAEC	Good Agricultural and Environmental Condition
GBR	General Binding Rule

GDOS	Generalna Dyrekcja Ochrony Środowiska (PL)
GDP	Gross Domestic Product
GIOS	Główny Inspektorat Ochrony Środowiska (PL)
GMES	Global Monitoring for Environment and Security
GMO	Genetically Modified Organism
GWEN	Global Wildlife Enforcement Network
HCPAC	House of Commons Public Accounts Committee (UK)
HELCOM	The Helsinki Commission
HNV	High Nature Value
HPA	Health Protection Agency (UK)
HPU	Health Protection Unit
IED	Industrial Emissions Directive
IMPEL	EU Network for the Implementation and Enforcement of Environmental Law
INECE	International Network for Environmental Compliance and Enforcement
IOS	Inspekcja Ochrony Środowiska (PL)
IPPC	Integrated Pollution Prevention and Control
ISWK	Informatyczny System Wspomagania Kontroli (PL)
IT	Information Technology
IUCN	International Union for the Conservation of Nature
JNCC	Joint Nature Conservation Committee (UK)
KPOŚK	Krajowy Program Oczyszczania Ścieków Komunalnych (PL)
KZGW	Krajowy Zarząd Gospodarki Wodnej (PL)
LANA	Bund/Länderarbeitsgemeinschaft Naturschutz, Landschaftspflege und Erholung (DE)
MA	Management Authority
MEA	Multi-lateral Environmental Agreement
MoU	Memorandum of Understanding
MS	Member State
N2K	Natura 2000
NAO	National Audit Office (UK)
NDNAD	National DNA Database (UK)
NE	Natural England (UK)
NFI	National Forest Inventory (SE)
NGO	Non-governmental Organisation
NIK	Najwyższa Izba Kontroli (PL)
NVZ	Nitrate Vulnerable Zone
OECD	Organisation for Economic Cooperation and Development
Ofwat	The Water Services Regulation Authority (UK)
OMA	Operator Monitoring Assessments (UK)
OPRA	Operational Risk Appraisal
OSM	Operator Self-Monitoring (UK)
PACE	Police and Criminal Evidence Act 1984 (UK)
PAW	Partnership for Action Against Wildlife Crime (UK)

p.e.	population equivalent
PO	Plany Ochronne (PL)
POM	Programme of Measures
PUL	Plany urządzania lasu (PL)
PWCO	Police Wildlife Crime Officers (UK)
PZO	Plany Zadan Ochronnych (PL)
RDOS	Regionalna Dyrekcja Ochrony Srodowiska (PL)
REDIA	State Environmental Inspection Network (ES)
RES	Regulatory Enforcement and Sanctions Act 2008 (UK)
RIS	Swedish National Inventory of Forests (SE)
RBMP	River Basin Management Plan
RMCEI	Recommendation 2001/331/EC providing for minimum criteria for environmental inspections
RoHS	Restriction of Hazardous Substances Directive
RPA	Rural Payments Agency (UK)
RSA	Restoring Sustainable Abstraction (UK)
RSPB	Royal Society for the Protection of Birds (UK)
RSPCA	Royal Society for the Prevention of Cruelty to Animals (UK)
SA	Scientific Authority
SAC	Special Area of Conservation
SANEPID	Panstwowa Inspekcja Sanitarna (PL)
SCI	Site of Community Importance
SCM	Standard Cost Model
SEARS	Scotland's Environment and Rural Services (UK)
SEPA	Scottish Environment Protection Agency (UK)
SEPRONA	El Servicio de Protección de la Naturaleza (ES)
SINAC	National Water Consumption Information System (ES)
SK	System Kontroli (PL)
SME	Small and Medium-sized Enterprise
SMR	Statutory Management Requirement
SOIVRE	Servicio Oficial de Inspección, Vigilancia y Regulación del Comercio Exterior (ES)
SNH	Scottish Natural Heritage (UK)
SPA	Special Protection Area
SRG	Scientific Review Group
SSSI	Site of Special Scientific Interest (UK)
SwEPA	Swedish Environmental Protection Agency (SE)
TAM	traditional Asian medicine
TOZ	Polish Society for the Protection of Animals (PL)
UKBA	UK Border Agency (UK)
UNEP	United Nations Environment Programme
UWWTD	Urban Waste Water Treatment Directive
VMP	Variable Monetary Penalty
WCMC	World Conservation Monitoring Centre

WCO	World Customs Organisation
WEEE	Waste Electrical and Electronic Equipment
WFD	Water Framework Directive
WHO	World Health Organisation
WLEWG	Wildlife Law Enforcement Working Group (UK)
WSR	Waste Shipment Regulation
WSZ	Water Supply Zone
WWF	World Wide Fund for the Protection of Nature
WWTP	Waste Water Treatment Plant

Country abbreviations

AT	Austria
BE	Belgium
BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
FI	Finland
HR	Croatia
HU	Hungary
IT	Italy
LV	Latvia
LT	Lithuania
LU	Luxembourg
MT	Malta
NL	Netherlands
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
SE	Sweden
UK	United Kingdom
US	United States

1 INTRODUCTION

1.1 Purpose of the report

This report is for the project “Information collection and impact assessment of possible requirements for environmental inspections in the area of EU legislation on water, nature protection and trade in certain environmentally sensitive goods”.

The objectives of the report are to provide:

- 1 *information on how inspections are currently undertaken for a representative cross-section of MS in the policy areas of water, nature protection and trade in certain environmentally sensitive goods (study subject areas);*
- 2 *an identification of weaknesses and good practices in the way environmental inspection systems function across the EU in the study subject areas;*
- 3 *an assessment of different options to strengthen inspection practices (feasibility, budget implications, and the more general economic, social and environmental impacts).*

This study examines the control, inspection and enforcement processes of three environmental themes for five Member States covering the issues of inspection approaches, capacities, frequency and costs. This analysis provides a baseline of current practices. This provides the basis, along with a review of relevant studies for other areas of environmental law, to develop a series of policy options to improve inspections. Furthermore, the baseline provides the basis to assess the options within an Impact Assessment of those options.

1.2 Environmental inspections and implementation of the EU environmental acquis

The EC Proposal for the 7th Environment Action Programme (EAP) defines future priority objectives that include better implementation, enforcement, monitoring and strengthening of environment policy and legislation. In its conclusions on setting the framework for a Seventh EU Environment Action Programme, the Council supported the objective of improving inspections and surveillance regimes where necessary inter alia through guidance for Member States, on the basis of experience with existing provisions and avoiding unnecessary administrative burdens improving complaint handling at national level.¹

The Recommendation 2001/331/EC² providing for minimum criteria for environmental inspections (RMCEI) provides guidance on the way to organise, plan and implement environmental inspections mainly in the areas of stationary industrial activities. It was followed by a Communication of the EC published in 2007³, on the review of the RMCEI.

¹ http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/envir/130788.pdf

² Recommendation of the European Parliament and of the Council of 4 April 2001 (2001/331/EC) providing for minimum criteria for environmental inspections in the Member States

³ Communication from the Commission to the Council on the review of Recommendation 2001/331/EC providing for minimum criteria for environmental inspections in the Member States (COM(2007) 707 final).

Member States are responsible for implementing and enforcing EU legislation, including sufficient control of the application of this legislation. In the recitals of the RMCEI, the status of environmental inspection within the EU was described in the following:

“(7) The existence of inspection systems and the effective carrying out of inspections is a deterrent to environmental violations since it enables authorities to identify breaches and enforce environmental laws through sanctions or other means; thus inspections are an indispensable link in the regulatory chain and an efficient instrument to contribute to a more consistent implementation and enforcement of Community environmental legislation across the Community and to avoid distortions of competition.

(8) There is currently a wide disparity in the inspection systems and mechanisms among Member States in terms not only of their capacities for carrying out inspection tasks but also of the scope and contents of the inspection tasks undertaken and even in the very existence of inspection tasks in a few Member States, and this is a situation which cannot be considered satisfactory with reference to the objective of an effective and more consistent implementation, practical application and enforcement of Community legislation on environmental protection”.

The EC review of the RMCEI noted that the scope of the RMCEI has been interpreted in different ways by Member States. There are large differences both in the number of installations subject to environmental inspections and between the percentages of installations inspected per year in the Member States. This review highlighted that, for instance, some Member States apply the Recommendation only to installations falling under the IPPC Directive, while others cover also other installations.

Additionally, the scope of the RMCEI focuses mainly on industrial and waste treatment installations and excludes many other activities that are regulated under EU environmental legislation. In particular, the Recommendation does not contain criteria for the inspection of waste shipments or for the inspection of Natura 2000 sites. However, some inspection requirements and criteria are contained in sectoral legislation (e.g. such as the Industrial Emissions Directive, the Directive on the control of major-accident hazards involving dangerous substances (Seveso III), the Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment, the Directive on the protection of animals used for scientific purposes, etc.).

Member States are supported in their efforts by the European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) created in 1992. IMPEL is a network of the environmental authorities of EU Member States and provides a framework for policy makers, environmental inspectors and enforcement officers to exchange ideas, and encourages the development of enforcement structures and best practices. It carries out a number of activities aiming at ensuring a more effective application of European legislation. The network’s activities include awareness raising, capacity building, peer review, exchange of information and experiences on implementation, international enforcement collaboration as well as promoting and supporting the practicability and enforceability of European environmental legislation.

The EC 2007 Communication⁴ contains an annex concluding on the way domestic inspections are carried out in the sectors covered by the RMCEI⁵. It appears that in several countries (Denmark, Finland, France, Greece, Italy, and Spain), the situation regarding the level of implementation of the RMCEI is unclear. It is not possible to establish whether this is due to the gaps in the information or if there are real cases of non-compliance. Belgium, Germany, Ireland, the Netherlands, Sweden, and the United Kingdom appear to have reached a high level of implementation of the RMCEI. Austria, Luxembourg, Portugal, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia as well as Bulgaria and Romania seem to have partially implemented the RMCEI. Cyprus and Malta seem to be some way from fulfilling the requirements.

Despite the support provided by IMPEL, there are still wide discrepancies in the way inspections are organised and carried out in Member States. In addition, the EC does not have powers of inspections and can only rely on the duty of Member States to cooperate. In parallel, the EC must play its role as Guardian of the Treaty (Article 211 of the Treaty of the Functioning of the EU) and ensure that the provisions of the Treaty and the measures taken by the institutions pursuant thereto are applied, essentially by means of the opening of infringement procedures.

As Guardian of the Treaty (Article 17 paragraph 1 of the TEU), the EC must ensure that the provisions of the Treaty and EU legislation are respected by Member States. The EC can launch infringement proceedings, and bring matters before the Court of Justice. The EC registers a high number of complaints every year, alleging breaches of EU environment rules across the EU (between 500 and 700 a year). The lack of implementation and enforcement of European environmental legislation leads not only to continuing damage to the environment but also to distortions of competition. As there is no EU inspectorate for the environment to check what is happening in practice, the European EC has only limited possibilities of ensuring proper enforcement.⁶

There are significant challenges for the Member States in ensuring the full application of the EU environmental acquis, including the full control and enforcement of its provisions. The following Chapter highlights concerns that have been raised in previous studies on selected parts of EU environmental law and then provides further analysis of the three thematic areas of the study. To tackle the gaps in control in the Member States, it may be appropriate that further actions or instruments are adopted at EU level, such as addressing the limited scope of the RMCEI. Potential options are elaborated in Chapter 3, followed by an Impact Assessment of those options in Chapter 4. Chapter 5 provides a final summary of the findings of this study.

However, prior to providing an analysis of the control practices in the Member States or elaboration of options, it is important to explore the nature of some of the key concepts or terms used in this report.

⁴ (COM(2007) 707 final), See footnote 3

⁵ http://ec.europa.eu/environment/legal/law/pdf/sec_2007_1493_en.pdf

⁶ EEB (2005), EU Environmental Policy Handbook: A Critical Analysis of EU Environmental Legislation Making it accessible to environmentalists and decision makers, www.eeb.org/?LinkServID=3E1E422E-AAB4-A68D-221A63343325A81B&showMeta=0

1.3 Concepts and definitions

This study is focused on the need to ensure that the EU environmental acquis is fully implemented, with a particular focus on the practical enforcement of that law by Member State authorities. In doing so, a number of terms need to be used, which can mean different things in different contexts. Therefore, it is important to examine some of the concepts at this stage. The intention is not to provide an extensive 'enforcement glossary', versions of which are available in other publications, but rather to examine the concepts at the core of this analysis.

Compliance

The concept of compliance centres around the behaviour of those subject to the requirements of law – being in compliance meaning that the entity subject to those requirements is fulfilling the requirements. EU environmental law either directly (through stated obligations in the law) or indirectly (as Member State authority oblige entities to do, or not do, something to meet an objective in the law) result in duties on entities (businesses, individuals, etc., which are enforceable (e.g. a permit condition). Compliance means that these entities meet their obligations arising from these enforceable duties.

In the context of this study it is important to highlight two different aspects of compliance. The first is the requirement on Member States to ensure that legislation adopted at EU level is fully implemented. Thus there is a compliance obligation on the Member States. Throughout this study, therefore, reference will be made to examples or policy options, etc., relating to ensuring this fulfilment of the Treaty obligations of the Member States.

The second area centred on the concept of compliance concerns the obligations on businesses and individuals subject to legal requirements. If those individuals and businesses meet those obligations, then they are compliant.

For much EU environmental law, there is a need to translate the obligations of that law into requirements for individual entities into national law. Therefore, the compliance of these entities is necessary for the overall requirement of compliance by the Member State.

Inspection and investigation

In seeking to determine whether businesses and individuals are compliant with their legal requirements, the relevant authorities can undertake a variety of different inspections, checks, investigations, etc. It is important to stress that the types of activity undertaken will vary according to the nature of the obligation. Furthermore, the way specific terms are used in Member States, such as 'inspection', varies and it is, therefore, important not to assume the content of a particular activity, unless it is specified.

'Inspection' in many cases is assumed to include a visit to a site or individual, but this is not always the case. Indeed, document checking (including on-line) can be referred to as 'inspection'. Intelligence-led approaches contrast by being investigative in character, gathering intelligence, information, etc., which may involve site visits. It is because of this

range of type of appropriate activity, that, for instance, in the Netherlands the term 'supervision' is favoured.

Enforcement

Inspection, investigation, supervision – all provide the basis for uncovering cases of non-compliance, the characterisation of the non-compliance and the reasons for it. Furthermore, for some regulatory regimes businesses and individuals may voluntarily report instances of non-compliance. The response to such non-compliance is enforcement. The appropriate enforcement response would depend on the remedies available in law and the seriousness of the offence, but could range from a mild warning to imprisonment.

It is important, however, that while enforcement in its strict sense is the response to non-compliance, the term can be more loosely used to apply to regulatory activity more broadly. For example, if a national regulator is described as being responsible for enforcement of a Directive, this could imply also the inspection and investigative functions alongside responding to non-compliance.

Compliance promotion

Compliance promotion encompasses all proactive actions that aim to raise the understanding of the businesses and individuals affected by environmental law of the obligations they have to ensure they are compliant with that law. In some cases the obligations may be directly set out in the law (e.g. a prohibition on transboundary movement of an object), while in others the obligations in law have been translated in some way into specific obligations for the business or individual, e.g. a prohibited activity on a protected area due to its conservation interest or the interpretation of the obligations of the Industrial Emissions Directive into permit conditions which must be complied with.

Lack of understanding of one's legal obligations is a common cause of compliance failure and well-targeted compliance promotion reduces the risk of non-compliance. In some regulatory contexts the term 'compliance promotion' is less commonly used and simple 'awareness raising' is more common – this is particular so in communicating with the general public. In all cases, however, the principle is the same.

While the most obvious situation for compliance promotion is at the early stage of regulatory activity, i.e. communicating to businesses and individuals before they undertake actions which might lead to non-compliance, it is important to note that compliance promotion can also be an important supporting activity to inspection and other supervisory activity. These actions provide the opportunity for face to face contact with individuals as, therefore, an opportunity to provide information to help them deliver compliance in the future.

The regulatory system as a whole – the 'control chain'

Finally, it is important to consider the processes of regulation, enforcement, supervision, compliance promotion, etc., as a whole. The individual activities of competent authorities

are critical in ensuring compliance with environmental law. However, the effectiveness of these individual activities is dependent on the totality of actions taken by such authorities. For example, inspection may be well targeted, but without good compliance promotion compliance issues may remain a problem.

Various terms are used to describe the totality of such regulatory activity, including compliance assurance and reference to the regulatory cycle. These terms are more commonly used for enforcement in industrial (and similar) situations. In seeking to encompass the wide range of activities necessary to ensure compliance with the environmental acquis as a whole, in this report we refer to the 'control chain'. This encompasses not only the more familiar aspects of industrial inspection, but also investigations for protected areas, intelligence-led approaches, etc. It will also be seen that the control chain includes the need for ex-ante strategic actions, such as developing a strategy for delivering compliance as well as ex-post evaluation of the regulatory system and actions.

Conclusion

This brief exploration of the key concepts in this report has aimed to provide the reader with a guide to terms which are often used in different ways in different regulatory contexts. Where this report discusses an individual regulatory situation (e.g. CITES enforcement or inspection of waste water treatment plants), the individual context is important in understanding the specific nature of an 'inspection' or 'compliance promotion', etc. However, as the analysis moves from the specific case to a general consideration of options to deliver more effective compliance with the environmental acquis as a whole, it is important to recognise the range of different actions that can be encompassed by one term so as to ensure that any option(s) that are taken forward are as widely applicable as possible, as well as being as clear as possible in the provisions that they contain.

2 BASELINE ANALYSIS OF THE MEMBER STATES

2.1 Introduction

In order to develop and assess options to improve the application of the full control chain for EU environmental law in the Member States, it is necessary to undertake a baseline analysis – what is the current situation and whether it might change without further intervention (i.e. are adopted policy measures still in the process of being implemented so that outcomes are not yet certain?). This is necessary for two reasons:

- To provide a foundation of knowledge upon which to consider where an option for a new policy will deliver improvements.
- To provide the ‘baseline’ (or ‘do nothing new’) option for a formal Impact Assessment as required by the IA Guidelines of the EC.

This study does not, due to previous work and limitations in timing and resources, perform a detailed baseline assessment of the entire control chain for the full environmental acquis in all Member States. Some areas of the acquis have already been analysed, at least in part, and, therefore, the initial part of baseline description of this section summarises the conclusions, where relevant to the baseline, from these relevant reports.

We undertook baseline analysis for five Member States in three policy areas – water, nature and trade in endangered species, to provide additional information on the baseline. Within each policy area one or more specific items of EU law formed the focus of assessment. However, the number of Directives included under ‘water’ was extensive, so that specific items of legislation were selected to be addressed in the different Member States based on issues that are of most relevance to those Member States. The Member States included and Directives/issues covered are set out in the following table.

Table 1. Directives addressed by theme for each Member State

Member State	Water	Nature	Trade
Germany	1. Drinking water 2. Land spreading	3. Habitats 4. Species	5. CITES
Poland	6. Drinking water 7. UWWT	8. Habitats 9. Species	10. CITES
Spain	11. Abstraction 12. Drinking water 13. UWWT	14. Habitats 15. Species	16. CITES
Sweden	17. Farm infrastructure 18. Non-IED emissions 19. UWWT	20. Habitats 21. Species	22. CITES
United Kingdom	23. Abstraction 24. Drinking water 25. Farm infrastructure 26. Land spreading 27. UWWT	28. Habitats 29. Species	30. CITES

Overall this covers 30 policy areas across the five Member States. Annex I provides the country study analysis of these 30 policy areas.

In this section, a summary of the baseline analysis is given for each policy area – water, nature and trade in endangered species.

However, before presenting the baseline conclusions, it is worth noting the content and responses of the EC public consultation on environmental inspections and whether this contributes to the baseline analysis or for options development in the following Chapter.

2.2 The public consultation

The EC held an online stakeholder consultation⁷ on the initiative on revision of the EU legal framework on environmental inspections between 29 February 2013 and 26 May 2013.

The consultation document supporting the EC public consultation on environmental inspections summarised some baseline conclusions. These are:

- The current scope of the inspection ‘framework’ is limited – focusing mainly on industrial activities and missing much of the environmental *acquis*.
- The current EU Recommendation on Minimum Criteria for Environmental Inspections (RMCEI) as it stands is in need of ‘improvement in terms of the detail and precision of its current content’.
- The current framework is largely non-binding.
- There are large disparities in levels of compliance and enforcement processes between Member States.
- The current framework does not address the full compliance promotion and enforcement activities within the control chain.
- The current framework lacks provision for co-ordination of inspection activities across different environmental sectors.
- There is a lack of appropriate provisions for transboundary co-operation.
- The current framework lacks provisions on capacity at EU level to ensure national systems are consistent, coherent and effective.

Some of these conclusions concern the baseline of EU law, such as the nature of the EU legal framework, while other conclusions concern the level of implementation and/or enforcement in the Member States.

The public consultation asked for public views of different aspects of inspection, enforcement and compliance promotion. The questions began by asking about the importance of enforcement generally and then specifically for individual sectors. It then asked about the importance of compliance promotion and streamlining, before considering the criteria for effective enforcement, co-operation between Member States and the role of EU level capacity in this area.

⁷ <http://ec.europa.eu/environment/legal/law/inspections.htm>

With regard to the thematic areas examined in the baseline analysis in this study, stakeholders responded to the public consultation stating that an enhanced inspection regime was needed for the following issues⁸:

- Compliance with requirements concerning environmental infrastructure (this included urban waste water treatment facilities as well as landfill sites) (63% 'very necessary' and 26% 'necessary').
- Abstraction of water in areas affected by water scarcity (47% 'very necessary' and 29% 'necessary').
- Activities that may cause diffuse water and land pollution (55% 'very necessary' and 27% 'necessary').
- Activities that may damage protected habitats (60% 'very necessary' and 26% 'necessary').
- Activities that may result in harm to species (51% 'very necessary' and 26% 'necessary').
- Unlawful trade in endangered species (55% 'very necessary' and 25% 'necessary').

These are very large majorities for enhanced inspection activities across most of the thematic areas of the baseline analysis of this report.

Furthermore, stakeholders supported the view that Member States should develop an overall strategy for inspection, enforcement and compliance promotion (40% 'very useful' and 25% 'useful'). They also supported the importance of compliance promotion. Other results included:

- Support for risk-based approaches to enforcement.
- High levels of support for effective and appropriate follow-up action to inspection.
- The need for greater transparency and public involvement.
- The importance of reliable systems to evaluate compliance assurance systems in Member States.

The public consultation responses, therefore, provide a strong basis for taking forward EU level action to enhance inspection regimes. The options to take this forward should therefore:

- Address at least all of the aspects of the environmental acquis covered by the public consultation.
- Promote strategic planning for compliance control activity and subsequent evaluation of plans and activity.
- Ensure inspection and enforcement actions are properly followed up to reduce future non-compliance and restore environmental harm.
- Support risk-based approaches where relevant.
- Promote transparency and public participation.

⁸ <http://ec.europa.eu/environment/legal/law/pdf/Summary%20Results%20Public%20consultation.pdf>

2.3 Baseline: lessons from the literature

Introduction

This section summarises the key lessons from some of the most relevant literature. Country-specific literature is addressed in the thematic analysis of the baseline (see the Annex). The aim here is to identify key lessons which can inform the development of options in the following Chapter. These lessons are generic in nature (i.e. are more widely applicable for the environmental acquis), rather than relate to a specific detail of the implementation of an individual item of legislation.

This section looks at the relevant literature in turn.

Bio IS. 2011. Stocktaking of the main problems and review of national enforcement mechanisms for tackling illegal killing, trapping and trade of birds in the EU. 30 December 2011.

This study made the following recommendations for national level actions:

1. Improved awareness-raising of the local issues and illegal actions is needed, targeting key stakeholders through effective communication in order to reduce the number of illegal activities.
2. Improvement and enforcement of the regulations is needed, such as revising the burden of proof, envisaging vicarious liability, or linking subsidies to the presence of certain species. Furthermore, good practice in training and collaboration between specialised units, the police, customs, prosecutors, judges, etc. can be disseminated in MS. Specific actions on hunting periods were also recommended. Greater powers to field enforcement units are recommended to avoid congestion in courts, including the ability to apply limited sanctions on the ground.
3. In some MS there is a lack of sufficient human, financial and material resources, which can manifest itself in different situations – in the field, at borders, etc. This needs to be addressed for effective enforcement.

At the EU level, the study makes recommendations for EU level action to support:

- Increased awareness by stakeholders.
- Increased awareness by enforcement authorities, such as through joint training, role of networks, etc.
- Better links between species protection and CITES.
- Improved reporting, allowing the EC to understand what is happening, the use of exemptions, etc., and so determine levels of compliance more easily.
- Improved working with stakeholders such as NGOs to enhance practical compliance.

Key conclusions for the options:

- Compliance promotion is a critical element to be enhanced in delivering compliance.
- The capacity of enforcement institutions can be a serious constraint which needs to be addressed.

- Improved reporting to the EC is needed to ensure improved EU level understanding of compliance levels and constraints on this.

Milieu. 2006. Study on the Enforcement of the EU Wildlife Trade Regulations in the EU-25.

The study identified the following conclusions for CITES enforcement, including:

- Regular national assessments of CITES crime should be used to develop enforcement plans to target enforcement objectives and actions.
- Resources for enforcement are not sufficient in some MS, including budgets, personnel and equipment.
- Effective coordination among national agencies delivers more effective enforcement, such as formal agreements, inter-agency committees and regular working contacts.
- Regular training for enforcement personnel is needed, such as training programmes for frontline customs, police and other officials.
- Checks need to be undertaken at all relevant locations - not just at airports as is sometimes the case. Also strong in-country enforcement is needed.
- Risk assessment is needed to identify threats of non-compliance and target enforcement actions.
- Effective public information plays an important role in compliance.
- Strong sanctions need to be available and used to deter criminal activity.
- Coordination with other Member States is needed. Several Member States are particularly active in terms of communication and coordination across the EU.

Key conclusions for the options:

- Sufficient capacity has to be provided, both in relation to resources and training as this must be for all of the authorities involved in enforcement.
- Enforcement reviews, risk assessments, etc., are important to deliver enforcement plans that better target resources.
- Enforcement must be targeted at all of the locations and issues where non-compliance is at risk.
- The role of sanctions as a deterrent is important.
- Awareness raising helps stop non-compliance before it starts and so reduces the need for enforcement action.

Crook, V. 2012. Analysis of EU Member State CITES Biennial Reports 2009–2010.

This is an analytical study of the reporting by the MS, rather than one leading to specific recommendations. However, these conclusions are important for developing options.

- MS do carry out compliance checking – 26 of 27 MS undertook at least one activity, most inspecting traders, producers and/or markets and at borders, although in some cases this was limited in scope.

- Twenty Member States reported co-operative enforcement activities with other countries and with international bodies such as Interpol. There seems to be good sharing of information between many MS.
- Eleven MS had undertaken reviews of enforcement activity. Many focused on issues such as determining enforcement priorities.
- Eight Member States had adopted a national action plan for co-ordination of enforcement with clearly defined objectives and timeframes that is harmonised and reviewed on a regular basis. Some others stated such a plan was in development.
- Twenty-three Member States reported carrying out CITES training and/or awareness raising activities for enforcement agencies, customs, prosecution services and/or the judiciary.
- The number of staff working in the managing and scientific authorities of MS varied enormously (from only one to 365). Furthermore, there was major variation in the time they spent on CITES implementation. A wide range of expertise necessary for CITES implementation was reported.
- Over 50% of Member States have enforcement committees or specialised units in place that focus on co-ordinating and setting priorities for enforcement. Nearly all have environmental/CITES focal points within each relevant enforcement authority for co-ordination.
- Nearly 75% of Member States reported having the necessary specialist equipment, expertise and resources for enforcement and risk and intelligence assessments are used systematically across most of the EU, in particular by Customs at borders for passenger and cargo shipment controls. However, in some cases the lack of resources in certain enforcement sectors such as inspectorates, is limiting in-country enforcement and checks within the EU.
- All but one Member State was involved in public awareness activities of a range of different types to enhance compliance.
- The penalties available for non-compliance vary significantly. The highest reported maximum fine was EUR 760,000 (NL), but in the UK in some cases there is no maximum. Penalties applied did not reach the maximum, but there were cases of imprisonment, including use of greater penalties in Belgium due to recent legal changes.

Key conclusions for the options:

- It is not clear how far problems in enforcement in one Member State leads to transboundary problems in another – therefore increasing compliance across the Union is important
- Reviews of enforcement activity and development of enforcement action plans (or similar) is a good way to target enforcement action and maximise use of resources.
- There is insufficient capacity in some MS (at least on some issues, including equipment) and this needs to be addressed.
- Compliance promotion is commonly used and while effectiveness is not reported, it is likely to be viewed as important.
- The application of sanctions is an important aspect of ensuring compliance.

O’Laoire Russell Associates. 2011. Study on the Role of Customs in Enforcement of European Community Legislation Governing the Protection of the Environment and its Best Practice. DG TAXUD.

This study focused specifically on the role of customs in the control of waste shipments between the EU and Asian ASEM member countries. It highlighted a number of specific issues related to the entry of hazardous waste into East Asian countries, a number of which are specific to individual country legal regimes or to aspects of the Basel Convention. For the purposes of this study, however, the following points are of interest:

- Meeting the objectives of the Basel Convention (and the Waste Shipment Regulation) depends partly on the ‘strength’ of the weakest link in the control chain. In this case that is Hong Kong SAR and, therefore, achieving objectives of EU environmental law needs to take this into account.
- Although Customs authorities are ideally placed (and legally mandated) to carry out export controls, they lack a systematic flow of information from environmental authorities in respect of waste shipments.
- There is a need for formal operation arrangements with legitimate traders, carriers and logistics operators to provide information and intelligence.

Key conclusions for the options:

- Co-operation between authorities is needed for effective enforcement, but this is more than a Memorandum of Understanding – it requires good, real-time information exchange.
- For trade issues, enforcement action in the EU needs to recognise how weak links in third countries affect enforcement effectiveness.
- Co-operation with private operators can be an important element in delivering effective enforcement.

IEEP, Bio IS and Ecologic. 2009. Study on Inspection Requirements for Waste Shipments.

This study reviewed inspection activity for the WSR in the MS and developed 174 criteria for improving inspection in the EU. Some of these were directed to the MS and some to the EU. The main headings for these criteria were:

1. Member states shall ensure that competent authorities have sufficient capacity to ensure effective enforcement of the WSR.
2. Member States shall have an effective control strategy to ensure implementation of the WSR.
3. Member States shall ensure that they have sufficient understanding of illegal waste movement to meet the enforcement requirements of the WSR.
4. Member States shall ensure that they undertake risk profiling and risk analysis of waste streams that may result in illegal waste shipment.
5. Member States shall ensure that they undertake an assessment of criminal activity contributing to illegal waste shipment.

6. Member States shall have an effective inspection plan covering all aspects of waste shipment inspection.
7. Member States shall undertake an effective review of the inspection plan.
8. Member States shall ensure that they have an effective inspection programme.
9. Member States shall ensure effective procedures are followed for the preparation of an inspection.
10. Member States shall ensure effective procedures are followed for undertaking an inspection.
11. Member States shall ensure effective procedures are followed for the follow-up to an inspection.
12. Member States shall ensure that inspectorates adopt a sampling plan for the taking of samples during an inspection.
13. Member States shall ensure that laboratory facilities and procedures are of a high quality to support inspection actions.
14. Member States shall ensure that relevant aspects of waste shipment inspection activity are transparent.
15. Member States shall ensure that the inspectorate responsible for waste shipment inspection operates in an effective way.
16. Member States shall ensure that the inspectorate has sufficient budget to deliver its obligations regarding enforcement of the WSR.
17. Member States shall ensure that the inspectorates have high quality staff.
18. Member States shall ensure that staff in authorities responsible for inspection under the WSR shall have the necessary competence.
19. Member States shall ensure that inspectorates recruit staff of high quality.
20. Member States shall ensure that staff in inspectorates receive training to ensure the maintenance of the quality waste shipment enforcement.
21. Member States shall ensure that waste shipment inspection activities are undertaken to a high quality.
22. Member States shall ensure effective co-operation within the competent authority responsible for waste shipment inspection.
23. Member States shall ensure effective co-operation between competent authorities necessary to deliver enforcement of the WSR.
24. Member States shall adopt measures to inform and involve stakeholders in enforcement activity.
25. Member State authorities shall participate in EU and International level actions.

Some of these headings are specific to the WSR, but many are equally appropriate to inspection of other parts of the acquis, covering planning, conducting inspections, capacity, stakeholder engagement, etc.

Key conclusions for the options:

- It is possible to establish EU level criteria for MS to assess the enforcement requirements of EU environmental law.
- Effective criteria to address the enforcement gap need to cover the entire control chain.
- It is possible to establish EU level criteria for MS to require inspection planning and strategic assessment for enforcement.

- Requirements for inspection processes and follow-up are appropriate.
- Capacities of enforcement institutions need to be assessed according to enforcement needs and delivered.
- Inter-institutional co-operation is important.
- Stakeholder communication and involvement is important.

Bio IS. 2010. Environmental, social and economic impact assessment of possible requirements and criteria for waste shipment inspections, controls and on-the-spot checks.

This study groups the criteria developed in the previous study to undertake IA analysis on these groups to support possible EU intervention to take forward action on waste shipment enforcement. The issues addressed in the IA do not add to conclusions on developing the options in this report.

Milieu et al. 2009. Study on the feasibility of the establishment of a Waste Implementation Agency.

This study focused on examining the feasibility and roles of a waste implementation agency. However, in doing so, it highlighted key implementation problems for the waste acquis in the MS. These included:

- Many Member States lack sufficient capacity for the inspections, controls and other actions to enforce waste legislation properly.
- There are organisational problems - poor coordination among the various national bodies with responsibilities for inspections and controls – and this hinders enforcement.
- Implementation of the EU acquis is considered a low priority in many MS, resulting in insufficient resources for enforcement.

These problems are further exacerbated by lack of capacity for waste management planning and differing interpretations of waste requirements by the MS. As a result of poor enforcement, there are major problems, such as illegal waste facilities, illegal waste shipment, poor producer responsibility, etc, leading to low level of environmental protection and high levels of citizen complaints.

Key conclusions for the options:

- Insufficient capacity for enforcement bodies is a major impediment to effective enforcement of the waste acquis.
- Co-ordination processes between enforcement bodies are a necessary pre-requisite for effective enforcement.
- Enhancing enforcement capacity and enforcement action requires the issue to be made a higher priority for MS strategic policy makers.
- Public participation and access to justice is an important driver for delivering enforcement action.

Bio IS. 2011. Implementing EU waste legislation for green growth.

This study examined options for improving implementation of the EU waste acquis. It reiterates the implementation and enforcement problems in the MS (see above). The study focused on options for three EU level bodies – the EC, the EEA and a possible new waste implementation agency. It did not address specific action to the MS themselves as an option. However, some of the tasks identified as possible at EU level can be taken forward within a new instrument, including:

- Improving the knowledge base of MS implementation performance and more coherent tracking on MS implementation.
- Assistance and guidance to MS on inspection.
- Awareness raising on implementation.
- Training, in co-operation with networks such as IMPEL.

Key conclusions for the options:

- Improved understanding on implementation and enforcement in the MS is needed at EU level, requiring better assessment and reporting.
- There is a need for support at EU level for guidance, awareness raising and training on enforcement.

IEEP, ACTeon, Arcadis, Fresh Thoughts and Milieu, 2012. Assessment of Policy Options for the Blueprint.

This study summarised issues relating to water governance drawing on the Comparative Study of Pressures and Measures in the Major River Basin Management Plans⁹, which in turn supported the EC's latest review of the implementation of the Water Framework Directive (COM(2012) 670, 14.11.12¹⁰). The study noted that the earlier Fitness Check of EU water policy (SWD(2012) 393, 14.11.2012¹¹) found variations in enforcement, including deficiencies, reflecting legal, political, economic and cultural differences in the Member States. In particular, enforcement problems of water law may arise from problems of "spatial fit" and "institutional interplay", i.e. the degree to which the intended objectives of European policies match with the policy objectives, interests and administrative capacities as well as vested interests of policy stakeholders at a national and local level.

In order for Programmes of Measures to be effective, the study stress that these measures need to be implemented and enforced the nature of the enforcement activity will depend on the measures themselves and to whom the measures apply. As these measures will be adapted to the particular pressures placing good status at risk in each water body, a common systematic approach to enforcement for all RBMPs is probably not possible. It was

⁹ <http://ec.europa.eu/environment/water/water-framework/implrep2007/background.htm>

¹⁰ http://ec.europa.eu/environment/water/water-framework/pdf/COM-2012-670_EN.pdf

¹¹ http://ec.europa.eu/environment/water/blueprint/fitness_en.htm

also not possible to identify failures of enforcement in application of POMs, since the requirement to make measures operational was after the publication of the study.

The Pressures and Measures Study also addressed enforcement. That study suggested a number of indicators that could be considered in an assessment of enforcement systems:

- | | |
|---------|--|
| Annex 1 | Resources available for inspections, including staff and training. |
| Annex 2 | The number of inspections carried out, and follow-up action. |
| Annex 3 | Trends in the number of violations identified. |
| Annex 4 | Level of sanctions, and judgements whether they have a deterrent effect. |

Key conclusions for the options:

- Implementation of the WFD is still at an early stage, so that determining deficiencies in enforcement is difficult.
- There needs to be a systematic approach to addressing enforcement needs focusing on key pressures and ensuring sufficiency enforcement resources and processes are in place.
- Different priorities and processes are needed in different river basins across the Member States depending on priorities and Member State structures.
- The spatial nature of the WFD requires Member States to move from enforcement of individual items of EU law to a more comprehensive approach to addressing compliance with wider water objectives.

Farmer, A. & Cherrier, V. 2011. Linking the Water Framework Directive and the IPPC Directive, Phase 1. IMPEL, Brussels and Farmer, A. & Cherrier, V. 2011. Linking the Water Framework Directive and the IPPC Directive, Phase 2. IMPEL, Brussels

The first IMPEL report on the interactions between the WFD and IPPC reached conclusions on enforcement relevant to the WFD. It stated that enforcement activity is critical to ensuring installations comply with permit conditions and the requirements concerning permits within POMs are fulfilled. In particular it noted that the Industrial Emissions Directive requires inspection to take account of the impact of installations on the environment and that this was a new provision introduced during the review of the IPPC Directive specifically to aid integration with EU water law. It noted that for some Member States, inspectors already take this broader approach, but for others this is a new departure. It will involve working with water authorities to determine if installations are impacting on water bodies. This requires inter-institutional relationships to be forged. A second IMPEL report found that many enforcement authorities' inspections did not focus on wider environmental impacts, although there were important exceptions. In some cases there was little interaction between enforcement institutions and water authorities, but there were also good practice examples of co-operation, such as formal agreements, use of common databases and joint inspections, along with regular meetings, etc.

Key conclusions for the options:

- There is a need for inter-institutional co-operation for effective enforcement covering IED and WFD.
- Enforcement activities need to consider issues more broadly than simple compliance with permit conditions to ensure objectives of the environmental acquis are being complied with.
- A range of different interaction processes are possible to address different aspects of compliance assurance.

OECD 2005. Funding Environment Compliance Assurance

This study examined lessons for the funding and budget control of enforcement bodies in OECD countries in order to provide lessons to those in non-OECD countries needing to enhance enforcement capacity. The report showed that there are very different approaches to financing in the OECD, in particular in relation to the recovery of costs of activities, such as permitting and inspection costs, and that these differences were often entrenched in principles of government policy. Beyond this, the report stressed the importance of good budget control and management.

Key conclusions for the options:

- It is not possible to prescribe at EU level details of cost recovery – these vary between MS on issues of principle. Thus it is appropriate to state that authorities have sufficient funds, but not generally how these are to be obtained.
- Budget control is an aspect of good management. It is possibly not necessary to require that public bodies are managed properly in an EU instrument as this should be taken as read (even if this is not the case in practice).

OECD 2009. Assessing environmental management capacity: towards a common reference framework

This report sets out a detailed reference framework against which the capacities of enforcement institutions can be assessed. The framework includes:

- Identification of core functions.
- Objective setting and financing such as problem analysis, strategic financial planning, etc.
- Environmental policy integration functions.
- Policy implementation functions, such as environmental assessment, environmental services.
- Environmental compliance assurance functions, including detection of non-compliance, responses to non-compliance, understanding the regulated community.
- Strategic management functions, including stakeholder communication, human resource management, etc.

With respect to this study, the report is consistent with the development of details in options in the following Chapter. However, it provides considerably more detail that are appropriate at country level to question various aspects of institutional organisation, management and capacity to deliver effective enforcement.

OECD 2009. Ensuring Environmental Compliance: trends and good practices

This important study focused on approaches to ensure compliance with pollution prevention and control regulations, particularly in the industrial sector. It covered the issues of compliance promotion, compliance monitoring, and non-compliance response (enforcement). Examining practices in a number of countries across the world, it identified the following positive trends:

- An increased focus on strategic planning and performance assessment on environmental outcomes. Some environmental authorities (e.g. NL, UK, US) have developed performance indicators to assess levels of compliance with regulatory requirements, and reductions of the negative impact on the environment.
- Integration of environmental permitting and compliance monitoring regimes across media, in particular in the EU since the adoption of IPPC.
- Growing importance of compliance promotion, particularly targeted at SMEs, which is an efficient approach to achieving compliance, both for businesses and regulators that save resources on enforcement. Compliance promotion has also been moving from a focus on permit conditions to wider environmental management.
- Focusing on risk-based approaches to activities with higher potential environmental impacts, including higher risks of non-compliance.
- Moving towards greater use of self-monitoring by industry.
- Making enforcement more proportionate to the extent of non-compliance.
- Enhancing stakeholder co-operation, transparency and public disclosure of information. Mobilising opportunities provided by information technology.
- Analysing non-compliance with environmental requirements in order to improve policy design.

Key conclusions for the options:

- The trends in best practice identified – risk-based approaches, improved transparency, self-monitoring, compliance promotion, etc., all can be addressed by the options.
- The importance of strategic planning, review and linking to enforcement priorities.

OECD 2012. Illegal Trade in Environmentally Sensitive Goods.

The study concluded that the illegal trade of goods such as wildlife and timber is a serious economic and environmental problem with the potential to disrupt whole economies and ecosystems, undermine environmentally sustainable activities, and reduce future options for the use of resources. The study estimated that the global value of this environmental crime to be around USD 30-70 billion a year. As a result, its drivers are often economic. Furthermore, good data on the problem are difficult to obtain, but could be enhanced by better harmonised reporting between authorities.

The study recommends improved enforcement along with greater use of economic incentives, but noting that these can only work in a framework of good governance and law enforcement, and as part of a package of measures to address the full range of causes of illegal trade.

Key conclusions for the options:

- Improved enforcement is a critical element of good governance.
- A key element of institutional co-operation is the sharing of information in forms that are easily useable.
- Innovative instruments should be considered to tackle specific types of enforcement gaps.

REC and UBA 2008. Handbook on the Implementation of EC Environmental Legislation

This handbook focuses on the obligations arising for new MS on the implementation of the acquis. It emphasises the importance of strong enforcement to ensure compliance. It states that this requires strong and committed environmental inspectorates with adequate resources, systems of fines and penalties, and criminal liability for serious violations. This also requires adequate training for inspectors, equipment, etc. Thus the regulatory systems for implementation must ensure adequate monitoring and control. Alongside this is the need for transparency and public access. The handbook also provides a checklist to guide implementation. Some of the items in the checklist are relevant here, including on issues of institutional arrangements and capacity:

- Clarify current institutional arrangements and responsibilities
- Quantify current staff resources and future requirements
- Compare current institutes with those required by legislation
- Develop a proposal for institutional reform to reflect the requirements of a directive
- Estimate costs of any reforms
- Communicate the agreed way forward to all parties
- Establish priorities
- Present cost estimates
- Identify potential sources of funds
- Quantify any shortfall in funds

Key conclusions for the options:

- It is appropriate to develop generic criteria for enforcement for the environmental acquis as a whole.
- There is an important emphasis on the necessary institutional structures and capacity, including that this is determined in a robust and transparent way.
- Public participation and access is important.

COWI et al., 2011. Impact assessment study into possible options for revising Recommendation 2001/331/EC providing for minimum criteria for environmental inspections (RMCEI).

This study developed options and undertook an impact assessment of those options related to revision of the RMCEI. The options were developed to overcome deficiencies in the enforcement activities of MS and the limitations in the scope of the RMCEI so that this would improve the effectiveness of inspection in the MS and promote co-ordination, knowledge exchange and sharing of best practices between inspecting authorities in and between MS.

The study, therefore, provided an initial assessment and consideration of options more limited than the current study, but do provide a basis for development of options within this report. The options considered were:

- Option 1: Revision of the RMCEI
 - Option 1A: Inclusion of all activities covered by the environmental law into the scope of the revised RMCEI
 - Option 1B: Further development of criteria for inspection plans and programmes
 - Option 1C: Establishing a regular reporting system based on the ten potential indicators identified in the IMPEL Brainstorming Project
- Option 2: Transformation of the RMCEI into a Directive
- Option 3: Introduction of inspection obligations into sectoral legislation

2.4 Baseline analysis: water

2.4.1 Introduction

The baseline analysis for the water 'theme' includes consideration of the application of the control chain in the following areas:

- Drinking water
- Water abstraction
- Land spreading
- Farm infrastructure
- Point source emissions from activities not covered by the Industrial Emissions Directive ('non-IED emissions')
- Urban waste water treatment

This is a long list of different types of activities controlled in different ways under EU law. For some of the activities there are specific obligations on the performance of those activities established in EU law. This applies to drinking water, septic tanks, WWTPs, land spreading and farm infrastructure, as set out in the Drinking Water, UWWT and Nitrates Directives (although some specific elaboration is required at MS level). In such cases one aspect of control activity is to ensure the obligations in EU law (as transposed into national law) are

implemented. For activities such as abstraction and non-IED emissions, the controls on those activities are developed nationally through implementation of the Water Framework Directive – the restrictions on abstraction or discharge necessary to meet the quality objectives of that Directive. Thus the particular extent of control, the types of measures adopted and the control approach may vary between (and within) MS depending on the pressure such abstraction and discharge places on achieving WFD objectives.

2.4.2 *Institutional framework*

The institutional context for inspection and control for the Drinking Water Directive (DWD) varies between MS¹²:

1. In Germany responsibility for control rests with regional authorities (usually executive agencies of these authorities responsible for health).
2. Poland has a National Sanitary Inspection under the Ministry of Health. However, there is also a role for checks under environmental regulation within the Ministry of Environment, which includes actions at the regional level.
3. The UK (England and Wales) has a totally centralised and national inspectorate with inspectors based in one location which conducts all inspection activity. The inspectorate is under the environment ministry (Defra).

All MS have some forms of inter-institutional relationships. Where responsibilities are largely under health ministries (e.g. Poland), links are made with environmental inspectorates. In the UK, the inspectorate stresses its interaction with local authorities. It does not stress its link with health bodies, but this may be because it is a 'given', with its status as a recognised WHO centre.

Abstraction control is derived from implementation of the WFD, which requires abstractors to have a permit and which also would require controls on abstraction should this threaten achievement of WFD objectives. Note that for the latter, implementation reports have shown that MS are using exemptions for measures which is an approach possible until the 3rd RBMP (2021-2027). In the UK, abstraction control (for water companies, industry and agriculture) is the responsibility of the Environment Agency, which sets enforcement action in the context of its wider water (river basin) management responsibilities and permitting role. The main inter-institutional interactions on abstraction related to cross-compliance checks, supporting enforcement, of the Rural Payments Agency, and working with nature protection authorities on the impacts of abstraction. In Scotland there has been a major effort to bring those regulating farmers together so as to reduce burdens on farms, but increase oversight by allowing inspectors from one authority to inspect for issues covered by another.

Landspreading and farm infrastructure are closely linked. While these are two separate issues on a farm – the provision and maintenance of infrastructure and restrictions on

¹² Note that the variety of institutional structures for control of drinking water in the MS has existed for many years, see: Horth, H., Gendebien, A., Casillas, J., Farmer, A. and Crathorne, B. 1998. Investigation of Drinking Water Quality Enforcement Procedures in the Member States of the European Union. WRc.

applications to land – the regulations derive from EU law such as the Nitrates Directive and inspection and enforcement activity is usually combined in practice, driven by programmes of action plans addressing these issues. In Germany, responsibility for inspection and enforcement is at the regional level, usually executive agencies of the regional governments and this is very often devolved further to sub-regional and local authorities. In Sweden, while much environmental control is devolved to the counties, for nutrient management advisors are employed by the Board of Agriculture, but are responsible for several counties; however, enforcement is the responsibility of municipalities. In the UK enforcement is the responsibility of the Environment Agency, including performing inspections and reporting results to the Rural Payments Agency for cross-compliance. The Agency is also responsible for advising on NVZ designation.

For UWWT, in Spain inspection can be carried out by regional or national inspectorates depending on the location of the waste water treatment plant (WWTP). In the UK, inspection is the function of the Environment Agency.

It can be seen, therefore, that institutional contexts for different aspects of control of directives relating to water vary significantly. The case studies do identify some constraints with regard to national control bodies, but shortcomings in institutional settings are found most commonly where control functions are highly devolved. Of course local context and community involvement is important, but localised control has problems of capacity (e.g. ES, DE, PL and SE) and of interaction with national (and EU) objectives. Furthermore, local enforcement bodies often address many different issues and these can present competing priorities not necessarily consistent with the priorities established in EU law. Furthermore, where the emphasis is on local control activity, it is often difficult for national bodies to have a clear picture of the levels of control activity, let alone understand if it is effective. This is clearly the case in DE, ES and SE. Finally, local institutions have the potential to be more strongly influenced by local political interests. The Swedish case reports some evidence of this and, if so, is a concern not only to harmonised approaches to control across the EU, but also within a Member State.

2.4.3 Strategic approach to inspection

For drinking water, where there is a centralised inspection function it is evident that there is clear strategic planning. In the UK, the inspectorate develops an annual programme of work, with its routine sample checking and incident inspection response based on previous years of experience. Poland also has a strategic plan for inspection. In Germany, while water testing requirements are determined in regulation, the exact nature of inspection planning in the many sub-national bodies is difficult to elucidate. However, as (see below) much enforcement activity is reactive rather than proactive, inspection planning for an institution is probably less about specific activity planning (as in other areas) and more about estimating the future resources needed to perform the necessary functions.

Strategic approaches to inspection of water abstraction should be integrated within catchment planning. In the UK, this is done through a Catchment Abstraction Management Strategy which identifies activities to be controlled into three risk groups which drive the

frequency of inspection. The Environment Agency has also identified 'unsustainable' abstraction as a major priority for permitting and enforcement action.

For landspreading and farm infrastructure inspections are already included, in part, in the inspection requirements of cross compliance – including the random sub-sample of 1% and risk-based requirements. Evidence from Germany and the UK, for example, raises similar criteria for the risk-based planning. A common feature across many areas of inspection is the different forms of risk-based approach. In Sweden activities are classified according to different classes and the levels of inspection and authorities responsible for inspection are assigned accordingly. For UWWT, the UK has a risk-based approach to inspection, which focuses on checking water companies' own self-monitoring of discharges. Indeed, the frequency of visits can be very low, with enforcement effort directed to other water protection issues where risks are higher. In Spain, inspection is also focused on the checking of records for self-monitoring and of incident investigation. This drives the planning.

In some cases elaborate risk-based approaches have been developed, such as OPRA by the UK Environment Agency for polluting activities. However, this authority also uses less elaborate but equally important risk based approaches, such as the following categories for determining inspection action for abstraction:

- Highly critical – generally the most important and potentially damaging licences, such as a licence that requires positive action by the operator (e.g. large Water Company licences), can be inspected more than once a year depending on the season, etc. There is no fixed limit on the number of visits. This group includes a few spray irrigation licences.
- Critical – such as spray irrigation where water is abstracted in the summer when flows are lower and also there is a need for good measurement as 50 per cent of the licence annual charges could be payable on the volume abstracted. They are visited once a year.
- Less critical – visited on average once every 5 years.

While most institutions have a plan for their activities including enforcement actions, the detail and sophistication of these plans varies. It is obvious that strategic plans which aim to target enforcement action to deliver improved outcomes and improved compliance must be based on accurate information and evidence. Not least there should be some examination of how effective current control measures are as this drives changes in the processes of the control chain. While some institutions have this evidence and incorporate this into control chain planning, some do not. This demonstrates the importance of data collecting, analysing and reporting on individual enforcement actions.

2.4.4 Undertaking inspections

For drinking water, it is important to note that routine monitoring of the quality of drinking water is the responsibility of the provider of the water (public or private undertaker). In all cases examined, inspections are undertaken as the result of complaints or incidents – examining what went wrong, rather than checking routine compliance. The UK inspectorate

also performs a routine cross-check on a sub-set of drinking water samples for all water companies. This is an analytical cross-check rather than a site inspection.

For water abstraction, in the UK the Environment Agency inspections focus on checking data from metering and records held by the abstractor and to take the opportunity to discuss with the operator ideas to save water, etc. Cross-compliance inspections also, where appropriate (i.e. where a farmer is abstracting water), check abstraction records. For all inspections there are specific requirements for reporting, etc. The Spanish case study illustrates the importance of technology for supervision for abstraction. For some years remote sensing has been used to monitor illegal abstraction and this has been the only practicable approach to determine the extent of such illegal practices across very large areas. This has proved an effective tool and the EC has, therefore, included the wider use of GMES (Global Monitoring for Environment and Security) as a tool to tackle illegal abstraction in its 2012 Communication on the Blueprint to Safeguard Europe's Water Resources¹³.

For landspreading and farm infrastructure inspections farm visits are able to inspect infrastructure, but for landspreading inspections have to rely largely on records kept by farmers. Where there is good water monitoring, discrepancies in nutrient levels could be raised, but this is problematic. Where numbers are reported, such as Sweden and the UK, the annual number of inspections is of several thousand, illustrating the level of activity on this issue.

For UWWT, as noted above, inspections in both Spain and the UK examine self-monitoring results for discharge quality. In the UK inspectors also assess the operator's own quality management system to ensure future quality of self-monitoring. The UK has also set up its own laboratory accreditation system and review to support this and other areas of compliance.

It is clear that there are serious constraints on inspection practice in some instances. Spain and Poland have limited capacity to undertake sufficient inspections particularly for the regulation of agricultural pollution and abstraction. Furthermore, in Sweden for most of the County Administrative Boards there has been a move away from focusing on enforcement for water. In the UK there is some greater emphasis on better targeting of farmers, but evaluations show that there are significant capacity constraints.

While the emphasis in the cases has been on physical inspections, it is important to note that other approaches to control have been developed. This is seen in intelligence-led approaches such as for CITES. At a different scale, the use of remote sensing for detection of illegal abstraction in Spain has enabled the regulator to identify non-compliant cases over very large areas which would be simply impossible through site visits.

It is difficult to identify whether there are shortcomings in inspections per se. Where inspections are undertaken, there do not seem to be reports or analyses suggesting that these are inefficient or focus on the wrong issues. Indeed, the opposite is the case. Rather the issue is the sufficiency of the number of inspections and their appropriate targeting.

¹³ Commission Communication (COM(2012) 673, 14.11.2012). A Blueprint to Safeguard Europe's Water Resources. Pp. 22.

Again, the appropriate level is difficult to determine. For example, in the UK the Environment Agency undertakes a large number of farm inspections (nutrients, infrastructure, abstraction, etc.), but its visits to waste water treatment plants are very infrequent. However, given the role of self-monitoring and auditing developed over several years, this is probably appropriate.

2.4.5 Follow-up, including use of sanctions

Follow-up to inspection activity includes the application of responses to non-compliance (e.g. the use of sanctions) as well as wider follow-on in relation to improving compliance with EU law. In particular for water, the latter requires a focus on consolidating assessments of the overall compliance gap and helping to drive forward investment planning. In most cases it is in fact difficult to identify an explicit link in this regard in the MS and, indeed, the long standing compliance gaps in MS such as Spain and Poland highlight this as an issue to be addressed. An exception to this is in England and Wales where the privatised water companies produced (in a spending/price review) investment plans which take account of needs to address the requirements of EU law. This is driven by the economic and environmental regulators. However, in Europe this is an unusual situation.

For drinking water, the sanctions that can be imposed for breaches of the regulations reflect differences in the legal frameworks of the MS. In Poland, for example, there is a full range of civil and criminal sanctions available, but in the UK the adoption of new civil penalties (fines) in other areas of environmental protection has not included drinking water. Thus the inspectorate relies on its own warning procedures and use of prosecution in the courts (leading to fines).

For abstraction, a particular follow-up sanction available is the link to single farm payments under cross-compliance (where this is a requirement for good agricultural and environmental condition - GAEC). In the UK low numbers of non-compliance with this GAEC are found, with resulting reductions to single farm payments. In the UK the place of civil sanctions has recently changed, with new options available to the Environment Agency across many areas of regulation, including abstraction non-compliance. However, currently data reported reflect the use of prosecutions, etc., which have been at a steady level for many years, resulting in fines. In the Spanish case there is the report of the introduction of fines (which are routinely applied) working alongside incentive systems under rural development and this has led to improvements in abstraction levels (see below).

For landspreading and farm infrastructure inspections, the primary sanctions imposed relate to reductions in single farm payments under cross-compliance. This is a common framework across the EU. In the UK there is also provision for civil and criminal sanctions for water pollution incidents. In Scotland the use of catchment walking to examine compliance with General Binding Rules for agriculture has a strong follow-up element whereby farms are subject to follow-up visits to check on requirement improvements and if a third visit finds continued non-compliance sanctions are applied. This is transparent to all.

For UWWT both Spain and the UK are able to use a range of sanctions, civil and criminal. In Spain incidents are classified according to severity and this affects to which organisation a case is referred to and the level of potential sanction.

Finally, it is important to note the potential for political factors to influence the use of sanctions. The Swedish case study refers to recent research indicating that the party political make up of municipalities (which are responsible for much inspection and sanction activity) influence the degree to which sanctions are imposed on non-compliant activities. How far this is an issue in Sweden, let alone across the EU, is not clear, but it is an important point to take into account, particularly in the context of ensuring a level playing field for business in ensuring compliance with the *acquis*.

The effectiveness of sanction, i.e. are they dissuasive, is not easy to determine. Where sanctions are rarely applied, then their impact may be thought to be limited. Conversely if sanctions are applied frequently, is this evidence of their effectiveness? For example, in the upper Guadiana basin in Spain there are several thousands of fines for illegal abstraction each year. While it could be argued that this suggests such fines are not dissuasive, the abstraction levels have declined. The effectiveness of sanctions will depend on the culture of those subject to sanctions, cultural differences between countries and other factors such as public opinion.

2.4.6 Capacity

For drinking water, assessment of the capacity shows considerable variation across the MS. For Poland there are 18 sanitary inspectors, with 28 more at sub-national level. However, interviews suggested that there were capacity constraints due to financing issues. For Germany, the highly dispersed nature of the competent authorities has made the assessment of capacity even more problematic, although there is some concern again over financial constraints. In contrast the UK, with its centralised inspectorate, reports good capacity (with 39 staff). Indeed, its adoption of new responsibilities has been achieved with efficiency savings and the Inspectorate itself reports high level of staff training and knowledge and sufficient staff to perform the inspection functions. The financial constraints are less of an issue, due to its cost-recovery of much of its activity. The level of capacity required in the MS should reflect the type of inspection work, i.e. not assessing routine compliance, but following-up on incidents and complaints.

In assessing the capacity regarding abstraction, in the UK the Environment Agency uses licence fees to cover its regulatory activity in this area. Therefore, it is somewhat buffered in relation to financial constraints. However, reviews undertaken by the National Audit Office have suggested there are issues with identifying the exact capacity for enforcement¹⁴.

For landspreading and farm infrastructure inspections there are limited data on inspection capacity specifically for this area. For example, in Germany, personnel levels are not yet known, although there is supporting laboratory capacity and for compliance promotion

¹⁴ For example: National Audit Office 2005. Environment Agency: Efficiency in water resource management. <http://www.nao.org.uk/wp-content/uploads/2005/06/050673es.pdf>

inspectors draw on the expertise of farm associations. In the UK, research indicates that the number of full time staff for this issue is around 70, each conducting around 70 inspections per year¹⁵. In Sweden, municipality inspectors spend just over half of their time on inspection and a good proportion on awareness raising.

For UWWT, there is a significant constraint in terms of the number of inspectors in the regional case study. This is viewed as a concern. For the UK, the capacity demands of UWWT on the Environment Agency are minor compared to other water enforcement issues. The frequency of inspection is low (e.g. compared to farm visits above). Therefore, capacity is not a concern.

Overall on capacity, there is a trend which is difficult to disentangle of concerns arising from the current financial crisis with constraints on funds available for inspectorates. This is not universal and, given the recent nature of such a constraint, it is difficult to know what the practical implications will be for the capacity of inspectorates.

The case studies have identified several instances where there is concern over capacity of control institutions. Levels of personnel are a concern in institutions in ES and PL, skill levels in local institutions in DE and ES, confirmed funding in the UK (wildlife crime) and, in all cases, concerns over public budget cuts in the current financial crisis. Some of these constraints through better institutional management, but it is difficult to overcome severe budget constraints without a change in governmental priorities. However, it also leads to the conclusion that understanding effectiveness of enforcement action is critical in order to target better the resources that are available.

2.4.7 Costs of inspection

The following section on effectiveness provides examples of the level of inspection activity with respect to some areas of water law and activity levels reflect cost. However, it is only appropriate to consider such an interpretation of cost if the control activity is effective.

When considering the different directives included in this section, it is clear that it is not possible to provide an overall assessment of costs of control actions. A consideration of the situation in the UK illustrates that each regime is different in character in this regard:

- For drinking water, the Drinking Water Inspectorate charges fees for auditing of samples and for all the time it spends on inspection of incidents – there is, therefore, an ‘audit trail’ of cost data.
- For abstraction, the Environment Agency includes any time it spends on control within its wider work on abstraction (planning, permitting, etc.), so that external audits have not been able to identify the costs of control activity.
- For nitrates, a major control action is undertaken by the Rural Payments Agency to examine cross compliance, so that only a small part of the time spent by inspector/farmer should be considered as directly related to the Nitrates Directive.

¹⁵ National Audit Office. 2012. Streamlining farm oversight. Pp. 22. <http://www.nao.org.uk/wp-content/uploads/2012/12/1213797.pdf>

- For non-IED emissions there is simply a lack of information on specific measures under the WFD, let alone related control functions.
- For UWWT, there is a strong reliance on self-auditing, so that checks on audits/inspections occur extremely infrequently. Specific costs are not identifiable, but the information available suggests these are extremely low.

Therefore, the one example where costs are more easily identified is the DWI. The total costs of the DWI are £2.5 million per year and this represents 13 pence for each household connected to the water supply – or 0.09% of the annual average household water bill. Daily charge rates for inspections to water companies are £380/day and the DWI charges £37 to analyse 100 water samples in its auditing of quality sampling undertaken by water companies. Non-recoverable costs are about £0.5 million per year.

Some similar elements are seen in other Member States – on drinking water, integration of control functions on cross compliance, etc. Furthermore, variance in types of control approaches make cost estimates difficult. For example, in Sweden for small discharges (non-IED) there seems to be little routine control, but a reliance on responses to incidents on water quality. While this has costs, it might be argued that this is not a sufficient control system upon which to base costs. The use of GMES for remote detection of illegal abstraction in Spain is an excellent example of innovate control measures, but costs associated with this would be difficult to extrapolate to other situations.

2.4.8 Review and effectiveness of inspection

For drinking water, all MS report on the activities of the control bodies. However, it is difficult to identify systematic review of enforcement activity in a fundamental way. The inspectorate in the UK has to review its activity to some extent as it bases future charging on this. The dispersed nature of inspection in Germany makes an assessment of effectiveness difficult. For Poland, there is good practice in relation to laboratory standards, but the case has indicated that there are issues with the national regulations affecting specific substances and accreditation, for example, which may affect implementation. In contrast, the UK inspectorate has shown increasing levels of compliance to a high level, the use of sanctions (fines) over many years and views itself as an effective control body.

For abstraction, in the UK it has been difficult to determine the effectiveness of the control regime. The Environment Agency has been seeking to do this and some research suggests that licence holders consider many aspects of the regime to be effective. Recent changes to deliver better targeting may also improve effectiveness.

For landspreading and farm infrastructure, the effectiveness of the control chain is difficult to determine. There has been work on this in the UK, concluding that the issue is complex. Indeed, if the outcome is reduced nitrate levels, the limited change in water quality is largely due to the long lag-time for this nutrient to change. Having said this, work by the Environment Agency has led it to reduce inspections while increasing compliance levels, suggesting more effective control. Under cross-compliance rules, in England and Wales the 1% inspection requirement of farms receiving single farm payments means that 1,100 farms should be inspected as a minimum. In 2009 the Agency carried out almost 3,620 inspections

of farms, of which 2,725 assessed compliance with the Nitrates Directive. Therefore, the EA inspected over 1,600 more farms than required under cross-compliance rules. However, since 2010 the EA has reduced the number of inspections undertaken to 1,100 farms, i.e. the minimum required under cross-compliance. Furthermore, it is important to understand the nature of non-compliance in order to target action to reduce environmental risks. The following table sets out the reasons for failure of farmers to comply with Nitrates Regulations in England and this shows that the vast majority are administrative failures to keep sufficient records. However, targeting follow-up action on those exceeding nitrogen application, etc., would deliver higher environmental outcomes and be a factor in driving effectiveness.

Table 2: Reasons for farmers’ failure in England to comply with the Nitrates Regulations in 2010¹⁶.

Reason	Number not complying
Insufficient records	43
Nitrogen in excess of crop requirement	13
Fertiliser applied inappropriately	5
Excess of organic manure field limit	3
Whole farm nitrogen limit exceeded	3
Insufficient manure storage for closed period	1
Fertiliser applied in closed period	1
Total	69

For UWWT, there has been some review in the UK, which has led to greater reliance on accredited self-monitoring and reduced inspection frequency. In Spain the enforcement system is not effective, as evidenced by the significant number of cases for infringement being pursued by the EC.

Understanding effectiveness requires good data collection linking compliance rates and/or environmental change to control actions. Examples in the case studies which illustrate this are described below.

In understanding effectiveness it is important to determine where control activity is directed. The following figure shows that just over half of supervision activity undertaken by municipal inspectors in Sweden for farms is ‘inspection’, while 20 per cent is on compliance awareness work. The subsequent table also shows the number of inspections for different types of activities, illustrating a greater focus on storage of manure than on landspreading. However, whether this represents a perception of a greater risk from manure storage or that inspection of such facilities is easier and less time sensitive than observing intermittent spreading of manure is not clear. However, the data illustrate issues with effectiveness assessment.

¹⁶ Source: Rural Payments Agency website: <http://rpa.defra.gov.uk/rpa/index.nsf/UIMenu/6FC5003174245E5B802579C10040D8A1?OpenDocument>

Figure 1. Distribution of the municipalities' time spent on farm control in Sweden.

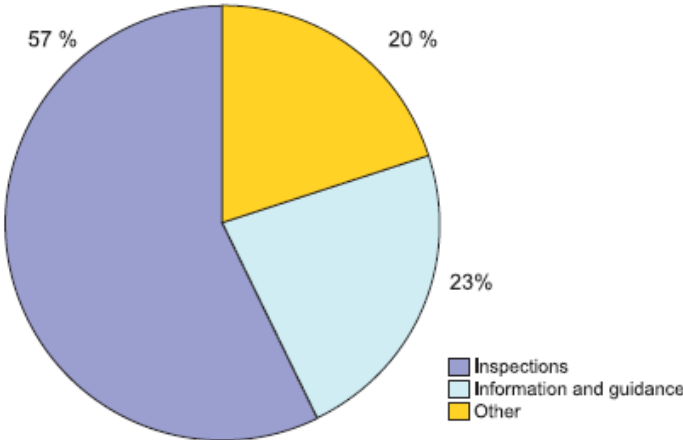


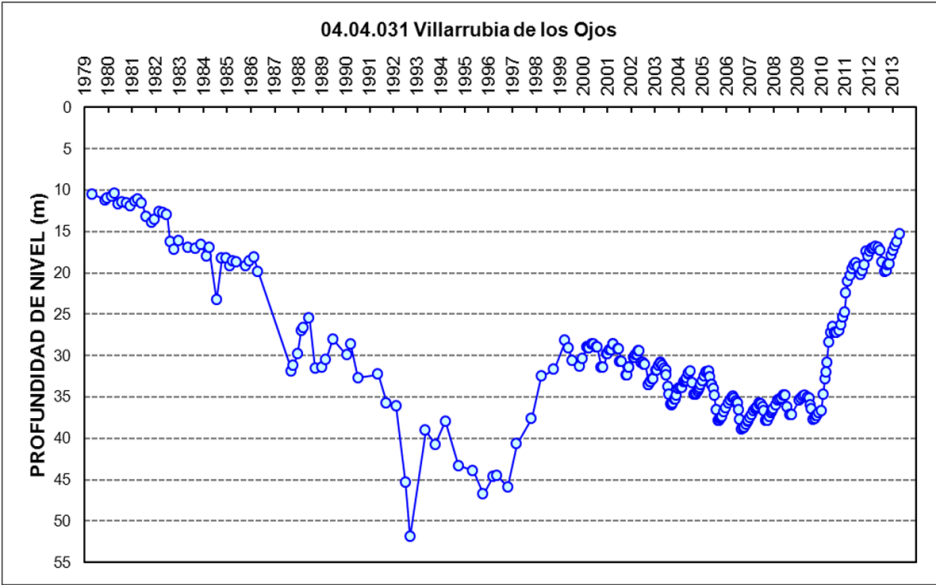
Table 3. Number of inspected activities in Sweden in 2003 with regard to the specific rules¹⁷.

Activity	Number of inspections
Storing of manure	8,200
Livestock density	6,400
Spreading of manure	5,500
Green land	4,200

An important aspect of assessing effectiveness is to observe positive responses in the environment, demonstrating that pressures on the environment have eased. In the Spanish case study on abstraction it is seen that in the Upper Guadiana river basin over abstraction became a severe problem from the 1980s onwards. However, measures (use of remote sensing to detect illegal activity, fines and incentives under agri-environment) put in place have led to a restoration of ground water levels as illustrated by the following figure for one aquifer.

¹⁷ Jordbruksverket (2007), Action programme for reducing plant nutrient losses from agriculture How far have we reached?
http://www2.jordbruksverket.se/webdav/files/SJV/trycksaker/Pdf_ovrigt/ovr138ENG.pdf

Figure 2. Changes in groundwater levels from 1979-2013 in an aquifer within the Upper Guadiana basin



However, while this demonstrates a clear positive environmental response, it is not clear from the case how far this was driven by control activity. Changes in the legal framework and extensive use of fines to tackle illegal abstraction were put in place. However, this was accompanied by parallel measures on agri-environment to change farming practices. Thus the case is one of both carrot and stick and it is difficult to determine the relative effectiveness of incentive measures and enforcement measures.

In Scotland a new approach to assessing compliance with mandatory obligations for farmers was introduced whereby priority catchments were ‘walked’ to identify all cases of non-compliance in the catchment. Overall 5,835km were walked and 5,169 instances of non-compliance with GBR’s were found. Where non-compliance was found there is a programme of return visits. Return visits have been undertaken in four catchments. Of the 328 return visits, 241 farms had started or completed work to take them into compliance, but for 87 there was no change. The policy is to allow for a 3rd return visit (all three visits to take place over two years) and if there is still no compliance, farmers can be taken to court. This illustrates the effectiveness of on farm visits to change farming behaviour and the link between inspection activity and follow-up actions.

An aspect of effectiveness assessment which is important in communication with government and stakeholders is the efficiency of supervision activity. In some cases costs are recovered from business and such business have a clear interest that supervision activity is efficient. However, the costs of other activities may require funding from government budgets. In England and Wales, for example, the Drinking Water Inspectorate recovers its direct inspection costs, but other activities are funded by the government. These costs are just under £2.5 million each year. While this is a substantial sum, the money equates to around 13 pence per household, whereas the average household water supply bill is over £150.

Finally, it is important to note that cases of independent review of control authorities by auditing or Parliamentary bodies have been seen, e.g. in the UK, which provide the opportunity to question both the authorities and stakeholders on the practice, capacity and effectiveness of control chain actions. This is clearly good practice. A further good practice example has been the review of the County Administrative Boards in Sweden which has identified a number of shortcomings in enforcement and provides the basis for stakeholders to question the future control priorities¹⁸.

2.4.9 Conclusions: recommendations regarding the options

It is evident that across the different items of water legislation, control activities are highly varied. Furthermore, such variation may be fully justified. For example, the Environment Agency in the UK undertakes infrequent inspections to WWTPs, but thousands of inspections per year to farms. A risk-based approach may justify this.

In many of the reviewed countries little information on the general framework for inspections and the methodology of a risk assessment was publicly available (an obvious exception being the UK). This means that the validity and effectiveness of the inspection regime is difficult to assess. Risk assessment and inspection planning is mostly done on the local level and information is hard to come by.

Inspection infrastructures vary – from highly devolved arrangements in Germany and Sweden, to more centralised arrangements in the UK and intermediate in other countries. Capacities vary, including within a country for different issues. Drinking water tends to have good capacity, while there are questions in relation to control of small pollutant sources. For farms, although there are many inspections, it is unclear whether this is sufficient, although environmental improvements are seen.

Overall very little information on the capacities of inspection regimes is available in several of the countries. The decentralised system makes an assessment of the available capacities impossible. The local institutions are normally responsible for several regulations and shifts of inspection capacity cannot be detected easily.

For the options, these different structures need to be accommodated. However, lack of transparency and reporting in some cases should be challenged. Capacity issues are of concern in some cases, particularly with financial constraints, and support is needed to enhance this aspect of control. For follow-up, sanctions tend to be widely available. However, their use is variable. However, how far this is an issue of discretion or not and the EU appropriate approach to this needs to be discussed.

¹⁸ Environmental Co-operation Sweden (2011), Optimal Tillsynsplan, Slutrapport, June 2011, <http://www.miljosamverkansverige.se/projekt/Rapport%20Optimal%20tillsynsplan/Optimal%20tillsynsplan%20-%20slutrapport.pdf>

Overview tables

Table 4. Drinking water

MS	Capacity	Procedure	Other measures	Strengths and weaknesses	Overall confidence
DE	Highly dispersed institutional framework at regional and sub-regional level, making capacity assessment very problematic. At local level many local authorities lack sufficient specialisation	Inspection of utilities quality assurance systems is required once per year and local authorities report to regions	Prevention work is undertaken through provision of advice Sanctions available including suspension of provision of water	Strengths: <ul style="list-style-type: none"> Procedures in place obliging authorities to inspect and report. Compliance has improved in recent years Weaknesses: <ul style="list-style-type: none"> Lack of sufficient specialisation in some local authorities. 	Not clear
PL	There is concern expressed on the budgets available to conduct sufficient inspections. Inspectors undergo specialist training.	Controls focus on analysing and checking data reported by water supply utilities and undertaking more in-depth audits of quality checking.	Wide range of sanctions available.	Strengths: <ul style="list-style-type: none"> Interaction between health and environment officials. Inspectors are well qualified. Weaknesses: <ul style="list-style-type: none"> Probably insufficient budget to deliver necessary inspections Central collection of reporting is lacking 	Medium/ good
ES	A review has shown a lack of sufficient numbers of trained personnel, but this is not uniform across the country	Much of the sampling is self-monitored by water suppliers with enforcement authorities undertaking spot controls and incident response	Sanctions are available, but usual response is to recommend improvements, rather than use punitive measures	Strengths: <ul style="list-style-type: none"> Working relationships between health and environment Procedures for inspection established Weaknesses: <ul style="list-style-type: none"> Insufficient capacity Possible limited use of sanctions 	Medium
UK	The DW Inspectorate has 39 staff (29 inspectors) and a budget of £2.5 million	Inspections are undertaken in response to incidents – so they are not	The DW Inspectorate works with water companies to	Strengths: <ul style="list-style-type: none"> Long-track record of enforcement 	High

MS	Capacity	Procedure	Other measures	Strengths and weaknesses	Overall confidence
	per year. It considers its staff are highly qualified and it is responsible for a separate large research budget. New responsibilities and work have been met with efficiency savings	planned for a set frequency or time. In 2011 the Inspectorate carried out 136 incident investigations Inspections focus on the nature of the incident – the origin of the problem, who is at fault and remediation. Costs of inspections are worked out by staff time (including office time), travel costs, etc. All these costs are passed on to the regulated business – so there is full cost recovery of this work.	highlight issues. It also advises local authorities on their role for risk assessment of private water supplies (this is a relatively new role). It uses a variety of sanctions based on a transparent assessment of severity, fault, etc. In many cases a civil enforcement approach is taken, e.g. warning letters. However, it also issues cautions and prosecutes. Since 1997 to 2011 there have been 22 successful prosecutions. Fines imposed ranged from around £2,500 to over £125,000. 25 cautions were issued between 1995 and 2011.	leading to improved compliance <ul style="list-style-type: none"> Expansion of responsibilities to local authorities in 2010 addressed a gap. Highly skilled staff and sufficient budget. Close working with business. Range of sanctions available and all are used, including prosecutions. Weaknesses: <ul style="list-style-type: none"> No obvious weakness, except the potential threat of future constraints in government budgets. 	

Table 5. Abstraction

MS	Capacity	Procedure	Other measures	Strengths and weaknesses	Overall confidence
ES	There is significant lack of capacity in many basin authorities and in some case lack of sufficient expertise	Legislation has been adopted to implement the WFD and basin authorities are in place, but application is problematic. Adoption of remote sensing has been important in detecting illegal abstraction.	Water users associations have taken action outside of formal control to limit abstraction. Wide use of fines. Lack of transparency on sanctions, lack of dissuasive use of sanctions. Environmental improvements seen, but in combination with positive incentives for farmers	Strengths: <ul style="list-style-type: none"> New responsibilities in place. Water users recognize the issue. Weaknesses: <ul style="list-style-type: none"> Difficulties shifting to wider water management responsibilities Legal code to stop illegal abstraction is ineffective Overall level of illegal activity is not known 	Variable – but difficult to determine relative effectiveness of control activities
UK	EA spends over £100 million per year on its	Risk-based approach to inspection.	Compliance awareness is	Strengths: <ul style="list-style-type: none"> Strong link to 	Good

MS	Capacity	Procedure	Other measures	Strengths and weaknesses	Overall confidence
	water resource work. However, there are no separate data on number of staff on enforcement. Review indicates quality of staff is high.	Also EA responsible for cross compliance reporting. Strategic objectives to make abstractions more sustainable. Inspection focuses on record keeping on abstraction volumes and timing.	important factor – working to improve farmers’ performance. Wide range of sanctions available, but new civil sanctions are still new.	<p>licencing and catchment planning for abstraction.</p> <ul style="list-style-type: none"> Integration with cross compliance. Compliance promotion. Abstractors generally report confidence in enforcement system. <p>Weaknesses:</p> <ul style="list-style-type: none"> Some non-compliance continues. 	

Table 6. Land spreading and farm infrastructure

MS	Capacity	Procedure	Other measures	Strengths and weaknesses	Overall confidence
DE	Regional authorities are responsible for enforcement, but this is often devolved to local level. No data on number of inspectors. Inspectors have good knowledge of agricultural practices	Standard inspection procedure is in place. Frequency of inspection can be increased when non-compliance is detected. Links to cross compliance made – but this is at regional level.	Federal programme in place to provide information and disseminate good practice to farmers. Covers 100,000s of people.	<p>Strengths:</p> <ul style="list-style-type: none"> Inspector skills are good. Enforcement can be tailored to non-compliance histories. Links to cross-compliance Extensive compliance promotion programme in place reaching a very large audience. Declining nitrate levels suggest success. <p>Weaknesses:</p> <ul style="list-style-type: none"> Lack of data on institutional capacity 	Good/ high
SE	Municipalities are responsible for inspection	Procedure is not clear, but emphasis on actual inspection is on inspection, followed by guidance and information. More inspection on manure storage than spreading, but not too dissimilar	Board of Agriculture has advisors to help compliance promotion for farms. Sanctions available, but few cases given to	<p>Strengths:</p> <ul style="list-style-type: none"> Significant numbers of inspections undertaken Compliance promotion programme 	Not clear

MS	Capacity	Procedure	Other measures	Strengths and weaknesses	Overall confidence
			prosecutor	Weaknesses: <ul style="list-style-type: none"> Not clear on capacity and procedures. 	
UK	The EA has 71 staff undertaking inspections. Costs of employing staff and training for Nitrates Directive is £1.2-1.9 million annually. Capacity has to be considered within much wider water quality work of EA – totalling £140 million per year.	EA performs inspection, including reporting for cross-compliance. In Scotland SEARS programme integrated farm visits across all delivery bodies, increasing supervision but reducing costs. Scottish approach to ‘walking’ catchments has proved effective in detecting non-compliance.	Compliance awareness is important factor – working to improve farmers’ performance. Sanctions available, but most offences due to record keeping issues.	Strengths: <ul style="list-style-type: none"> Significant capacity Procedures in place for inspection. Integrated into wider water protection work Integrated with cross compliance Weaknesses: <ul style="list-style-type: none"> England and Wales farm supervision not as integrated as Scotland 	Good

Table 7. Non-IED emissions

MS	Capacity	Procedure	Other measures	Strengths and weaknesses	Overall confidence
SE	County Administrative Boards have insufficient capacity. Furthermore, they cover many areas of environmental enforcement and for most Boards have deprioritized this type of water enforcement	For most there is no routine inspection. Rather a quality approach is used, whereby surveillance monitoring identifies water quality problems leading to an inspection response	Sanctions are available in Sweden. However, very limited enforcement action results in very few applications of the sanctions	Strengths: <ul style="list-style-type: none"> The enforcement link to water objectives does link to WFD Weaknesses: <ul style="list-style-type: none"> Significant problems with capacity Conscious movement away from enforcement of water pressures. 	Poor

Table 8. Urban waste water treatment

MS	Capacity	Procedure	Other measures	Strengths and weaknesses	Overall confidence
ES	Inspection by regional inspectorates or national for intercommunal rivers. Regional inspectors cover range of issues,	Inspectors visit WWTPs to check on discharge quality reports. Also respond to incidents, according to severity of the case	Inter-communal and transboundary agreements in place.	Strengths: <ul style="list-style-type: none"> Inspectorate provisions in place. Sufficient skills. 	Medium

MS	Capacity	Procedure	Other measures	Strengths and weaknesses	Overall confidence
	so difficult to specify UWWT capacity. Specialist laboratory facilities. Funded by taxation rather than cost recovery			Weaknesses: <ul style="list-style-type: none"> Spain still has basic compliance issues on UWWTD with insufficient investment to deliver objectives Further legal effect to the WFD is on-going. Need for driver of investment decision making 	
PL	Overall, there is reasonable capacity for WWT enforcement with staff training, etc. However, specific capacity is difficult to determine given the wider inspectorate functions	Procedures are well established with a simplified risk-based model.	Wide range of sanctions available.	Strengths: <ul style="list-style-type: none"> Significant number of staff technically available. Inspectors are well qualified. Weaknesses: <ul style="list-style-type: none"> Poland still has basic compliance issues on UWWTD with insufficient investment to deliver objectives Budget constraints for inspection authorities Central collection of reporting is lacking 	Medium
SE	Responsibility is devolved usually to the municipality. But the wider issues with capacity for water enforcement are problematic	The procedure is operator self-monitoring and this is checked, if necessary by the municipality	Sanctions are available, but potential political interference with their use.	Strengths: <ul style="list-style-type: none"> There are clear requirements that are largely followed. Many years of investment have led to high levels of compliance with the UWWTD. Weaknesses: <ul style="list-style-type: none"> Some concerns over capacity, but WWTP enforcement is not generally 	Good/Medium

MS	Capacity	Procedure	Other measures	Strengths and weaknesses	Overall confidence
				<p>raised as an issue</p> <ul style="list-style-type: none"> Potential political interference with use of sanctions 	
UK	<p>No separate figures for capacity for UWWT. No evidence, however, of capacity issue. UWWT work integrated into wider water management work</p>	<p>Supervision work largely focused on checking water companies' own quality management systems for self-monitoring. Inspections infrequent, therefore.</p>	<p>Separate accreditation process and checking on this for self-monitoring. Wide range of sanctions available.</p>	<p>Strengths:</p> <ul style="list-style-type: none"> Levels of compliance have increased over time. Risk-based approach leading to low priority for supervision in this area. Operators express confidence in enforcement system. <p>Weaknesses:</p> <ul style="list-style-type: none"> Possible concern over low rate of inspection – but this might be justified. 	Good

2.5 Baseline: Nature Directives

2.5.1 Introduction

This section provides the baseline analysis for the enforcement of the provisions of the Birds (Directive 2009/147) and Habitats Directives (Directive 92/43) and Natura 2000 sites in Germany, Spain, Poland, England and Sweden. Following the principal recommendations regarding the options, the key information from each of the Member States is presented within the given categories. For reference purposes, the key enforcement requirements of the respective EU Directives are provided within boxes at the start of each section.

2.5.2 Legislative and policy framework

Article 6 of the Habitats Directive, 92/43 requires MS to apply a set of site protection safeguards to the sites making up the Natura 2000 network, including sites classified as special protection areas (SPAs) under 2009/147. These safeguards include:

- general restrictions or conditions governing certain land-uses within or close to Natura 2000 sites. In some instances, these may be found in agri-environmental contracts;

- a requirement to submit potential damaging plans and projects to an appropriate assessment and other procedural requirements. Approval of damaging projects can only be given on basis that certain conditions are fulfilled. These include habitat compensatory measures.

While the majority of the Member States examined in this report claim to have clear objectives for inspections, published implementation and enforcement policies are often largely absent.

Natural England (England's executive, non-departmental public national body responsible for determining whether damage has occurred to most habitats and to initiate enforcement action) published a recognized enforcement guidance document in 2011. According to this policy, if it discovers or receives a report of an incident for which it believes offences may have been committed, it will conduct an investigation in order to establish the facts of the case, the seriousness of the damage and the wider relevance of the incident. The enforcement guidance also sets out in detail the types of sanctions (e.g. compliance notice, enforcement undertakings, fixed monetary penalty, prosecution, injunction, etc.) that may be imposed for different types of offences and how these will be applied.

Efforts to increase the degree of standardization in Germany have also begun. In a multi-year consultation process, the German federal government and the German Länder agreed on a uniform approach for sample-based monitoring under the Habitats Directive and have compiled a national monitoring plan (meeting the requirements of Article 17 of the Habitats Directive on a biogeographical level).

In Poland, the Act on Nature Conservation sets out the responsibilities concerning Natura 2000 sites. However, the Act is not clear regarding the appropriate levels of responsibility for executing management and monitoring of Natura 2000 sites or the relationships between these levels.¹⁹

In all of the examined Member States, transposition of the Natura 2000 Directives into national law, which provides the initial basis for subsequent enforcement action (examined in more detail in the following sections). These key laws are:

- In Spain, the formal transposition is laid down by the Royal Decree 1997/1995, of 7th December, on the conservation of natural habitats and of wild fauna and flora (Royal Decree 1997/1995 hereinafter). The Law 43/2003, of 21st November, introduced a new Chapter, including five new provisions to ensure that the annexes (lists of habitats and species) of the LEN are fully consistent with the Directives'.
- In Sweden, the Habitats and Birds Directives are transposed into the Environmental Code (1998:808) as well as the Species Protection Ordinance (2007:845).
- In England, SSSIs are protected by Part II of The Wildlife and Countryside Act 1981. This Act has been amended by section 80 of the Countryside and Rights of Way Act 2000, substituted by Schedule 9 to the Countryside and Rights of Way Act 2000 and is inserted by section 55 of the Natural Environment and Rural Communities Act 2006. The

¹⁹ Pawlaczyk et al (2004). Natura 2000 Shadow List in Poland.

enforcement of this amended Act is supported by the Environmental Damage (Prevention and Remediation) Regulations 2009. These Regulations apply where damage to land, water or biodiversity is extremely severe. Also the Environmental Impact Assessment (Agriculture) (England) (No.2) Regulations 2006 aim to protect uncultivated land and semi-natural areas from being damaged by projects that increase agricultural productivity.

- In Germany, the legal implementation into federal (national) law of Nature Conservation as a framework law was only achieved in 1998 (Bundesregierung 1998: 823 ff., for legal aspects see Gellermann 2001: 1 ff.), with amendments to include the marine environment beyond 12 nautical miles in the Exclusive Economic Zone in 2002. Under German Federal law, the Länder are also required to create a system of interlinked biotopes covering at least 10 % of Germany's territory.
- In Poland, EU regulations essential for creating the Natura 2000 network have been incorporated into the Polish law when the Environmental Protection Act of 16 April 2004 was published (Journal of Laws No. 151, item 1220, amended).

2.5.3 *Inspection requirements*

Provisions derived from EU law for nature protection relevant for inspection functions include:

- checking compliance with management requirements for Natura 2000 sites in accordance with respective management plans and designation acts.
- checking compliance with the obligation of non-deterioration of sites under Art.6(2) of 92/43.
- checking compliance of projects with assessment provisions set out in Art. 6(3)-(4) of 92/43 (screening decisions, quality of assessments, alternatives) and related permits delivered (conditions attached thereto concerning implementation of mitigation/compensation measures or monitoring requirements).

Neither the Birds or Habitats Directive contain detailed inspection provisions. However, surveillance is provided for in Article 11 of the Habitats Directive. Externalities of breaches of the site protection safeguards include biodiversity loss. This may take the form of deterioration or fragmentation of habitats, disturbance or displacement of sensitive species, loss of rare or endangered species, changes in species composition, along with loss of all the socio-economic benefits they entail (for example, wetlands can provide ecosystem services such as reduced flood risks and wetland destruction may involve a loss of these services).

While all five MS have transposed the Directives into national law, some of the transpositions have only been partially completed and threaten their effectiveness. In Poland, for example, Art 6(2) and 6(1) are not completely transposed²⁰. While there is the obligation for the Nature Authority to stop illegal destructive activities, responsibilities are unclear and there are no obligations to avoid the effects of legal but disturbing activities.

²⁰ Pawlaczyk (2010). Natura 2000 in Poland - Last Progress. http://www.kp.org.pl/pdf/poradniki/jak_sie_troszczyc_o_obszar_n2000-pzo20100626.pdf

Furthermore, while the preparation of management plans is obligatory, there is no obligation to implement them into practice.

Similarly, the provision on the monitoring of the conservation status of the natural habitats and Natura 2000 species (contained in the art. 11 of the Habitats Directive) is not elaborated in Spanish regulation. The Spanish Royal Decree 1997/1995 includes article 6.1 of the Habitats Directive, but does not develop specific guidance or provisions about the management regime.

2.5.4 Inspection planning

Inspection planning for the nature legislation is different to other areas of law. For protected areas, it is difficult to distinguish between routine biodiversity monitoring, casual observation and 'inspection'. For example, in the UK Natural England monitors the condition of sites, but refers to 'inspection' as investigations after incidents have been reported. However, in other areas of law 'inspection' may include the monitoring to determine incidents have not occurred. Secondly, for species protection all investigation is incident-based (e.g. for illegal hunting, poisoning, etc.).

Where inspection is, therefore, viewed as an incident response activity, planning for inspection is of a specific character. The baseline analysis has found it difficult to identify dedicated inspectors, but rather across all of the MS studied, inspectors largely are either general staff (or particular habitat or species specialists) who undertake inspections as needed. Planning for these in a strategic sense is difficult, except to identify likely resource needs based on prior experience. It is also important to note that other enforcement bodies, such as the police, may be involved, but in this case the planning will overlap with other planning and processes relating to crime prevention and detection in other areas of law.

2.5.5 Administrative Arrangements

In Sweden, the supervision of protected areas is carried out by regional County Administrative Boards, the Swedish Forestry Agency and municipal environmental authorities. The County Administrative Boards also supervise activities that may affect Nature 2000 sites (although they may delegate these responsibilities to municipal authorities).^{21,22}

In England, Natura 2000 administrative structures take the form of a national body - Natural England. It is the competent authority responsible for determining whether damage has occurred to most habitats and for initiating enforcement, compensatory or restoration actions. However, enforcement activity involves a range of organizations and relationships of various types have developed between the respective authorities. Much of Natural England's compliance promotion and enforcement work is delivered in partnership with other

²¹ Ebbeson (2006), Natura 2000 in Sweden, Avosetta meeting in Krakov, January 13 and 14, 2006, <http://www-user.uni-bremen.de/~avosetta/repse2006.pdf>

²² Naturvardsverket (2007), Bättre tillsyn i skyddade omraden, delrapport 1 – kartlaggning och forslag pa utvecklingsomraden, <http://www.naturvardsverket.se/Documents/publikationer/620-5685-9.pdf>

agencies, including the Police, and Crown Prosecution Service (CPS), Environment Agency, Forestry Commission and the Rural Payments Agency (RPA).

In Poland, monitoring and controlling the implementation of protective measures is undertaken by the institution supervising the area (Regional Directorates for Environmental Protection and Marine Offices, which are controlled by the national Director General for Environmental Protection) according to the plans for conservation measures (Plany Zadan Ochronnych) and Protection Management Plans (Plany ochronne).

Spain and Germany's inspection systems are organized in a decentralized manner, consisting of several administrative structures with distinct responsibilities and tasks. Both Member States have no national inspecting body and instead organize the inspection system within the individual states (Länder in Germany and Autonomous Communities - AC - in Spain). These structures lead to different methods and approaches regarding site selection, site management and protection within the responsible administrative structures and require strong national coordination in order to achieve a coherent Natura 2000 network. The ability to implement additional laws and regulations within the respective Länder and AC can also create variations in levels of stringency, procedural aspects and requirements for nature protection.

Regardless of whether responsibilities are coordinated on a national or regional level, Member States have largely created regionally active administrative bodies or teams to improve inspection regimes via e.g. the amount of locally relevant information able to be obtained. Local teams of Natural England, for example, are supported by "Protected Areas Teams" and "Regional Regulatory and Enforcement Leads" which work to ensure consistency on regulatory aspects of nature conservation designations and bring together the understanding of management objectives with those of damage caused by non-compliant activity. Germany is also active via its e.g. 'Local Actions' and Sweden through cooperation with County Administrative Boards. Poland also acknowledges the advantages of delegating selected environmental protection responsibilities to local governments, but is restricted by insufficient skills and limited budgets.²³

2.5.6 Inspection and follow-up activities

Inspection requirements for nature protection should include:

- (a) Systematic surveillance, detection and characterization of breaches of site protection safeguards
- (b) Non-routine inspections where appropriate including in response to substantial complaints.
- (c) Co-ordination of site safeguard-related inspections with work focused on other related types of compliance work.

Follow-up requirements for nature protection should include:

- (a) cessation of illegal activities.

²³ Grodzińska-Jurczak et al. (2012). Chapter 9: Effectiveness of Nature Conservation – A Case of Natura 2000 Sites in Poland.

(b) measures to rectify breaches (e.g. additional mitigation, restoration as where part of a protected site has been unlawfully destroyed).

(c) dissuasive, effective and proportionate sanctions, incl. criminal penalties, monetary sanctions, confiscation of illegal equipment or other administrative measures.

Monitoring and inspection activities vary greatly across the Member States, as well as within the individual German Länder and Spanish AC. Overall, it can be said that some Member States have recently begun to start monitoring efforts, that the systems are still evolving and mostly are not yet comprehensive.

In Poland, for example, the plans for conservation measures (Plany Zadan Ochronnych, PZO) and the Protection Management Plans (Plany ochronne - PO) have only recently been designed and have thus resulted in monitoring and control measures only being carried out to a limited extent. Any structures and changes planned in areas covered by Natura 2000 need to undergo an environmental impact assessment. Therefore the General Directorate for Environmental Protection is in principle aware of potential risks for the environment in Natura 2000 sites and can request changes to be made to the plans. National control activities, mostly due only to the recent implementation of the Protection Management Plans, have so far been conducted mainly in relation to activities that may have significant effects on the Natura 2000 network (in accordance with Article 37 of the Act of Environmental Protection), if there were any indications that these activities were done without authorization.

Following the German National Monitoring Plan, in the event that monitoring activities reveal that conditions have worsened in a given German Natura 2000 site, an investigation will be conducted to find the cause. When it is not caused by immediate human activity, the issue cannot be pursued (e.g. due to climate change). However, when human causes are found to be responsible, the individual is asked to restore the site to its original condition. Should they not comply, legal action can be taken which may result in sanctions being applied. However, the legal procedures for following up to non-compliance still vary due to differing state legislations (e.g. the State Act for the Protection of Nature, State Preservation of Historic Monuments Act, Game Law, etc.).

Sweden monitors on the national and regional level on a regular basis, focusing on semi-natural pastures and mown meadows, which constitute about half of Sweden's HNV-farmland area (450,000 out of approximately 850,000 hectares). For the rest of the HNV-farmland area, there is no on-going monitoring. There is also a national biodiversity monitoring scheme focusing on biodiversity in the most valuable areas (highest biological values). The latter monitoring scheme is carried out as a part of the National Inventory of Landscapes in Sweden study and examines the changing quality of biodiversity in the monitored areas. Sweden also monitors farmland birds.²⁴

Natural England adopts targeted inspections and thus regularly visits sites to assess the condition and management and other issues with owners. Furthermore, other agencies, e.g.

²⁴ European Commission (2010), Biodiversity Knowledge Base, Country Profile – Sweden, http://cdr.eionet.europa.eu/se/eu/bap/envtcd65w/CPSE_Final.pdf

Rural Payments Agency (RPA), also undertake inspections linked to cross compliance. Drawing on these different site visits, potential incidents of damage to sites are identified which would instigate more detailed inspection by Natural England specialist staff. Where irregularities are identified as a result of an inspection they are followed up and Natural England has access to a wide range of different types of sanctions in the case of non-compliance for protected areas (the application of these sanctions is set out in its enforcement policy). However, the House of Commons Public Accounts Committee reports²⁵ that Natural England (NE) staff as well as other stakeholders, such as environmental NGOs, believe that more needs to be done with reference to this risk-based approach - e.g. carrying out inspections more often - to ensure that sufficient compliance inspections are taking place to meet Natural England's strategy targets. This potential for improvement arises given the shared understanding that "inspections have multiple important functions: to monitor sites of concern, to increase NE's exposure which in turn encourages compliance and strengthens the role of compliance as a lever for consultants over developers, and to provide valuable field experience for new advisors which strengthens NE's capacity to make office-based risk assessments and licence approval decisions" (House of Commons Public Accounts Committee).

2.5.7 Awareness raising

Regarding awareness raising, information and prevention efforts, all five Member States provide evidence of such activities. Some examples include the launch of a new LIFE project in Spain to raise awareness of its citizens about the importance of biodiversity and the Natura 2000 sites, provision of guidance materials and advice in England, intense stakeholder involvement for management planning in Germany, prevention and promotion work in Sweden²⁶, and participation via public consultations in Poland. Competent authorities need a close working relationship with landowners to discuss the necessary management techniques to deliver positive conservation outcomes, as well as preventing damage to sites.

2.5.8 Inspection capacity, review and reporting

Estimates regarding the cost of inspections, the number of staff involved and their respective levels of expertise are difficult to obtain, let alone to assess whether or not these numbers are sufficient to deliver effective levels of control. This is in large part due to the divided responsibilities of respective administrative authorities and their employees as well as regional and national variations.

In Germany, for example, existing monitoring programmes are included in the national monitoring concept, e.g. monitoring under the Water Framework Directive for fish species.²⁷

²⁵ <http://www.publications.parliament.uk/pa/cm200809/cmselect/cmpubacc/244/24401.htm>.

²⁶ While a large amount of work is being carried out in this regard, it has been said to not be followed up in practice, thus limiting the effectiveness.

²⁷ Natura 2000 – The German Network Flyer. (Available at http://www.bfn.de/fileadmin/MDB/documents/presse/29_05_08_natura2000_und_monitoring.pdf)

The estimated annual habitat management and monitoring costs combined with management planning costs are estimated at 17.9 million Euro; the average annual per hectare costs for habitat management and monitoring is 59.39 euro.²⁸

In Spain, the distribution of inspection competencies varies greatly from region to region. Only five regional environment ministries report that inspectors have the competence to control all environmental media²⁹. In most Autonomous Communities, there are sectoral restrictions on inspection competencies. More generally, however, it has been pointed out that coordination mechanisms are insufficient, as only two ministries state that sectoral inspections are subject to coordination. Gantolier et al. (2010) also indicate that current funding is insufficient, especially when taking into consideration the large dimensions of the Natura 2000 network in Spain and the budget shortcomings in several of the regions. The current financial crisis is only making this financing situation worse.

In Sweden, as part of a review of the supervisory work of County Administrative Boards, major deficiencies were revealed in the supervision of protected areas. On average, County Administrative Boards reported a 50% shortage of human resources in 2007 based on estimated needs and final outcome according to their supervision plans. The most severe deficiencies relate to investigation and monitoring activities to be carried out on the counties' own initiative.

While Natural England has a sizable budget and staff (ca. 2,250), the authority's budget and staff are responsible for many more tasks than its control functions. Therefore, it is not possible to identify the precise capacity for enforcement work. Public authorities are under significant financial pressure in the UK, so it is likely that additional problems will occur in delivering the range of Natural England's work.

The information on inspection capacity is also very patchy in Poland. The fixed costs of monitoring per year in the years 2006-2013 were estimated at 1.29 million euro³⁰.

Reports on inspections and inspection outcomes are produced by England on a national level and by certain Länder within Germany (e.g. Schleswig Holstein³¹), where they are made available on the internet for public viewing. There are also reporting obligations in Poland under Article 31 of the Act on the Protection of Nature, requiring a submission every 3 or 6 years of reports relevant to: initiated protective activities, the impact of these activities on the state of the protection of habitats and species, and results of the monitoring and supervision of these activities.

²⁸ Gantolier S., Rayment M., Bassi S., Kettunen M., McConville A., Landgrebe R., Gerdes H., ten Brink P. Costs and Socio-Economic Benefits associated with the Natura 2000 Network. Final report to the European Commission, DG Environment on Contract ENV.B.2/SER/2008/0038. Institute for European Environmental Policy / GHK / Ecologic. Brussels 2010.

²⁹ Bohne, E (2006). The question for environmental regulatory integration in the European Union - Integrated pollution prevention and control, environmental impact assessment and major accident prevention. Kluwer Law International.

³⁰ Stocki, J.S. (2013). "Programme of NATURA 2000 in Poland". Presentation: http://www.lesycr.cz/o-nas/zahranicni-vztahy/Documents/11_Jacek_CZechyNatura2000_Poland.pdf

³¹ Available at www.natura2000.schleswig-holstein.de

Natural England, in addition to publication of individual enforcement actions, publishes an annual overview of its control activities³², but similar reports were not identified in other Member States.

2.5.9 Effectiveness of the inspection system

Problems that inspection needs to address include:

- illegal construction and other illegal interventions such as quarrying and extraction;
- overgrazing by livestock;
- over-intensive leisure use causing problems such as erosion and species disturbance;
- poor water quality resulting from multiple sources of pollution and interference.

The large number of complaints and infringements, and related CJEU cases, demonstrate the widespread problems of compliance at MS level. The conservation status assessments provided in the context of MS regular reporting obligations also demonstrate the distance that exists in meeting the objectives of the directives.

Several cases of non-compliance have resulted in the EC taking action against Spain, Germany and Poland for failure to designate SPAs/SCIs on schedule. While these issues have since been resolved, several additional compliance and effectiveness issues remain, such as ensuring farmers adequately deliver their commitments for nature protection and reduction of illegal activities on protected sites.

More specifically, Spain is among the MS with the highest number of sanctions, complaints and reports related to breaches and/or insufficient fulfilment of the European laws of nature conservation. In 2007, 62 cases were filed against Spain, making it one of the countries with the highest number of on-going procedures of infringement of environmental legislation - most of them related to nature conservation. This suggests a range of compliance issues. Whether these translate into problems in ensuring enforcement of objectives for protected areas is not yet clear.

Possible reasons for this high level of non-compliance noted in the baseline analysis are: an absence of preventive protection measures, lacking guidance for setting up management plans and a lack of unified models of action among the ACs. The lack of guidance and instructions on monitoring procedures as well as missing adapted species lists for individual ACs in Article 11 of the Habitats Directive is a further issue.

In Sweden, the level of ineffectiveness of nature legislation can be linked with the insufficient amount of surveillance being carried out. This is due in part to deficits in available financing, but also to an unclear division of surveillance responsibilities between both administrators and field workers. Supervision planning at County Administrative Boards exists at almost all county administrative boards, but often they are of poor quality and have not been updated or followed up on. Furthermore, while the County Administrative Boards

³² Annual reports of enforcement actions available here: <http://www.naturalengland.org.uk/ourwork/regulation/enforcement/>

decide on the amount of funds that will be used for financing surveillance, preference for other priorities has limited the amount being designated for these purposes in practice.

In Poland, the lack of stakeholder acceptance for conservation practices generally as well as specifically on their private land presents a large impediment to effectiveness. The expectation that increased costs and obligations will accompany the Natura 2000 network and associated legislative items instil hesitation and often harmful behaviour of stakeholders. Increased outreach, education and support in the creation of management plans are necessary to address such obstacles.

Finally, Natural England has been cited³³ as failing fully to utilize its enforcement powers to act against landowners who refuse to comply with management practices which conserve and protect designated Natura 2000 sites. This lack of sufficient action can facilitate protracted negotiations which create high financial and conservation costs, which are particularly relevant given the pressure from public budget constraints. The authority is also working to increase its effectiveness by improving the capacity of its staff, both in terms of specialists and generalists.

2.5.10 Costs of inspection

For these particular Directives, there are typically no charges for business regarding inspection activities. In Germany and Poland, for example, there are no charges for businesses as no fees are charged for inspections carried out in relation to Natura 2000 sites. In the UK, the costs of inspection activity itself by Natural England are met by the budget of the authority, not those being inspected. Costs to those being regulated, therefore, arise from the time spent during inspection visits and follow-up. However, as the latter would occur in the case of non-compliance (as would sanctions), this is not relevant in the context of administrative burden.

In examining the information gathered during the baseline analysis it is clear that it is not possible to determine the specific costs of enforcement of the nature directives. Costs are almost entirely time costs - to the administration and to landowners, etc., subject to inspection. However, while for an industrial activity, for example, it can be assumed that five hours on-site inspection by an inspector is probably matched by an accompanying staff member from the company, this need not be the case with nature protection sites. Where there is public access, for example, they could be visited without the landowner's knowledge, let alone cost.

It is also not possible to disentangle 'inspection' of sites from wide nature protection work. Staff of nature protection administrations routinely visit sites to monitor biodiversity, examine outcomes of management regimes, etc. These visits may result in detection of problems, but staff may not class such visits as 'inspections'. Where incidents occur and other specialists are brought in, then such 'inspections' have identifiable costs. However,

³³ House of Commons Public Accounts Committee (2009). DEFRA: Natural England's Role in Improving Sites of Special Scientific Interest. Section 1, paragraph 8. <http://www.publications.parliament.uk/pa/cm200809/cmselect/cmpubacc/244/24405.htm>

data on the extent of these is difficult to determine. Even in cases, such as the UK, where Natural England states it has a policy of seeking to recover costs, evidence to recent reviews expresses concern over the level of fines imposed and, therefore, raises a question mark on whether such numbers could be used as a surrogate for inspection costs.

Finally, for wildlife enforcement, there are problems in identifying cost due to the number of overlapping institutions involved – nature agencies, police, etc.. Furthermore, staff may also be involved in CITES enforcement (see next section) so that separation of staff costs between environmental themes is not possible. In the UK, it is noted that several (but not all) police forces have a dedicated wildlife officer. This would total costs of several person years per year, but is negligible compared to the overall costs of the staffing of these police forces.

In conclusion, due to the complexities of the nature of enforcement and the institutional contexts, it is not possible to identify robust costs estimates of control costs, let alone costs that would arise from application of a fully effective control system for the nature directives.

2.5.11 Recommendations regarding the options

From the baseline summary below, we identify the following conclusions for the development of options:

- Information on the enforcement practice in the respective Member States is sometimes difficult to clarify. In Spain and Germany, one reason for this could be the decentralized nature of the administrative systems, which makes it difficult to have a unified and coherent inspection system. While such decentralized systems usually permit a more “hands-on” approach regarding the implementation of environmental policies at regional and local levels, the lack of coordination between fragmented and competent environmental authorities is the main weakness hampering the inspection activities and does not ensure consistency. From a European perspective, this does not necessarily mean that the inspection systems are not robust enough, but rather that it is impossible to judge whether they are or not. Information on the effectiveness of the inspection regime and the processes for risk assessment are generally not available.
- Currently, monitoring of the outcomes of the Nature Directives is evolving; however, in most Member States, this system is narrow in scope as there is hardly any reporting on the capacity, actions or effectiveness of the inspecting authorities. Likewise, there is little information on the strategic approach to enforcement taken. Improved information on these aspects would facilitate the identification of weaknesses in current MS enforcement activities and better target available resources. As a result it is difficult to determine on which threats the inspection regime is focusing and whether the inspection regime is sufficiently effective. Responsibilities are unclear in many countries making the system not very accountable.

- It would be beneficial to have requirements which outline clear rules for cooperation within Member States, wherein several organizations are required to work together to ensure an efficient control system.
 - The German regional approach could, in this respect, be a good example. Schleswig-Holstein's way of implementing Natura 2000 is an intense cooperation-oriented process with the participation of regional stakeholders from agriculture, forestry, water management, tourism, local communities, conservation and other regionally important groups. This approach supports a successful implementation path in Schleswig-Holstein with a focus on 'local actions' (Lokale Aktionen). This is a method allowing for a high degree of responsibility to be shared with the regions and local stakeholders in the implementation of Natura 2000. The actions are technically competent support structures that are largely independently responsible for the management of Natura 2000 sites. The Ministry of Agriculture, Environment and Rural Areas (MLUR) promoted a special directive.
- Some of these recommendations have already been implemented in England and can serve as best practice examples for other Member States, including:
 - Publication of an extremely detailed enforcement policy detailing how and when to use different sanctions.
 - Close working relationships with a range of other public bodies to deliver much greater inspection information as well as to reduce burdens to land owners.
 - Restoration of environmental harm is a primary objective of the enforcement process.
 - Full cost recovery of enforcement action in the case of offences.
 - Detailed publication of offences committed and responses to these.
 - Criminal sanctions are available and used for the few serious cases arising.

Table 9. Thematic table overview for nature

	Germany	Sweden	Spain	UK	Poland
Capacity <ul style="list-style-type: none"> Budget Staff numbers 	Difficult to estimate as: (1) the set-up and distribution of tasks varies by state and (2) there is large overlap with other responsibilities (e.g. for the Water Framework Directive, other aspects of nature protection than inspections, etc)	50% shortage of human resources ³⁴ , particularly in investigation and monitoring activities Deficit in available financing for their surveillance plans of protected areas	Insufficient budget and capacities (only five regional environment ministries have sufficient inspectors to control all environmental media)	Natural England: £140 million overall budget per annum (£810,000 is the administrative budget) Natural England: 2,250 staff ³⁵ NE has an enforcement/legal team and Protected Areas Teams. It also draws on the routine payments inspections of the Rural Payments Agency. These are able to identify damage.	Insufficient skills and limited budgets
Procedure <ul style="list-style-type: none"> Numbers of thematically related inspections Frequency of inspections Coverage of inspections (full or selective target coverage) Average lengths of inspections Average costs of costs 	On-going monitoring (one mandatory control per 6 year reporting period). Follow-ups to complaints or intelligence received. Sampling-based monitoring. Habitat management and monitoring costs combined with management planning costs are estimated at 17.9 million €/yr. Average costs for habitat management and monitoring is 59.39 €/ha/yr.	Regular inspections of semi-natural pastures and mown meadows.	Preventive inspections may be initiated by internal inspections plans, regulatory requirements, and/or routine, while reactive inspections are triggered mainly by malfunctions, accidents or complaints.	RPA inspections are limited to farms receiving payments. NE also visits other sites for routine conservation work, when damage can be identified. If so, further reactive and investigative work can be undertaken. Risk-based inspections based on a standard risk model using likelihood and impact and a high, medium, low assessment However, there is independent Parliamentary criticism of control.	Fixed costs per year for monitoring from 2006-2013: 1.29 million euro ³⁶

³⁴ Estimated for 2007 based on estimated needs identified within the supervision plans of the competent authorities.

³⁵ These figures are responsible for many more tasks. Therefore, it is not possible to identify the precise capacity for enforcement work. Public authorities are under significant financial pressure in the UK, so that it is likely that additional problems are faced with delivering the range of Natural England's work

³⁶ Stocki, JS (2013). "Programme of NATURA 2000 in Poland".

<p>Level of overall confidence (high, medium, low) (qualitative)</p>	<p>Delay in the designation of SCIs/SACs and action against Germany from the EC; the sites were designated and the case was dropped in 2006.</p>	<p>Failure to meet Environmental Quality Objectives due to insufficient surveillance³⁷.</p>	<p>The delay in the designation of SCIs, the absence of preventive protection measures and the lack of management plans in the SCIs have resulted in a degradation in the state of conservation of a large part of SCIs. Among the MS with the highest number of sanctions, complaints and reports related to breach and/or insufficient fulfilment of the European laws of nature conservation.</p>	<p>Sometimes cross-compliance requirements are breached for Single Farm Payments. Damage from off-road vehicles is a priority.</p>	<p>Incomplete transposition of Art 6(2) and 6(1) in national legislation. Delay in implementation of Natura 2000 and an infringement procedure against Poland by the EC in 2006; the sites were designated and accepted in 2008.</p>
<p>Other (incentive) measures to</p> <ul style="list-style-type: none"> encourage compliance non compliance response <p>Qualitative</p>	<p>Intense stakeholder involvement/consultation and public awareness/ acceptance work. High level of transparency.</p>	<p>Lack of follow-up with prevention and promotion work.</p>	<p>Incomplete adaptation of the species lists for Autonomous Communities. Removal of harmful incentives (e.g. agri-environmental payments) or imposition of RES Variable Monetary Penalties.</p>	<p>Natural England works closely with land owners to set out management requirements and identify activities threatening habitats. It also seeks to educate others with damaging activities. Non-compliance responses are administrative and criminal. New administrative sanctions are being used. As these came into place in 2012, their effectiveness as a deterrent is not known.</p>	<p>Public consultations, awareness raising activities/workshops.</p>
<p>Overall view of strengths and weaknesses Synthesis / qualitative</p>	<p>Incomplete management plans Completion of a uniform approach for monitoring under the Habitats Directive. 'Local actions' and consultation processes in e.g. Schleswig-Holstein.</p>	<p>Deficiencies in the supervision of protected areas due to limited capacity. Unclear division of responsibility between administrators and field workers.</p>	<p>Further information is needed to assist ACs in setting up "management plans". The Natura 2000 Network overlaps with the ENP-Networks in communities who kept differentiated networks, creating inefficiencies regarding the monitoring and inspection procedures. Insufficient coordination</p>	<p>Need to improve consistency of risk assessments and inspections Strengths:</p> <ul style="list-style-type: none"> Detailed enforcement policy detailing with how and when to use different sanctions. Close working relationships with a range of other public bodies to deliver much greater inspection information as well as to reduce burdens to land 	<p>Complicated and unclear system of responsibility. Lack of awareness by stakeholders.</p>

³⁷ Sweden's Environmental Quality Objectives³⁷ (EQOs) guide to a large extent Sweden's environmental policy. The detailed assessment of the progress in achieving the EQOs from 2012 concludes that one of the reasons for Sweden being unlikely to meet the EQO target of a rich and diverse plant life target is the insufficient surveillance.

			mechanisms.	owners. <ul style="list-style-type: none">• Restoration of environmental harm is a primary objective of the enforcement process.• Full cost recovery of enforcement action in the case of offences.• Detailed publication of offences committed and responses to these.• Criminal sanctions are available AND used for the few serious cases.• New use of administrative sanctions.	
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2.6 Baseline analysis of Trade in endangered species (CITES)

2.6.1 Legislative framework

CITES (The Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement that came into force in 1975. It aims to ensure that no species of wild fauna or flora becomes or remains subject to unsustainable exploitation through international trade³⁸. CITES is implemented in the EU through a set of Regulations known as the EU Wildlife Trade Regulations, which are directly applicable in the Member States. The two regulations that constitute the legal framework in the EU are:

- The framework regulation: Council Regulation (EC) No. 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein including the Annexes containing a list of species regulated in trade.
- The implementing regulation: Commission Regulation (EC) No. 865/2006 of 4 May 2006 laying down detailed rules concerning the implementation of Council Regulation (EC) No 338/97 on the protection of species of wild fauna and flora by regulating trade therein.

The Regulation establishes different bodies at EU level to oversee the implementation of the Regulations. They include the Committee on Trade in Wild Fauna and Flora, the Scientific Review Group (SRG) and the Enforcement Group. The groups include representatives of MS and chaired by the EC. At MS level, three additional bodies must be established to comply with CITES requirements. A Scientific Authority must be designated to determine whether international trade in a species listed in one of the CITES Appendices is detrimental to the survival of the species in the wild. A Management Authority must also be established to issue permits for trade (based on the advice it receives from the Scientific Authority). Finally, an enforcement system is also required (e.g. Customs officers and the Police) to verify that shipments are traded with the required permits or certificates.

In addition to the core legislation, Commission Recommendation No 2007/425/EC (commonly referred to as the 'EU Enforcement Action Plan') specifies measures that should be taken for enforcement of the EU Wildlife Trade Regulations. These include adopting national action plans for enforcement, imposing sufficiently high penalties for wildlife trade offences and using risk and intelligence assessments to detect illegal and smuggled wildlife products.³⁹

Under the CITES Regulation, MS must:

- Ensure that all imports, exports and re-exports covered by the Convention are subject to a system of permits and certificates and to appropriate checks.
- Prohibit certain commercial activities relating to protected species.

³⁸ EC (2010) An Introduction to CITES and its Implementation in the European Union, http://ec.europa.eu/environment/cites/pdf/trade_regulations/short_ref_guide.pdf

³⁹ EC website on CITES implementation: http://ec.europa.eu/environment/cites/legislation_en.htm

- Take other measures to ensure species protection, e.g. introduce procedures for making of certain specimens to facilitate their identification of take measures to protect live specimens during transport

The CITES Regulation provides for:

- Monitoring of compliance.
- Enforcement action in case of non-compliance, including seizure and confiscation of specimens that are illegally imported or exported; checks at airports, ports and land borders carried out by custom officers, scientific examination of any question related to the CITES implementation.
- In-country controls on traders and holders such as pet shops, breeders and nurseries as well as on co-operation and information exchange.

Article 15 of Regulation (EC) No 338/97 requires the EC and MS to take the necessary steps to ensure that the public is sufficiently informed of the provisions regarding implementation of CITES. In addition, Member States must ensure that the public is informed of the implementing provisions at border crossing points. The EC website on wildlife trade issues⁴⁰ provides relevant information to stakeholders and citizens involved in wildlife trade in the EU.

2.6.2 *Inspection planning and process*

Under the EU's wildlife trade regulations, MS must designate Customs offices to carry out the checks and formalities required under the Regulation. Designated offices must have sufficient and adequately trained staff and sufficient accommodation for live animals in accordance with EU legislation on the transport and accommodation of live animals.⁴¹ At these entry/border points, 2 main activities related to inspections and enforcements are carried out: checking declared CITES shipments and looking for illegal, undeclared shipments. The documents for specimens of species regulated under the EU Wildlife Trade Regulations must be presented at their "point of introduction". The purpose of checks is to verify the documents of shipment declarations. Physical checks may be needed to ensure that the shipment matches the accompanying permits and certificates.

The thoroughness of checks that are done on CITES documents vary from MS to MS⁴². The EC study shows that good practice is seen in several MS through the computerisation of CITES documents, which can help the thoroughness of checks, such as in Slovenia where a database includes information on permits, offences, captive breeding and artificial propagation facilities, as well as a register of marked specimens. For some Member States, physical checks are also regularly performed. In Italy, the procedures for border checks of CITES shipments specify that physical checks be carried out to ensure that shipments

⁴⁰ EC website on CITES: http://ec.europa.eu/environment/cites/home_en.htm

⁴¹ Traffic (2013), Reference Guide to the European Community Wildlife Trade Regulations www.traffic.org/general-reports/traffic_pub_gen54.pdf

⁴² EC (2007). Study on the Effectiveness of the EC Wildlife Trade Regulations, ec.europa.eu/environment/cites/pdf/studies/effectiveness_study.pdf

correspond to their accompanying documents and permits. In contrast, at many border points, physical checks are carried out only in specific circumstances, such as when there is prior knowledge of a risk of illegal movement. In almost all Member States, document and physical checks are carried out by enforcement officers. Exceptions include Denmark where MA officials are sometimes called to the airport to check arriving shipments or in Spain (see the case study in the annex to this report), where at each border point designated for CITES shipments, a SOIVRE technical office is on hand to assist with checks.

Risk assessments are used by customs services in MS to target controls on potentially dangerous or protected goods and passengers arriving in the EU. Many Member States have introduced sophisticated, computer-based risk assessment systems to target controls for passengers and cargo arriving at border points. The 2007 EC study identifies a number of risk-based approaches in Belgium, France and the Netherlands, for example. In the annex to this report, the risk-based approaches in the UK customs are highlighted. It is important to note that risk-based investigation is promoted in customs operations generally (i.e. for non-environmental issues) along with intelligence-led actions, so that the use of such approaches for CITES enforcement fits naturally within this.

Many Member States also make regular checks of shops and traders to assess whether any specimens of illegal origin, including illegal imports, are traded. In the UK, local authorities and RSPCA's (Royal Society for the Prevention of Cruelty to Animals) inspectors check pet shops and our case study provides examples of campaigns with traders such as traditional Chinese medicine which have been effective in raising awareness and reducing sale of illegal items. DNA tracking is also a useful tool, as noted in the UK case study and also highlighted for Italy in the 2007 EC case study.

Illegal internet sales of specimens have also become an issue of concern in several MS and must be monitored. Illegal specimens have been offered for sale on public sites, such as EBay. Officials in the UK monitor the Internet for possible illegal sales. In Germany, a national unit focuses on all Internet crimes, including CITES crime. In Germany, the UK and a few other Member States, officials have reached agreements with major web auction sites to provide on-line information or links on wildlife trade requirements.⁴³

The 2006 EC study identified some weaknesses concerning the length of the inspection process particularly from the point of view of traders. A wide range of time and resource-consuming tasks identified during the inspection and enforcement processes include issuance of permits and certificates, provision of advice for applications for imports, inspection of commercial shipments of products and live animals and inspection of personal and household effects. Possible solutions such as adequate training of Customs and the availability of adequate handlers have been suggested as possible solutions.

2.6.3 *Inspection capacity*

Most inspection activities carried out under CITES are done by Customs services. In some Member States, individual staff with CITES expertise or training work at border points. In

⁴³ EC (2006). Study on the Enforcement of the EU Wildlife Trade Regulations in the EU-25: Overview Paper, ec.europa.eu/environment/cites/pdf/studies/enforcement_trade.pdf

others, however, the expertise available at border points is not as strong.⁴⁴ According to one report, the most time and resource-intensive tasks for inspection staff were assessing/investigating trade in live animals within the EU and confiscation of live animals imported or (re)exported for commercial purposes.⁴⁵ The UK case study (see annex) highlights the use of a dedicated CITES team at Heathrow which provides expertise country-wide, thus enhancing specialist capacity.

The number of staff working in the MAs and SAs of different Member States vary significantly⁴⁶, as does time spent on CITES issues. Our case studies show that specialist dedicated staff (e.g. on types of plants or animals) rarely spend their entire working time of CITES issues – rather they are available on call if specialist assistance is required. This makes determining capacity particular problematic. MA and SA staff exhibit a wide range of skills and knowledge predominantly in biology, administration, law and policy. There are also staff trained in veterinary science and geography, and some specialising in systematics, breeding operations, DNA techniques or specific biological groups, such as insects, reptiles and fish. Economics, trade, fisheries and forestry expertise is the least well represented amongst EU CITES staff.

During 2009-2010, authorities in 21 Member States received capacity building from external sources such as the EC, CITES Secretariat, UNEPWCMC, MAs, SAs and enforcement authorities from other countries, traders and NGOs, mostly in the form of oral or written advice/guidance or training⁴⁷. The 2012 Traffic study also noted that a number of CITES training courses and seminars are run for Customs personnel, police and environmental inspectors in most Member States. However, only three Member States reported having organised training for prosecutors and/or judges during 2009-2010. Another three highlighted developing closer co-operation with prosecutors and the judiciary.

2.6.4 Inter-institutional arrangements

There are normally several authorities in each MS responsible for the enforcement and monitoring of the compliance with the provisions of the EU Wildlife Trade Regulations e.g. Customs, police and environmental inspection services. These authorities must take the appropriate steps to ensure compliance or to instigate legal action if they have reason to believe that provisions are being infringed. Figure 3 below illustrates how each of the designated bodies interact to effectively implement CITES.

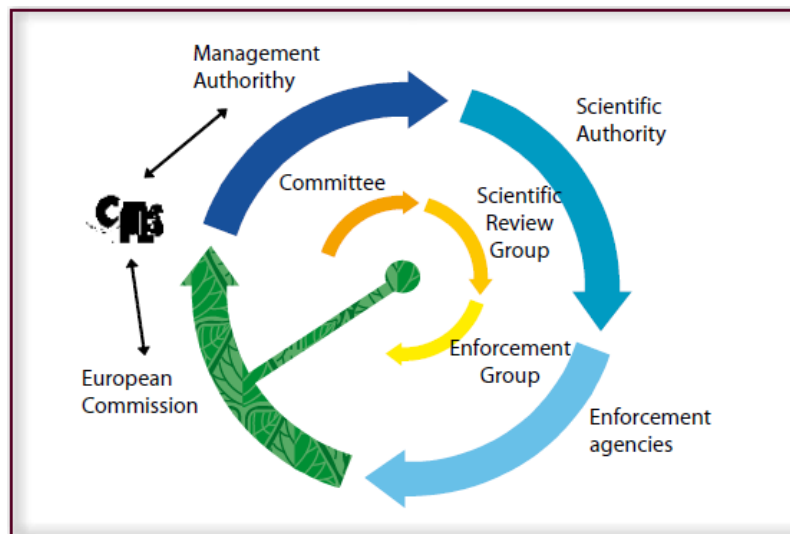
⁴⁴ EC (2006). Study on the Enforcement of the EU Wildlife Trade Regulations in the EU-25: Overview Paper, http://ec.europa.eu/environment/cites/pdf/studies/enforcement_trade.pdf

⁴⁵ EC (2007), Study on the Effectiveness of the EC Wildlife Trade Regulations, ec.europa.eu/environment/cites/pdf/studies/effectiveness_study.pdf

⁴⁶ EC (2006). Study on the Enforcement of the EU Wildlife Trade Regulations in the EU-25: Overview Paper, Pp. 17. http://ec.europa.eu/environment/cites/pdf/studies/enforcement_trade.pdf

⁴⁷ Traffic (2012) Analysis of EU Member State CITES Biennial Reports 2009-2010. Pp. 27. http://ec.europa.eu/environment/cites/pdf/analysis_2009-2010.pdf

Figure 3: Cooperation and coordination among the different institutions at EU and national level⁴⁸



The Customs services and agencies in each MS are usually the authorities that carry out checks at specific border/entry points. However, they are often assisted by other national authorities to properly implement and enforce the Regulations, such as the police. The UK has a coordinating unit and a network for wildlife crime including CITES (see case study). There is also in the UK a specific network of Police Wildlife Crime Officers (PWCOs), who investigate wildlife offences. Nearly all local police forces have at least one PWCO, and large forces have several. Whilst some of the PWCOs are full-time officers, the vast majority (300 – 350) work on this topic part-time. The recently created National Wildlife Crime Unit will support the PWCO network. In some other Member States, however, the Police have little involvement in CITES enforcement.⁴⁹

According to a study that analysed the 2009-2010 biennial CITES reports submitted by MS, 11 Member States have established inter-agency CITES committees (AT, DE, CZ, HU, MT, NL, PL, PT, SI, SK, UK). Further, in most MS, MAs hold meetings once or several times a year, along with weekly consultations to ensure co-ordination amongst CITES authorities⁵⁰. Several MS have set up formal arrangements for institutional co-operation related to CITES between the MA and other national agencies (e.g. Customs, the SAs, other government authorities, the police, Veterinary and Phytosanitary Departments). Examples include Poland where regional authorities for registration of CITES-listed animals co-operate with Customs, Police and Prosecutors for investigations.

⁴⁸ Source: EC (2010). An Introduction to CITES and its Implementation in the European Union, http://ec.europa.eu/environment/cites/pdf/trade_regulations/short_ref_guide.pdf

⁴⁹ EC (2006), Study on the Enforcement of the EU Wildlife Trade Regulations in the EU-25: Overview Paper, ec.europa.eu/environment/cites/pdf/studies/enforcement_trade.pdf

⁵⁰ Traffic (2012) Analysis of EU Member State CITES Biennial Reports 2009-2010 http://ec.europa.eu/environment/cites/pdf/analysis_2009-2010.pdf

2.6.5 *Inspection review and reporting*

The designated Management Authority in each MS is responsible for ensuring the implementation and enforcement of the Regulations, including the issuance of permits and certificates. Each Management Authority is required by the CITES Regulation to report annually on all trade in specimens of species covered by the EU Wildlife Trade Regulations. These reports are called the “Annual Report”. Every two years an additional report, the “Biennial Report” must be submitted to the CITES secretariat to report on legislative, regulatory and administrative measures adopted by the country to implement and enforce the regulations. Analyses and compilations of EU MS Annual and Biennial Reports are published via the EC website⁵¹.

The EC and the CITES Secretariat must be informed of any steps taken in relation to significant infringements of the Regulations (e.g. seizures and confiscations). The EC, in turn, can draw the attention of the competent authorities of the Member States to matters where it considers investigation necessary. The result of any subsequent investigation must be provided to the EC and, where appropriate, to the CITES Secretariat.

At the EU level, the CITES Enforcement Group (established under Regulation (EC) No 338/97) consists of representatives of each of the MS authorities that have responsibility for monitoring compliance with the Regulations. The task of the group is to examine any technical question relating to the enforcement of the Regulations and make recommendations to improve the enforcement of wildlife trade legislation. It also facilitates the exchange of information, experience and expertise on wildlife trade control related topics between the MS (trends in illegal trade, significant seizures and investigations), including sharing of intelligence information and establishing and maintaining databases. The EC has sought to improve the functioning of the group. Meetings are now held twice yearly⁵². Co-operation between Member States tended to occur on a case-by-case basis and through active participation in meetings of the EU Enforcement Group. Regular co-operation and exchange of official enforcement-related information, however, is sometimes prevented by strict or different national rules and laws for protection of personal and sensitive data. Regular international exchanges of information between EU authorities, Europol, Interpol and WCO and the dissemination of interesting seizures on EU-TWIX all helped strengthen national enforcement efforts. The success of operations organised by Interpol, WCO or between several Member States and third countries were highlighted in several Biennial Reports. The potential for even greater success would be maximised by total EU participation in future operations. Liaison with and support to third source and consumer countries was facilitated through exchange programmes with China, in particular (see also capacity-building below).

Besides the Enforcement Group, there are other groups in Europe that work on the enforcement of wildlife trade laws, including Interpol’s European sub-group on wildlife crime or the Europol group on wildlife crime. There is not yet an integrated and active wildlife trade enforcer’s network in the EU, despite the need to undertake joint

⁵¹ http://ec.europa.eu/environment/cites/reports_en.htm#annual

⁵² EC (2007), Study on the Effectiveness of the EC Wildlife Trade Regulations, ec.europa.eu/environment/cites/pdf/studies/effectiveness_study.pdf

investigations, collaborate on controlling illegal wildlife trade and exchange information related to the enforcement of the common EU Wildlife Trade Regulations⁵³.

Levels of sanctions vary considerably between Member States. In some Member States, sanctions are considered to be too low to be effective. Some Member States treat illegal wildlife trafficking as a mere misdemeanour. According to 2009-2010 CITES reports⁵⁴, sanctions in a number of Member States have been strengthened considerably over recent years and the courts in 25% of Member States are now able to sentence offenders to five years or more in prison for a CITES or Regulation-related crime. There is flexibility in applying the designated maximum penalties in some Member States, allowing for higher sentencing if the offence is deemed very serious or if it was carried out as part of an organised crime group. There are no examples of maximum sentences having been imposed during this period, with the highest prison sentence for 2009-2010 being two and a half years in the UK, where the maximum is seven years for such offences. Maximum fines across the EU vary considerably more than sentences⁵⁵, ranging from less than EUR 300 to over EUR 750,000, and take into consideration private and legal persons and the acts/legislation under which an offence is punishable. During the 2009-2010 reporting period there were several cases where private and legal persons in a number of Member States were fined over EUR 30,000 for committing a CITES-related offence.

Domestic legislation is continually being improved and updated to ensure adequate implementation of the EU Regulations at the national level. Fifty per cent of Member States reported having updated legislation during this period, in several cases taking into consideration results of national or EU-wide reviews of specific components of their legislation. 90% have stricter domestic measures in place, in particular for native or nationally protected species and for the marking of specimens. Recommendation III of the EU EAP emphasises the need for the exchange of information on penalties for wildlife trade offences to ensure consistency in application – the information provided in Biennial Report analyses and compilations will help towards this goal. The EU EAP provides recommendations for actions to strengthen and co-ordinate enforcement at both the national and EU level, and also engaging with third countries.

2.6.6 Effectiveness of the inspection system

The 2007 study on the effectiveness of the EC Wildlife Regulations and the analysis of CITES Biennale reports indicate that in many MS, there are not sufficient resources to tackle illegal wildlife trade. In some MS, there is lack of expertise needed for carrying out the controls. There is also evidence that a lack of awareness on wildlife crime among the judicial

⁵³ Traffic (2004) Expanding Borders: New Challenges for Wildlife Trade Controls in the European Union www.traffic.org/general-reports/traffic_pub_trade1.pdf

⁵⁴ Traffic (2012) Analysis of EU Member State CITES Biennial Reports 2009-2010. Pp. 32. http://ec.europa.eu/environment/cites/pdf/analysis_2009-2010.pdf

⁵⁵ Traffic (2012) Analysis of EU Member State CITES Biennial Reports 2009-2010. Pp. 32. http://ec.europa.eu/environment/cites/pdf/analysis_2009-2010.pdf.

authorities has been an impediment to the adequate sanctioning of persons infringing wildlife rules⁵⁶.

A wide range of time and resource consuming tasks were identified concerning the implementation of EU Wildlife Trade Regulations (e.g. issuance of permits and certificates, provision of advice for applications for imports, inspection of commercial shipments of products and live animals and inspection of personal and household effects), as well as time and resource-consuming products (small leather products, hunting trophies, souvenirs, ivory, caviar, TAM), live animals (birds, reptiles, corals), and live plants (orchids)⁵⁷. Management Authorities complained that since too much time and resources were being spent on issuance of permits and certificates, little time is left for other important tasks, such as training of enforcement personnel and public education. According to one Customs officer that was interviewed for a study, enforcement efforts are “insufficient” - with limited time to investigate the legality of CITES permits as well as to participate in targeted operations aimed at illegal trade⁵⁸. He specified a need for resources to investigate suspected illegal trade, instead of just investigating detected illegal trade.

Some EU Member States provided details on specific national priorities such as the creation of a permit database (FI), improved management of seized live specimens, often complicated by their uncertain health status (FR), establishing a Permanent National CITES SA Committee (RO) and improvements to the computerisation of the licensing service (UK).

In 2009-2010, Member States agreed on several main priorities that would help to increase the effectiveness of CITES at the national level. These priorities included increased budget for activities, hiring of more staff and improvement of national networks. By focusing on these priorities, improvements in other areas could also be strengthened. For example increased budget would allow for hiring of more staff and training of prosecutors and judges, improved facilities for the keeping of seized live specimens, increased regularity of in-country checks, full computerisation of permitting systems, etc.

Twenty-four Member States reported having carried out certain activities to enhance the effectiveness of CITES implementation at the national level, in particular the improvement of national networks (16 Member States), computerisation (13) and development of implementation tools (11). Seven Member States purchased technical equipment for monitoring/enforcement, four hired more staff and three had access to an increased budget for their activities. Other specific activities included MA and SA staff providing lectures in advanced CITES training seminars for Customs officers already specialised in CITES issues (DE), training, and distributing leaflets and posters to enforcement authorities (EL, HU), hiring of a scientific adviser for co-ordinating the activities of the scientific committee and enhancing its efficiency, financing EU-TWIX and revising the national CITES database (BE).⁵⁹

⁵⁶ EC (2007), Study on the Effectiveness of the EC Wildlife Trade Regulations, ec.europa.eu/environment/cites/pdf/studies/effectiveness_study.pdf

⁵⁷ EC (2007), Study on the Effectiveness of the EC Wildlife Trade Regulations, ec.europa.eu/environment/cites/pdf/studies/effectiveness_study.pdf

⁵⁸ EC (2007), Study on the Effectiveness of the EC Wildlife Trade Regulations, ec.europa.eu/environment/cites/pdf/studies/effectiveness_study.pdf

⁵⁹ Traffic (2012) Analysis of EU Member State CITES Biennial Reports 2009-2010. http://ec.europa.eu/environment/cites/pdf/analysis_2009-2010.pdf, pp19.

2.6.7 *Costs of inspections*

Information relating to fees, charges and costs have been analysed by Traffic⁶⁰. Twenty-two Member States charge fees for either CITES or Regulation-related matters. The majority of these charge for issuance of CITES documents (21 MS – it does state which). Some Member States charge for other services such as:

- Licensing or registration of operations that produce CITES species (8 MS)
- Harvesting (2 MS), use (3 MS) or importing (5 MS) of CITES-listed species
- Official labels for caviar (1 MS)
- “Non-CITES” statements (2 MS), and
- Internal EU trade documents such as EC certificates (7 MS)

In general, the revenue derived from such fees is only partly used to fund the implementation of CITES or conservation, in some Member States helping to cover the administrative costs of the permitting authority. In one Member State the fees are used to support running costs of designated CITES rescue centres.

The Traffic study provides some discussion of the detailed use of fees for permits and related services. However, enforcement is not subject to charges being an enforcement activity.

For CITES enforcement, there are problems in identifying costs due to the number of overlapping institutions involved – customs, nature agencies, police, etc.. Furthermore, staff may also be involved in wildlife enforcement (see previous section) so that separation of staff costs between environmental themes is not possible. In the UK baseline, it is noted that several (but not all) police forces have a dedicated wildlife officer. This would total costs of several person years per year, but is negligible compared to the overall costs of the staffing of these police forces. Furthermore, the UK’s dedicated team at Heathrow is often cited as very good practice, but represents limited staff cost.

It is also important to recognise the involvement of NGOs in control of CITES across the EU (both enforcement action and compliance promotion), such as Traffic, RSPB in the UK, etc.. This also results in costs, but these cannot be separated from the lobbying and other activities of these organisations.

In conclusion, due to the complexities of the nature of enforcement and the institutional contexts, it is not possible to identify robust costs estimates of control costs, let alone costs that would arise from application of a fully effective control system for CITES.

⁶⁰ Traffic (2012) Analysis of EU Member State CITES Biennial Reports 2009-2010. http://ec.europa.eu/environment/cites/pdf/analysis_2009-2010.pdf, pp57.

2.6.8 *Conclusions and recommendations for the options*

The EU is one of the biggest global markets for wildlife trade. It imported approximately six million live birds, 1.6 million live reptiles, around 10 million reptile skins, 21 million orchids and 579 tonnes of sturgeon caviar between 1996 and 2002⁶¹.

The EU is also one of the most complex global markets for trade in endangered species, as it is characterised as being one trading block with one set of comprehensive Regulations and yet 27 different sets of measures and procedures for controlling the trade and enforcing the Regulations. Lack of internal border controls within the EU reinforces the importance of strict controls of the external borders and the need for strong co-operation among the different enforcement agencies of the Member States. Once illegal wildlife has entered the EU's internal market it is more difficult to detect and can move relatively freely between EU Member States.⁶² Therefore, a harmonized and common approach to the implementation and enforcement of wildlife trade regulations throughout the EU is of great importance to guard against traders taking advantage of weak enforcement in certain areas.

One of the principal challenges identified with the implementation of CITES concerning inspections in particular, is the time and resources spent on the issuance of permits and certificates and the inspection of commercial shipments of products and live animals, as well as personal and household effects. Recommendations to improve these processes include putting more focus on items identified as time and resource intensive such as caviar, TAMs (traditional Asian medicine) and Internet trade, as well as training and the establishment of databases for effective information exchange between enforcement, Management and Scientific Authorities⁶³.

All Member States have some of their CITES/Regulation-related information computerised, in particular the monitoring and reporting of data on legal and illegal trade and permit issuance. However, a number of Member States emphasised the need for improvement in their national permit and licensing systems. Nearly all have continuous and unrestricted access to the Internet, and in some cases where this is not possible, Member States have taken remedial approaches such as preparing special guidance information that can be placed on intranet services available to local police officers. Furthermore, not all authorities have access to the basic CITES publications (checklist, identification manual and handbook) and ensuring better access in both these areas would be beneficial. Public awareness activities were run across the EU, to varying degrees, most commonly through press releases or conferences, newspaper articles or radio/television appearances, brochures or leaflets and presentations. These activities were often timed around events such as a national anniversary of CITES implementation, the onset of the holiday season or trade fairs.

⁶¹ Traffic (2004) Expanding Borders: New Challenges for Wildlife Trade Controls in the European Union www.traffic.org/general-reports/traffic_pub_trade1.pdf

⁶² Defra (2005) Proceedings of the EU Wildlife Trade Enforcement Co-ordination Workshop. 25–27 October 2005. Latimer Conference Centre, Buckinghamshire, UK www.traffic.org/general-reports/traffic_pub_trade6.pdf

⁶³ EC (2007), Study on the Effectiveness of the EC Wildlife Trade Regulations, ec.europa.eu/environment/cites/pdf/studies/effectiveness_study.pdf, p. 32.

One Member State established a Communications Strategy stakeholder group with the aim of taking a co-ordinated approach to national CITES communications.⁶⁴

Enforcement authorities across the EU share important information with their MAs, in particular on significant seizures and confiscations. Some Member States have tools to facilitate the logging of these details, such as through a central database (e.g. UK). Improved access to comprehensive DNA analysis would also help enforcement procedures in a number of Member States. The need for an EU database on wildlife forensic testing laboratories was identified by the EU Enforcement Group at its meetings in 2010 and 2011.

Some suggested areas to improve that surfaced after a stakeholder consultation on the effectiveness of the EC Wildlife Trade Regulations include:

- Better training of personnel at the Management Authority;
- Clear information about possibilities for import permits before applying for permits; and fast notification about amendments to the Regulations;
- More effective case handling by the Scientific Authorities;
- More staff to increase the effectiveness of case handling at the Management Authorities;
- Computerised application systems;
- Setting maximum handling time within which they have to process a target percentage of their applications – this is one way forward); and
- More effective and less time-consuming communication between national authorities and the EC (SRG) to expedite responses to or information for the traders⁶⁵.

The following table summarizes the overall baseline for the 5 selected MS for CITES.

⁶⁴ EC (2007), Study on the Effectiveness of the EC Wildlife Trade Regulations ec.europa.eu/environment/cites/pdf/studies/effectiveness_study.pdf, pp. 21-22.

⁶⁵ Traffic (2007) Study on the Effectiveness of the EC Wildlife Trade Regulations, <http://ec.europa.eu/environment/cites/pdf/effectiveness.pdf>

Table 10: Thematic overview table for CITES

MS	Capacity	Procedure	Other measures ⁶⁶	Strengths and weaknesses	Overall confidence
DE	<p>- In 2010, there were 26 staff working at the MA, and 8 staff in the SA (corresponding to approximately 3.5 full time posts). There are over 350 authorities (each with at least one employee) dealing with CITES across the country.</p> <p>-Specific data on budget for inspection not identified.</p>	<p>Routine and targeted inspections are carried out. Targeted inspections are determined via an evaluation of information obtained from seizures, enforcement problems or responses from surveys. The date/location/time are all determined in advance.</p>	<p>Bookkeeping requirements in DE facilitate the monitoring and regulation of trade in specimens originating from or traded within Germany</p>	<p><u>Strengths:</u></p> <ul style="list-style-type: none"> -Focused inspection efforts on certain pre-identified, calculated areas <p><u>Weaknesses:</u></p> <ul style="list-style-type: none"> - Enforcement actions are lacking with weak punishments -Problems with communication and data exchange due to decentralized organization among the Bundesländer 	--
PL	<p>- PO's MA consists of 3 fulltime employees. The CITES Commission (which is part of the Scientific Authority) consists of 5 persons working on a voluntary basis.</p> <p>- In 2011, there were 15 000 customs officers employed in the Customs Service.^{67,68}</p> <p>-Specific data on inspection costs not identified.</p>	<p>Risk and intelligence assessments are systematically used to target key areas of priority for systematic or on-the-spot inspections. However, overall inspections are more "complaint-based" rather than sought out.</p>	<p>Polish authorities wish to include new marking requirements for CITES-listed animals in the national legislation in the future.</p>	<p><u>Strengths:</u></p> <ul style="list-style-type: none"> -The legislative framework for CITES is well defined by the Nature Conservation Act with effective repartition of work at the administrative level. - Risk and intelligence assessments are systematically used. <p><u>Weaknesses:</u></p> <ul style="list-style-type: none"> - Coordination with other MS is not optimal. - Budget limitation problem - need for more capacity building for the enforcement authorities - Lack of strong effective sanctions 	Medium
ES	<p>- ES's MA consists of 24 fulltime people. The SA has 4 fulltime employees with 17 staff members working in satellite offices.</p> <p>-Specific data on inspection costs not identified.</p>	<p>Between 2009-2010, Spain ran 4 major operations on compliance checking with CITES. Periodic inspections of shops and businesses (e.g. pet shops, breeders and nurseries etc.) are also</p>	N/A	<p><u>Strengths:</u></p> <ul style="list-style-type: none"> -Decentralized system allows a more "hands-on" approach regarding the implementation of environmental policies at regional and local levels <p><u>Weaknesses:</u></p> <ul style="list-style-type: none"> -Decentralized 	Low to medium

⁶⁶ Under CITES, important to keep in mind that stricter measures can be put in place for specific species and plants.

⁶⁷ Including 10 000 in the customs area - among them, 3 500 on the borders, 300 in the exercise area and about 200 in the gambling area

⁶⁸ Polish Government (2011), Customs Service, http://www.mf.gov.pl/documents/764034/1526196/folder_SC_EN_podglad.pdf

MS	Capacity	Procedure	Other measures ⁶⁶	Strengths and weaknesses	Overall confidence
		carried out. Regular controls are carried out on breeders and nurseries. Controls in pet stores and other commercial sectors are random or the consequence of targeted research (risk analysis) identifying types of shops, etc., most likely to stock or be in contact with illegal importers.		administrative system in Spain makes it difficult to have a unified and coherent inspection system - Poor? intra-agency and trans-boundary cooperation -Lack of human resources and economic support in the regional Administrations	
UK	-Defra's CITES policy team consists of 7.5 staff. AHVLA (Animal Health and Veterinary Laboratories Agency) Wildlife Licensing and Registration Service have 30 staff, 22 of which are inspectors. They spend about 85% of their time on CITES work. -The JNCC (Joint Nature Conservation Committee) has 5 members of staff in total who work on CITES related work, ranging in time inputs from 30-100%. Kew has 4 staff members working on CITES, two providing 75% input and two providing 50% input. -Specific data on inspection costs not identified.	All inspections are generated, monitored and controlled by the Compliance Team within an overall risk-based inspection strategy, using a risk based system from low to high (risks include country of origin, known importation routes, destinations of risk, etc.). The UK Border Agency sets profiles on a computerised entry clearance system, to automatically select or identify shipments being imported from third countries that are worthy of examination or require document validation i.e. CITES permits.	N/A	<u>Strengths:</u> -Risk-based and intelligence-led approach with routine and non-routine inspections, backed-up by specialist expert advice - Strong working relationships with NGOs -Good level of sanctions <u>Weaknesses:</u> - Constraints on government funding -Issues with the recording of crime -Application of sanctions by the courts results in low penalties that may not be dissuasive.	--
SE	-No information identified on capacity -Among police authorities the average annual working time on animal crime varies between 0.2 to 3 work years. -Specific data on inspection costs not identified. Costs of the inspections are covered by public funds.	Customs inspections are in general based on profiling and research for imports coming from third countries. The procedures between the 21 County Administrative Boards vary.	N/A	N/A	--

2.7 Conclusions on the baseline for the three study subject areas

This chapter has provided an analysis of the baseline for control for the thematic areas of water, nature and CITES and reviewed previous studies relevant to other areas of the environmental acquis. Key conclusions on the baseline are set out below.

The compliance gap

As noted earlier, the compliance gap in Member States arises from failure to adequately apply EU law (e.g. invest in infrastructure or designate sufficient areas, etc.) and/or from inadequate inspection and enforcement of obligations on regulated entities. The baseline provides examples of the latter, with cases of non-compliance detection. However, it is also clear that where there is very limited enforcement capacity or enforcement action, that levels of non-compliance are simply not properly known. Therefore, there is a need to increase enforcement capacity and action to address this compliance gap and deliver the benefits of the EU environmental acquis.

Enforcement authorities

The structure of the enforcement authorities varies significantly across the Member States. Federal states have highly devolved structures, as do Member States such as Sweden. Furthermore, Poland also undertakes much enforcement at regional level. This presents challenges for inter-institutional working – horizontally between authorities at the same governance level and vertically between national and regional levels.

The baseline has identified examples of good practice in the co-ordination of enforcement work between institutions (e.g. on wildlife crime in the UK). However, challenges remain to ensure co-ordination between authorities across borders and between authorities covering different areas of supervision (such as nature protection and water protection).

Inspection and enforcement institutions may be responsible for wide areas of the environmental acquis (e.g. regional authorities in Poland and Sweden or the Environment Agency in the UK). This provides opportunities for joined-up thinking on enforcement, including assessment of risk to drive actions across different areas of law. However, it also means that it can be difficult to identify the level of capacity, etc., allocated to enforcement of individual aspects of the acquis. For example, the assessment of County Administrative Boards in Sweden found that enforcement effort has been markedly reduced with regard to water compared to other areas of enforcement.

Other institutions may be largely or entirely focused on one Directive (e.g. the Drinking Water Inspectorate in the UK). This allows for clear identification of enforcement obligations and capacity, but presents additional requirements for inter-institutional working.

Finally, the baseline has highlighted the importance of institutions that are not primarily environmental in scope, such as the customs and police. The baseline has found good examples of their role in enforcing the environmental acquis, such as on CITES in the UK and, from earlier studies, on waste shipment in the Netherlands. However, even in the most

active cases, environmental enforcement remains a small part of the function of these institutions and sits alongside other, often more pressing, priorities.

Inspection planning

Inspection planning to varying degrees is widely seen in the baseline analysis. Planning is critical to ensure the activities of enforcement bodies are efficient, which is increasingly necessary as budgets are tightened. Planning can ensure that enforcement actions target those activities which pose the greatest threats of non-compliance and/or risks to the environment. Planning also allows authorities to explain and justify their actions to the regulated community and to the public. In no examples studied are inspections entirely unplanned, but the degree of planning depends upon an understanding of the levels of compliance, risks of compliance and available capacity and this is not adequate in some cases, such as seen in Poland and Spain.

The level of planning depends on the predictive nature of the enforcement activity. Where this is focused on investigation of incidents, planning tends to rely on past experience, while for regular surveillance, other factors can be taken into account, such as the risk that an activity poses to the environment or its previous compliance history.

Risk-based inspection is widely reported as the basis for control activities, from the UK Environment Agency's detailed OPRA system, to the wider use of risk-based approaches by customs.

The use of effective planning and risk-based focusing on activities that are more likely to present non-compliance is the correct basis for enforcement planning, assuming the different bases for assessment of risk are accurate. Risk-based enforcement is important in targeting limited resources to deliver increased enforcement outcomes.

Type of inspection

Within the baseline there are very different types of inspection or control activity. These include:

- Reliance on self-monitoring and reporting by regulated entities with minimal site based intervention by regulators (e.g. for drinking water in Germany).
- Routine inspections to check compliance with operational conditions (the basis for much industrial inspection, urban waste water treatment, nitrates, etc.).
- Incident-based controls, responding to reported cases of non-compliance, environmental quality problems, concerns by citizens (e.g. poisoning of species, pollution incidents, etc.).
- Intelligence-led investigation, e.g. for CITES, wildlife crime and waste shipment.

The baseline did not identify specific concerns over how these different types of control activity were conducted when they are undertaken. Rather, there is concern over the sufficiency of controls, i.e. their number, frequency or even whether they occur in some cases. This is an issue of capacity (see below).

Resources and capacity

The effectiveness of enforcement institutions depends on the resources (staff numbers, expertise, equipment, etc.) available to them and whether these are sufficient to address the enforcement challenges they face. The baseline analysis has found very different conclusions on the sufficiency of the capacity of institutions in the Member States.

For example, the UK Drinking Water Inspectorate reports sufficient staffing and budgetary capacity. Conversely, there are severe constraints in Member States with budgetary problems, such as Spain and Poland. Furthermore, the County Administrative Boards in Sweden has significant insufficient capacity.

The nature of budgetary stability also affects capacity. For example, funding for the police wildlife crime unit in the UK was reviewed and its absolute value is limited, but of further concern was the fact that such funding was only confirmed one year ahead undermines its ability to attract staff.

In conclusion, there is without doubt a need to address the capacity of enforcement institutions across many Member States.

Compliance promotion

Compliance promotion is widely seen as necessary to ensure regulated entities understand their obligations and to reduce incidents of non-compliance. The baseline has found a number of compliance promotion examples, from working with the public and traders for CITES, with farmers on application of fertilisers, etc.

While most enforcement authorities recognise the value of compliance promotion, the challenge is how best to target this. For example, in Scotland there has been considerable effort to work with farmers, but the best results are with one to one communication, which is resource intensive. The response here is to bring different authorities together to share communication in rural areas. However, a key lesson is to target compliance promotion to deliver the maximum outcome where resources are limited.

Transparency and information

The transparency of inspection and enforcement activity across the Member States varies. There are variations in how far inspection and enforcement related decisions (inspection reports and application of sanctions) are published. For some this is proactive, for others information is on request. Inspection plans tend to be published. However, the involvement of stakeholders in developing inspection plans is limited.

There is clearly a need to enhance the proactive transparency of inspection/enforcement activity as well as to increase the facility for stakeholders to participate in inspection planning.

Review of enforcement activity

The baseline analysis found good examples of review of enforcement activity, such as reviews by Parliamentary Committees and National Audit Office in the UK and of County Administrative Boards in the Sweden. Furthermore, such reviews tend to ask questions about the effectiveness of inspection and enforcement as well as wider issues of compliance promotion. Additionally, they can examine issues of regulatory burdens and links to better regulation principles.

Such reviews deliver conclusions that lead to improving the focus of inspection and enforcement, increasing effectiveness and can provide the basis to re-examine capacity constraints and whether budgets should be addressed.

However, it must be noted that such reviews are notable because they are unusual and in most cases there does not seem to be any detailed or systematic review of such regulatory activity. Therefore, greater use of such reviews would enhance the effectiveness of enforcement of the EU environmental acquis as well as providing a more transparent assessment of enforcement for stakeholders as well as for interested bodies such as the EC.

Conclusions

Across the control chain within the baseline analysis there are many examples of good practice, but also severe constraints on effective enforcement of the environmental acquis in the Member States. There is, therefore, a need to enhance inspection and enforcement institutions, practice and capacity in many instances.

EU level intervention may, therefore, be appropriate to address these shortcomings and the options that could be taken forward at EU level appropriate to these challenges are explored in the following Chapter.

3 IDENTIFICATION OF OPTIONS

3.1 Introduction

This chapter examines the options that could be taken forward at EU level to address the deficiencies identified in the enforcement of the EU environmental acquis identified in the baseline analysis (previous chapter). This chapter initially examines the types of issues that would need to be encompassed by such options. It then proceeds by setting out a range of different options according to different types of possible approaches or instruments. The impacts, effectiveness, etc., of these options is the subject of the next chapter of this report.

The content of the options to enhance the control activities of Member States to ensure compliance with the environmental acquis could encompass many different themes as the legal basis for inspection, capacity (resourcing, training, and communication), risk based approach of inspection work, planning and targeting of inspections, intra or inter-institutional relationships, coherence between inspection regimes, transparency of inspection related work, compliance promotion, public involvement, etc.

In order to develop the options, this section initially considers the range of enforcement action that needs to be included. The section then outlines the options. For the purposes of discussion it begins with a consideration of baseline issues, in particular inspection/enforcement requirements 'in the pipeline' and then sets out the design of a potential legal instrument.

As described in the conclusion to the previous chapter, the baseline analysis has shown a range of different concerns for different areas of the acquis and for different elements of what is considered the 'control chain'. The control chain views the entire process of compliance promotion, inspection and enforcement as an integrated series of processes and behaviours. It starts with the concept of a need for an overall compliance and enforcement strategy and includes issues of compliance promotion, undertaking compliance promotion and awareness raising, having sufficient capacity of enforcement institutions, effective inspection and enforcement planning, co-ordination of control activities within Member States, co-ordination and co-operation on cross-border inspections and other controls, follow-up to control actions, transparency and role of the public and the need for evaluation of the performance of the control strategy and national inspection bodies. The analysis below and the options set out reflect the need to address this control chain as a whole.

3.2 The range of action in the control chain

In designing options that are applicable across most of the environmental acquis, it is important to ensure that the chosen option or approach is appropriate to all of the legislation affected and, equally, that the chosen option does not constrain the good practices that might be found for the enforcement of individual items of law.

There are a number of types of enforcement and inspection activity which represent good practice. These are set out below.

3.2.1 *Inspection of stationary sites to check compliance with operational conditions.*

This is the typical case of the Industrial Emissions Directive, but it also applies to Seveso, waste sites, etc. It also applies to point discharges to water under the UWWT Directive and those for which supplementary measures are required under the Water Framework Directive. It is also appropriate to farms with restrictions on application of fertilizers, etc. to ensure specified conditions are complied with. Across the environmental acquis this is the most widespread reason for inspection. The baseline analysis (including previous studies that have been undertaken) has shown that there are concerns over the ability and practices of enforcement bodies in some Member States to undertake sufficient inspections of stationary activities, although this is not a problem in all cases.

In all of these cases, operators should know what they should do to meet the conditions imposed on them. Indeed, this is almost always set out in a permit/licence (whether bespoke or standardised) (as long as these conditions are clear). Therefore, routine inspections can be planned to examine whether there is compliance with the specific conditions in that permit/licence. This may be backed-up with:

- Self-monitoring and reporting by the regulated entity to enable to regulator to identify cases of non-compliance or more serious incidents. This is typical of IED (but also see the case of UWWT in the UK case study in this report).
- Monitoring of the environment which may identify changes that could be due to non-compliance activity. This is typical of the Water Framework Directive (see the approach taken in Sweden in this report).

Effectively, it is this category of enforcement activity that was addressed by the RMCEI and that has been most influenced by it. However, it should be noted that not all activities of this type are the direct subject of the RMCEI, e.g. it does not cover diffuse water discharges from agricultural land.

3.2.2 *Incident response inspection of a stationary activity*

This might be viewed as a sub-set of the previous category, but it is different. It is typical of inspection to enforce the Drinking Water Directive. Drinking water supplies are stationary, but the Directive applies not to the output of a water supply works, but to quality of water at delivery to the consumer. Therefore, this 'stationary' activity is enormous. Hence the routine checking of quality is undertaken by the water suppliers, and inspection is focused on the investigation of incidents.

All other types of stationary activity can also be subject to incident responses when issues arise, such as a pollution event. The baseline analysis has shown that in some cases the capacity to address incidents is limited, e.g. for some species protection incidents.

Therefore, there is a need to ensure the capacity of enforcement bodies adequately to address control of incidents when they arise.

3.2.3 *Inspection to ensure certain activities are not undertaken*

Protected areas may be subject to positive management requirements, but enforcement tends to focus on whether prohibited activities have taken place or not. In such cases the offence may be committed by the landowner (e.g. a farmer damaging a site) or by a third party (e.g. off-road vehicles, arson, etc.).

Inspections, therefore, need to identify whether damage has occurred and investigate the cause and who is to blame. If blame can be identified, restorative action may be required. The baseline analysis has shown that damage to nature protection areas is investigated to different extents in the Member States and there are concerns over the effectiveness of the level of control needed to ensure the appropriate level of protection. Therefore, there is a need to ensure sufficient capacity to deliver protection of such sites and the investigate capacity to ensure restoration is ensured by those causing damage.

3.2.4 *Control of transported objects*

The detection of criminal activity concerning transported objects is primarily around two areas:

- Waste – particularly linked to the WSR, but also the WEEE Directive and, by extension, the Waste Framework Directive.
- CITES.

However, it is important to note that such activity may arise in other areas of environmental compliance. Note that this is different from identifying offences such as pollution incidents which may result in criminal sanctions as these are addressed under the above topics of stationary activities or prohibited activities, etc.

The baseline analysis has shown that there are significant problems with the enforcement of these types of legal obligations. Due to the nature of the movement of such objects, this not only poses a risk for compliance in the Member State where enforcement is weak, it also poses risks to Member State receiving such objects through transboundary movement, e.g. waste of unknown character.

Such criminal activity is, by its nature, not reported, nor presented for inspection. Therefore, different approaches are needed to detect that such activity is taking place so that enforcement action can be taken. Such detection needs to be tailored to the particular types of criminal activity and this can range from random inspections and screening activities to intelligence led approaches based on police or customs investigative techniques. In cases of organised crime there is often a need to investigate links to other types of linked criminal activity, such as money laundering. Therefore, action at EU level

both needs to ensure sufficient capacity to tackle such illegal activity, but ensure that it allows for different solutions to be adopted as local and national circumstances determine.

3.2.5 Product standards

The environmental acquis contains requirements that are effectively product standards and this may translate to labelling requirements. Such standards arise from, for example, the essential requirements of the Packaging Waste Directive or the restrictions set out in the RHOS Directive. REACH represents another system of a similar type.

Inspection activity, therefore, can examine whether these are complied with at source (e.g. manufacturer), at the time of import or while on the market. The baseline analysis has presented little information on this issue. However, it is important that any comprehensive approach to taking forward improved control at EU level needs to ensure that the control of product requirements, standards, labelling, etc., is encompassed by this approach or instrument.

3.2.6 Conclusion

These examples may not be exhaustive and they certainly can be sub-divided into a range of sub-categories depending on the type of activity or the type of offence committed, all of which affect the nature of enforcement activity. However, they do present a short overview of the types of control actions that need to be addressed in any future option that is taken forward. Such an option has, therefore, to be broad enough in scope to encompass these different approaches as well as ensuring that the particular requirements it contains are able to accommodate the different approaches. For example, an instrument could be too focused on stationary activities and its prescriptions become inhibitive of intelligence-led approaches or inadequately encompass product control.

3.3 Why joined up inspection should be encouraged

The EC review of the RMCEI stated that one way forward for enhanced inspection requirements would be to establish such requirements in individual items of law. This was taken forward, for example, in the adoption of the IED and revised WEEE Directive.

In its response to the review IMPEL was critical of what it thought was a potential fragmentation of inspection activity by such an approach⁶⁹. Rather, it supported the RMCEI approach which provided a more integrated consideration of inspection across the subjects to which the RMCEI applied. This was its purpose when it originally developed its thinking on the subject which eventually led to the RMCEI.

⁶⁹ IMPEL (2007). IMPEL input for the further development of the Recommendation on minimum criteria for environmental inspections (RMCEI). <http://impel.eu/wp-content/uploads/2010/02/2007-07-input-rmcei-FINAL-REPORT.pdf>

Of course, the development of a new comprehensive approach to control at EU level is able to address this concern from IMPEL. However, it is important to highlight why consideration of the integration of enforcement activity is important as this would need to be taken into account in the design of an instrument. There are two primary reasons for this – structural and effectiveness.

Structurally, Member States do not generally set up individual enforcement bodies for each Directive or Regulation (there are some exceptions). Rather regulators tend to be the competent authority for a range of legislation. Every Member State is different, of course. In some, such as the UK, regulation is largely in the hand of centralised inspectorates. The Environment Agency, for example, is responsible for inspection of most areas of industrial emissions, water and waste. However, the UK also has dedicated inspectorates, such as on drinking water. In Sweden inspection responsibilities are also brought together, but at a sub-national level. Often there is a marked division between pollution inspectorates and nature protection bodies. In all cases customs and police are separate.

While such integrated enforcement bodies may have units dedicated to particular issues, they may combine these in various ways. Their primary goal is environmental protection and while they need to ensure compliance with the details of individual Directives (as transposed in national/local law), their practical activities are likely to bring these actions together. This provides a better understanding of the threats posed and solutions to bring.

On effectiveness, there is a strong link to the risk-based approach. Risk-based approaches to enforcement activity are required or encouraged in much EU law (not just environmental) and are promoted by many Member States, IMPEL, etc. However, when one considers the case of a regulator with many responsibilities, it might use such a risk-based approach in planning inspection at a broad scale – what are the most important actions to take within the control chain to maximise environmental benefit and deter non-compliance? In such a context, enforcement activity may divert the focus from inspection under one Directive to another, where the perceived risks are higher. Naturally, different regulators in different Member States will come to different conclusions on such risks.

Risk-based approaches are also increasingly driven by the need for improved efficiency in the allocation of staff resources by regulators which are under budgetary pressure within this current economic crisis. We consider that such an approach is justified as the overall objective of the environmental acquis should be to maximise environmental outcomes.

3.4 What should an inspection address?

In developing inspection requirements in law, there have been issues with defining what is meant by an ‘inspection’. Thus the IED makes clear of the need for site visits in its inspection obligations, not least as the review of IPPC found that some Member States included document checking as ‘inspection’ (although this is indeed an important aspect of the regulatory enforcement process).

The definition of inspection also was problematic in work on inspection criteria for the WSR. On the surface, opening a container to see if it contains prohibited waste is an inspection. However, practice in two best practice Member States challenged this. The port of Rotterdam, for example, has an advanced container screening facility, so that it is able to examine the contents of many containers without opening them. This delivers the objectives of inspection. The UK, in contrast, is now intelligence-led, investigating criminal operators. When the regulator opens a container, therefore, it is done to obtain the physical evidence necessary for applying sanctions – the regulator already knows what it contains.

Furthermore, inspections may be undertaken that are not primarily environmental in nature. This may be the case with inspections required under the CAP for cross-compliance. Only certain SMRs/GAEC standards are environmental. Thus, how far do such inspections count as ‘environmental’?

It is necessary, therefore, for a future instrument at EU level, for example, to be able to encompass this variation, but at the same time ensure that inspection activity focuses on what matters. Where site visits or physical inspections are needed, these should be enhanced. Where alternative approaches deliver better or more efficient outcomes, these need to be encouraged.

The inspection requirements of the IED focus on checking compliance with permit conditions. However, the IED also introduced a requirement for the inspector to consider the possible impact of the installation on the environment. For some Member State inspectorates (particularly those that combine permitting and inspection) this was nothing new, for others it was a new departure. This requirement seems entirely sensible and focuses on seeking to achieve the primary purpose of a Directive. Once a permit or licence has been issued (which is likely to examine [potential] environmental impacts), the only site visits for several years may be inspections. Thus the accuracy of such determinations with respect to the environment should be examined if the goal of the legislation is to be achieved. Obviously, for some areas of environmental law, such a consideration is inherent in an inspection, e.g. for a protected area. However, it is not the case in all areas of law. Such an obligation is more useful for stationary activities than traded or moved material, but we believe that such a provision for inspection activity would help to maximise its impact.

3.5 Risk-based inspection

Risk-based assessment, inspection and supervision covers a variety of different approaches (depending on the law being enforced), but essentially means that inspection activity is not undertaken in a random manner, but is focused on activities which the enforcement body considers is either at more risk of non-compliance or would result in greater risks to health and the environment if non-compliance were to occur.

Risk-based approaches are set out in some EU legislation – for example it is encouraged in the IED and required in enforcement of cross-compliance under the Common Agricultural Policy (CAP). As noted in the baseline analysis, some Member States have adopted relatively

detailed analyses to determine risk. The UK Environment Agency's OPRA scoring system assesses activities according to issues such as relative risk to the environment and compliance history. In other cases a more informal approach is undertaken, drawing on the professional experience of individual inspectors. It is perhaps worth noting that the UK approach aims to be objective and transparent not least because it has the policy to recover the costs of inspection activity and, therefore, companies subject to greater levels of inspection require evidence that this is justified.

Risk-based approaches should be justified primarily on the basis of delivering more effective enforcement outcomes. However, they are also concerned with greater efficiency. For the regulated community, individuals and companies that pose little or no risk from non-compliance are subject to fewer inspections and, therefore, reduced administrative burdens. For the enforcement institution risk-based approaches enable limited resources to be targeted to increase detection of non-compliance. However, while risk-based approaches enable institutions to make better use of the resources that they have, they cannot overcome severe capacity constraints and Member States do need to ensure that competent authorities have sufficient resources to implement the environmental acquis for which they are responsible.

While risk-based approaches are appropriate in most circumstances, they do need evidence to be applied and there may be cases where this is not yet the case. Indeed, while the CAP (Regulation (EC) No 1122/2009, Articles 30 and 31), for example, requires use of risk-based assessment, it also requires Member States to undertake parallel random inspections and compare the results with the risk-based approach. This provides the evidence of whether a risk-based approach is delivering greater outcomes.

In developing options, therefore, it is important that, where applicable, risk-based assessment is promoted.

3.6 Who inspects?

A large number of the existing environment Directives and Regulations require that competent authorities are designated in Member States to be responsible for their implementation. Within this there needs to be clearly identified competence for enforcement action.

In most cases it can be assumed that those undertaking inspection and enforcement action are governmental bodies. However, this is not always the case. Contrasting examples include:

- The extremely important role of the major NGOs in the UK in contributing to the enforcement of species protection legislation.

- The sub-contracting of waste shipment enforcement by the designated competent authority to a private enforcement company in Ireland experienced in investigative processes⁷⁰.

Furthermore, in the wider context of improving enforcement, awareness campaigns, etc., often involve non-governmental organisations (civil society and business). In the two cases above, a government body is designated as the competent authority. However, if a new EU level instrument is, for example, to require obligations on inspections (planning, capacity, reporting), etc., then it needs to accommodate situations where non-governmental actors are involved.

3.7 Delivering environmental outcomes through inspection under other regimes

As noted above, other inspection regimes may be important for enforcement of environmental law. This not only includes the case of inspection under the CAP (see section 3.5), but also the enforcement actions of other bodies such as the police and customs. In our case studies on CITES and wildlife crime, we have focused on proactive ways the latter bodies contribute to enforcement and this can be viewed as enforcement strictly under the relevant EU environmental law. However, routine action by these bodies can contribute to such enforcement, such as tourist bag inspections by customs identifying CITES infringements or traffic police checks uncovering waste shipment infringements. In some cases the requirements for inspection are prescribed in some detail in EU law (e.g. CAP Regulations⁷¹), but not in others.

An option taken forward at EU level should, therefore, recognise the role of other inspection regimes in their contribution to enforcement action for the environmental acquis.

3.8 Follow-up

Uncovering cases of non-compliance is not the end of the inspection/enforcement process. The nature of the follow-up to the detection of non-compliance is important if future offences are to be avoided and deterred and the damaged environment is to be restored.

There is, of course, the administrative aspect of follow-up to inspection. There needs to be clear obligations to report on inspections, to provide this report to the operator/offender and to make this public (at least once sanctions are clear). Such requirements are already elaborated in part in the RMCEI, which details the requirements for an inspection report to be produced and provided to the operation. As a result, such requirements would need to be included in a future option, but tailored to address the environmental acquis as a whole.

⁷⁰ IEEP, Bio and Ecologic (2007). Study on Inspection Requirements for Waste Shipments. DG ENV. http://www.ieep.eu/assets/754/Inspection_Requirements_for_Waste_Shipment_Regulation.pdf

⁷¹ Commission Regulation (EC) No 1122/2009 laying down detailed rules for the implementation of Council Regulation (EC) No 73/2009 as regards cross-compliance, modulation and the integrated administration and control system.

An important aspect of follow-up is to consider whether a permit or licence should be revised in the light of inspection findings. Major offences could result in the suspension of a permit. Concern by the regulator of future behaviour could result in reporting obligations to be enhanced to keep a 'closer eye' on the activity. If inspection includes consideration of environmental impacts, the inspector could recommend that permit conditions be amended to reduce such impacts (even if they are compliant).

Where non-compliance is identified, appropriate sanctions need to be applied. Many Directives and Regulations now require Member States to apply 'effective, proportionate and dissuasive' penalties appropriate to that legislation. Beyond Directive 2008/99/EC on environmental crime, the choice of sanctions (civil or criminal) is left up to the Member States. Furthermore, it is not clear that more can be added on applying sanctions in a new future option other than that already set out in law. However, it is appropriate to link inspection and enforcement work to the application of sanctions, including aiming to identify the effectiveness of sanctions applied (i.e. whether they are dissuasive).

Beyond transposition failure there are a number of causes of non-compliance which are not driven by offences by businesses or individuals per se.

The largest driver for non-compliance is money. Some Directives require significant investments to upgrade infrastructure. The UWWT Directive is best known for this, but this is also the case for drinking water, IPPC/IED, landfills, etc. If WWTPs are not upgraded or illegal landfills are allowed to persist (sometimes in thousands in a Member State), is this because enforcement authorities are not inspecting, etc., or is it because the investment costs are too high and there is a government decision to delay implementation? In the latter case, inspection currently has little impact. However, if inspections were required to identify levels of compliance not only with permit conditions, but also with the obligations set out in EU law, such implementation failures would be highlighted.

A failure to provide sufficient treatment facilities to a WWTP or control fertiliser input on a farm when the receiving water is damaged by such discharges may be caused by failure by the Member State to designate waters as Sensitive Areas (UWWT Directive) or as NVZs (Nitrates Directive). The compliance failure, therefore, rests with the government/competent authority rather than the operator/farmer. However, where inspection is required to examine the environmental impacts of an activity, this can be used to highlight problems and drive improved designation (although farms, for example, outside of NVZs are unlikely to be inspected for such issues).

A further area of non-compliance which combines the previous two cases concerns designation of protected areas. Such designation can impose costs (as with infrastructure) and so governments may limit implementation. Furthermore, sites that are not designated will not be inspected. In such a case, therefore, the regulatory enforcement process is likely to have limited impact.

EU environmental law establishes a range of quality standards (air, water, etc.) which should be complied with and emissions should be controlled to contribute to such compliance.

However, the competent authority could issue permits with conditions which do not deliver such compliance. Thus non-compliance is not that of the operator failing to comply with their permit obligations. Again, inspections that examine the environmental impacts of an activity can highlight such problems with permit conditions and seek to drive permit revision.

It can be seen, therefore, that there are opportunities in the follow-up to inspection/enforcement action to drive wider compliance of EU environmental law.

3.9 Awareness raising

Non compliance can be reduced by increasing the awareness of businesses and individuals of their obligations and how they can act so as to reduce the risk of non-compliance. This can be achieved through a variety of means, depending on the target audience. An industrial operator can be communicated with during permitting and inspection visits to highlight issues of concern and recommend actions to reduce risks of non-compliance. A farmer can be given advice to ensure land management does not compromise nature and water protection requirements. The public can be informed about prohibitions to enforce CITES (as can shops and traders). There are many other permutations ranging from one to one actions to general information provision.

Furthermore, awareness raising is an important aspect of the follow-up to detection of non-compliance. Sanctions should be dissuasive, but their dissuasive effect will only be limited to the individual offended if the use of sanctions is not well publicised.

A preferred option should therefore include provision(s) for compliance promotion to complement other inspection and enforcement actions.

3.10 Co-ordination between institutions

Institutions often do not work alone to enforce environmental law. Even where an institution has a lead role, it may be beneficial to co-operate with others, e.g. in helping with compliance promotion. The baseline has shown a number of examples of inter-institutional relationships, such as the co-ordinating frameworks for wildlife law enforcement in the UK. A particular issue arises for co-operation between environmental authorities and other enforcement bodies such as customs and the police, which is good in some cases and poor in others. Therefore, there should be clear emphasis on improving the necessary co-ordination between authorities not only to deliver better compliance, but also to improve the efficiency of these public bodies and, potentially, reduce burdens to those being regulated.

A particular issue also arises with the need for co-ordination across frontiers. This is most evident with law regulating transboundary movement of environmentally sensitive goods, such as waste or CITES, or for products, where Member State authorities may need to co-

operate based on major routes of movement rather than proximity. Neighbouring Member State authorities will also need to co-operate on a range of local issues, from water and air pollution to nature protection. Any option setting out obligations on Member States should ensure better co-ordination between Member States.

3.11 Capacity of enforcement institutions

The baseline has shown wide variations in the capacities of institutions to enforce EU environmental law, including in the same Member State. Capacity consists of obvious resources such as staffing levels and equipment (e.g. support laboratories or IT data support), but it also includes issues such as the quality of staff (specialisms available, training, etc.). Any option to take forward more effective control at EU level should seek to ensure that Member States understand the capacities necessary to ensure full compliance with the acquis and take the necessary steps to deliver this capacity.

3.12 Public access to information and transparency

Public access to information is a critically important part of regulatory enforcement. There should be clear requirements for public access to information on many aspects of enforcement activity. This should include:

- Information on which authorities are responsible for enforcement of which laws.
- Inspection plans.
- Reviews and reports of implementation of inspection plans.
- Results of individual inspections.
- Details of individual sanctions applied.
- Overviews of the use of sanctions.

Provisions for public access to environmental inspection/enforcement related information need, therefore, to be taken forward in a preferred option for action at EU level.

3.13 Evaluation of performance

The baseline analysis has shown the value of evaluation of the control chain, but that it is undertaken in only a limited number of cases. In the UK bodies such as Parliamentary Committees and the National Audit Office undertake independent reviews questioning the effectiveness of the enforcement bodies, seeking stakeholder input and making recommendations. Control bodies themselves should review their own performance, which is simply good management practice. Any instrument to take forward more effective control should seek to ensure such evaluations are undertaken as these not only help to deliver more effective systems, they also provide transparency for stakeholders within the Member State and for interested parties at EU level.

4 THE OPTIONS

4.1 Introduction

In order to address the deficiencies in the control of compliance with the EU environmental acquis a number of options are possible. The options set out below are based on the need to address the problems identified in the baseline analysis (covering the themes in this report and those of other studies addressing other areas of the acquis).

A critical conclusion from the baseline analysis is that the concept of the control chain is important – the need to address all of the different elements of effective control systems in the Member States. Therefore, the options largely focus, in their different ways, on the control chain as a whole. No options are proposed that would only address a single element of the inspection and enforcement system.

For each option, the nature and content is set out. The pros and cons of each option are the subject of the Impact Assessment analysis, so these are described in the following chapter.

4.2 Option 1 - Baseline

The baseline is the ‘do nothing’ option. This leaves the obligations on control actions as they are (specified in some EU environmental law and implicit in the rest) to deliver implementation of the legislative requirements.

The baseline is, at this stage, the analysis of the previous chapter. However, it is important to note that new inspection requirements are still to be implemented in the Member States, such as in the Industrial Emissions Directive and the Waste Electrical and Electronic Equipment Directive. However, across much of the acquis, the problems of non-compliance are evident in describing the baseline and as the basis of comparison in the IA in the following chapter.

4.3 Option 2 – Non-legislative measures

This option is a fully non-legislative approach, whereby the EC supports enforcement in informal ways, e.g. through guidance or through support to existing networks of Member State enforcement bodies. Such networks include those of inspectorates (IMPEL), prosecutors (ENPE) and judges (EUFJE) and it would also build on other networking opportunities, such as through the Forum for Exchange of Information on Enforcement under the REACH Regulation. Networking shares information, best practices and can provide peer reviews. This allows for an increase in capacity and can help improve processes in Member States.

This option would require the adoption of guidance on specific themes (e.g. a cross-cutting guidance on inspection planning or on inter-institutional working) or on specific areas of law (e.g. best practice on investigation of wildlife crime). In all cases the guidance would impact on MS where it was perceived as filling a need. For example, guidance on evaluation and review of inspectorates would benefit most of the MS examined in the baseline which do not undertake such reviews. Furthermore, guidance aimed at improving inspections in the agriculture sector would be beneficial in most of the MS examined.

4.4 Option 3 – Upgraded Recommendation

The Recommendation on minimum criteria for environmental inspections in the Member States (331/2001/EC) (RMCEI) is currently in force. However, it is limited in the following respects with regard to the conclusions set out earlier in this report:

- It is limited in the scope of law to which it applies, largely being focused on stationary industrial and waste activities. It, therefore, does not include much of the environmental acquis in its scope and an amended Recommendation could be explicitly expanded to cover all of the environmental acquis.
- It is limited in the scope of the control chain that is included and the types of control activity specifically addressed. Recommended criteria for additional elements of the control chain (see below), such as capacity assessment, can be included. Furthermore, expansion to cover the whole of the environmental acquis would require new definitions of ‘inspections’, etc., for nature protection sites, for example, as well as addressing the different types of control undertaken in intelligence-led approaches.
- Being a Recommendation it is not a binding instrument and, therefore, there is no guarantee that its provisions will be enacted.

While the EC review of the RMCEI implementation⁷² raised a number of shortcomings, it was not the core concepts that were criticised. The RMCEI contains the following core elements:

1. Definitions of ‘environmental inspections, including site visits’.
2. Requirements to organise and carry out inspections.
3. Details of plans for environmental inspections – what covered and what should be in a plan.
4. Criteria to be applied to site visits.
5. Reporting on inspections.
6. Responses in the cases of incidents and cases of non-compliance.
7. Reporting and review of environmental inspection more generally.

⁷² Communication from the Commission to the Council on the review of Recommendation 2001/331/EC providing for minimum criteria for environmental inspections in the Member States [SEC(2007) 1493]

These elements can largely be used in a new Recommendation, for example. However, for the legislation covered by RMCEI it was possible to distinguish routine inspections from incident response inspections. For other parts of the acquis this is not always possible. For CITES, for example, some inspection may be 'campaign' focused, directed at likely non-compliant activities, but not directly in response to an incident, or routine either. Much species protection enforcement (wildlife crime) is incident focused rather than routine as is drinking water inspection in some cases. These different approaches to control activity can, with amendment, be addressed within an upgraded Recommendation.

The other core elements would all need amendment. Definitions of inspections would need to expand, as discussed above, as would the criteria for 'physical visits' (which would need to replace 'site visits'). Inspection planning would need to be expanded, building, however, on the core RMCEI elements, as would reporting on inspections. These changes need to accommodate all of the different types of inspection/enforcement activity required of the environmental acquis.

It is evident from the earlier analysis that several elements of the control chain are either missing from the RMCEI or are insufficiently addressed. These include, inter alia:

- Defining bodies undertaking inspections.
- Inter-institutional co-ordination.
- The scope of work on an inspection – including consideration of environmental impact.
- Capacity issues.
- Compliance promotion/awareness raising.
- Application of sanctions.
- Follow-up (beyond inspection reporting).
- Public availability of inspection related information.

Furthermore, the assumption of the RMCEI is that inspection is undertaken by (largely) dedicated environmental control authorities. An expanded Recommendation would need to ensure that its recommendations can also be taken on board by predominantly non-environmental bodies, such as the customs and police.

An upgraded Recommendation would be an advance on the baseline option in that it would provide a clearer, structured approach with extensive non-binding criteria addressing all key aspects of the control chain and covering the wider environment acquis. It would also provide a basis for reporting by the Member States and, therefore, even though it is non-binding, it would increase transparency to some extent.

An upgraded Recommendation would be implemented in the MS in a similar way to the existing Recommendation. The details of this would depend on the precise details of the new Recommendation. However, it is highly likely that such a Recommendation would improve inspection planning and transparency. This would be particularly valuable in instances noted in the baseline analysis for Germany, Spain and Sweden where local

enforcement activity is obscure and fragmented so that it is difficult to understand priorities and even concrete actions. A Recommendation would highlight problems with inspection capacity, but would be unlikely to overcome this unless new governmental funds were readily forthcoming.

4.5 **Option 4 – General binding instrument on criteria on control mechanisms in Member States**

This option involves the adoption of a new general binding instrument. At this stage we do not consider whether such a binding instrument should be a Regulation or a Directive. The specific nature of any possible instrument is for internal consideration by the EC.

A binding instrument would need to set out requirements for all of the elements of the control chain (see below) and could encompass much of the same ground as option 3 on an expanded Recommendation (but providing a different legal context). It would be applicable to the entire environmental acquis and, therefore, would need to address all of the different types of control activities, situation and compliance obligations arising from implementation of the different instruments of the acquis.

Section 4.8 below provides an illustration of the type of content that might be appropriate in a binding legal instrument. However, some of the details that an instrument could contain include:

- *Implementation and enforcement strategy*: this would contain the key elements that an enforcement strategy would need to address. A general instrument would not prescribe detailed elements from individual Directives.
- *Compliance promotion and awareness raising*: the key aspects to be assessed in determining compliance promotion needs.
- *Capacity of the institutions*: a requirement to determine the capacity needs (staff numbers, skills, etc.) for inspection and enforcement compared to the compliance gaps. The instrument could also require MS to identify how such capacity needs are to be filled.
- *Inspection and enforcement planning*: the instrument would set out the key elements of inspection planning that need to be included.
- *Co-ordination between institutions*: the instrument could require specified co-ordinating arrangements to be demonstrated between authorities responsible for implemented specified areas of the acquis.
- *Co-ordination on transboundary control activities*: the instrument could require specified co-ordinating arrangements to be demonstrated between authorities responsible for implemented specified areas of the acquis across borders.
- *Follow-up*: the instrument could require clarity on the use of sanctions and administrative actions to be taken in follow-up to deliver investment, etc., to close the compliance gaps.

- *Transparency*: the instrument can list the information and reports relevant to enforcement action that should be made available to the public.
- *Evaluation*: the requirement for a good evaluation process could be set out in the instrument.

A binding instrument would affect the MS to a much greater degree than a Recommendation. The degree of impact would be driven by two major factors. The first is the baseline compliance/enforcement gap. Full implementation would have the greatest impact on those MS with the largest gaps. The second is the likelihood of implementation. This depends on the political and administrative character of the MS in address implementation of EU law as well as the importance the EC places on ensuring implementation. The MS do have different compliance histories and these may reflect future application of a binding instrument. As with the Recommendation, enhanced planning and transparency would, from the baseline analysis, be particularly important in those MS with fragmented enforcement institutions.

4.6 Option 5 – Binding instrument setting out detailed requirements for control in the Member States

This option builds on option 4 of a general binding instrument, but includes much greater detail on the obligations required of the Member States.

This option would contain as its basic structure the same elements of the control chain as set out in options 3 and 4. However, where option 4 requires Member States to determine themselves what is required in relation to inspection planning, follow-up, etc., option 5 establishes some of the criteria within the instrument.

The detailed criteria that would be included in this option would likely need to be elaborated for different parts of the environmental acquis. Some might be appropriate to individual items of law (e.g. CITES), while in other cases they might be best elaborated for thematic areas of the acquis, such as on different aspects of waste law (e.g. on producer responsibility or waste disposal or handling sites). Some criteria could be set out in the body of an instrument, while others may be better described in annexes.

Examples of establishing detailed criteria in relation to the control chain could include:

- *Implementation and enforcement strategy*: the key elements of an enforcement strategy that must be included, such as details of the extent of non-compliance, assessment of the role of enforcement action, etc. for each area of the acquis.
- *Compliance promotion and awareness raising*: identifying specific audiences that should be targeted for compliance promotion for individual areas of law; methods to use (e.g. web-based); specific types of information that must be promoted.

- *Capacity of the institutions*: an instrument could set out requirements for capacity levels related to the enforcement needs (e.g. by number of activities) or alternatively at levels necessary to reduce non-compliance to a specific level. Staff skill requirements (technical, communication, etc.) could also be prescribed in the instrument.
- *Inspection and enforcement planning*: the instrument would prescribe the specific aspects of inspection planning that need to be included. It could prescribe the issues that need to be included in the assessment of risk for risk-based approaches, where random inspection is needed and specific elements of inspection that would need to be taken into account. If necessary, where risk-based approaches are not possible, minimum inspection frequencies could be included (as is the case with IED) – at least for some items of the acquis.
- *Co-ordination between institutions*: the instrument could require specified formalised arrangements to be demonstrated between authorities responsible for implemented specified areas of the acquis, together with assessment of the effectiveness of the co-operation arrangements.
- *Co-ordination on transboundary control activities*: the instrument could require specified formalised arrangements to be demonstrated between authorities responsible for implemented specified areas of the acquis across borders, together with assessment of the effectiveness of the co-operation arrangements. The instrument could highlight specific areas of the acquis where transboundary co-operation is most appropriate.
- *Follow-up*: individual items of law already require the application of appropriate sanctions (dissuasive and proportional). The instrument could prescribe assessment of how these sanctions are applied and whether they result in changes to levels of non-compliance. Regarding administrative follow-up, the instrument could prescribe the details required in inspection and control reports (e.g. that in cases of non-compliance mitigating actions need to be taken to a fixed timetable and reports made), etc.
- *Transparency*: the instrument can list all of the data, information and reports relevant to enforcement action that should be made available to the public.
- *Evaluation*: the details of a good evaluation process could be prescribed in the instrument (e.g. evaluating how control activities change compliance rates, gathering views of the regulated community and the public, etc.). It could also prescribe the frequency of such evaluation activities.

A more detailed prescriptive instrument would affect the MS to a greater degree than option 4. It would firstly deliver increasing closure of the compliance gap in a similar way to option 4 and, indeed, in some cases it would have a greater impact than option 4 as MS would have less flexibility. However, the levels of prescription could have significant unintended consequences with the administrative characteristics and traditions or innovative approaches in the MS.

4.7 Option 6 - Combined option including elements of the previous options

The preceding options are not mutually exclusive. In particular option 2 can be taken forward with any of the other options. Indeed, if a new Recommendation or a new binding instrument were to be preferred, their effectiveness would be enhanced with the development of guidance on specific aspects of those instruments and through actions taken by networks to support individual authorities in the Member States to take forward the obligations in these options.

4.8 Elements of the options to address the whole control chain

With the exception of the baseline option, all of the other options would, in different ways, contribute to enhancing the effectiveness of control activities in the Member States. The differences in the potential effectiveness of the options are addressed in the next Chapter. It is important to note that the analysis above demonstrates that effective control requires each element of the control chain to be effective and efficient in order for enforcement as a whole to be effective. Drawing on the analysis in the first part of this chapter, these elements are:

- Having an implementation and enforcement strategy
- Undertaking compliance promotion and awareness raising
- Having sufficient capacity of enforcement institutions
- Effective inspection and enforcement planning
- Co-ordination of control activities within Member States
- Co-ordination and co-operation on cross-border inspections and other controls
- Appropriate follow-up to control actions
- Transparency and role of the public
- Evaluation of performance of the control strategy and national inspection bodies

As noted all elements are required, though each element has its own value. For example, good inspection planning delivers benefits and allows better targeting, but with insufficient capacity effective control is undermined. Having said this, with insufficient capacity, planning helps better to direct such limited resources.

How these elements can be set out in the different options depends on the type of approach or instrument. Guidance can explore different aspects of these elements in different ways to how they could be set out in a binding instrument. Furthermore, the likely effectiveness of taking forward these elements will vary between the options in particular due to the binding nature of the option.

The following chapter describes the nature of each of these elements in more detail, providing a clear description and the economic, social and environmental impacts of each element (as well as the impacts of addressing the gaps in the control chain as a whole). The following chapter then explores the effectiveness and efficiency of each of the options (actions, instruments, etc.) set out earlier.

4.9 Example of a binding legal instrument

Introduction

This section provides an example of the types of obligations that could be set out in a binding legal instrument (option 4), illustrating the need to encompass the different types of activities necessary to ensure coverage of the entire environmental acquis and to address the whole of the control chain. The text below is not proposed as a definitive conclusion from the analysis in this report, but is illustrative only.

It is also important to note that the example text below is easily modified (removing explicit obligations) to provide the basis for an expanded Recommendation (option 3). However, it could also act as a framework into which more detailed criteria could be added to take forward option 5.

Aim

The aim of the legislation is to ensure compliance with EU environmental law through the improved performance of inspection and enforcement authorities in the Member States and providing information and access to the public in support of this objective.

Scope

The scope would cover the whole of the environmental acquis. In the instrument an annex could be provided listing the legislation to which it applies or other cross-reference made.

Definitions

[The range of definitions would need to be clarified, but key definitions will need to include]

The RMCEI definition of 'environmental inspection' is potentially appropriate [slightly amended]:

- (a) checking and promoting the compliance of controlled installations with relevant environmental requirements set out in [EU legislation as transposed into national legislation];
- (b) monitoring the impact of controlled [activities] on the environment to determine whether further inspection or enforcement action (including issuing, modification or revocation of any authorisation, permit or licence) is required to secure compliance with EC legal requirements;

(c) the carrying out of activities for the above purposes including:

- site visits,
- monitoring achievement of environmental quality standards,
- consideration of environmental audit reports and statements,
- consideration and verification of any self-monitoring carried out by or on behalf of operators of controlled [activities],
- assessing the activities and operations carried out at the controlled [activity],
- checking the premises and the relevant equipment (including the adequacy with which it is maintained) and the adequacy of the environmental management at the site,
- checking the relevant records kept by the operators of controlled [activity].

To this would need to be added:

- Checking on the condition of a site to ensure compliance with site management objectives and whether damage has occurred.
- Gathering evidence of potential offences committed.

[The following RMCEI definition of routine and non-routine inspections is also suitable.]

Environmental inspections, including site visits, may be:

(a) routine, that is, carried out as part of a planned inspections programme; or

(b) non-routine, that is, carried out in such cases in response to complaints, in connection with the issuing, renewal or modification of an authorisation, permit or licence, or in the investigation of accidents, incidents and occurrences of non-compliance.

Environmental inspections shall be carried out by any public authority at either national, regional or local level, which is established or designated by the Member State and responsible for enforcement of the legislation in [legislative annex].

Defining bodies undertaking inspections.

For each of the items of legislation in [legislative annex], Member States shall identify the competent authority/ies responsible for detecting and responding to non-compliance with that legislation. Member States shall also identify, for each of the items of legislation list in [legislative annex], other organisations (governmental or non-governmental) which contribute to the detection and/or response of non-compliance with that legislation.

Member States shall produce an enforcement strategy for the competent authorities and organisations identified above, detailing the specific and individual roles of those organisations. This shall be produced by [date], published online by [date] and updated regularly.

Assessing the risk of non-compliance

For each of the items of legislation in [legislative annex], Member States shall undertake an analysis of where non-compliance is currently most prevalent and where the risk of future non-compliance is most likely. Where necessary the analysis may group the items of legislation into thematic areas. The analysis shall include supporting data to justify the

conclusions and where there is insufficient information to reach a judgement, this shall be explicitly stated.

In the analysis Member States shall identify where levels of enforcement activity are contributing to the reduction in the risk of non-compliance and where increases in enforcement activity would be expected to reduce that risk further. The findings of this evaluation shall be considered when establishing compliance assurance strategies as well as for operational purposes.

Capacity of enforcement bodies

Member States shall conduct an analysis of the capacity of the competent authority/ies and organisations identified [above] responsible for detecting and responding to non-compliance with the items of legislation list in [legislative annex]. This analysis shall include:

- The number of staff in each competent authority and organisation.
- The number of staff in each competent authority and organisation undertaking inspection and enforcement work and the proportion of time spent on these activities.
- Where possible, the breakdown of staff numbers and time spent on inspection and enforcement of individual items of legislation in [legislative annex].
- The skills of these staff.
- Non-staff resources necessary to undertake effective control actions.

The analysis of capacity shall compare the assessment of the numbers and skills of the staff against the analysis of the risk of non-compliance (as above) and identify any areas where the capacity of the competent authority or organisation is insufficient to address those risks.

Plans for environmental inspections

[This draws on the RMCEI]

Member States should ensure that routine environmental inspection and enforcement activities are planned in advance, by having at all times a plan or plans for environmental inspections and enforcement activities providing coverage of all the territory of the Member State and of the activities, threats and issues regulated or addressed by [legislative annex].

Such plan or plans may be established at national, regional or local levels and may address individual legislation in [legislative annex] or appropriate areas of legislation.

Plans shall include inspection and enforcement activities for all of the competent authorities and organisations responsible for inspection and enforcement relevant to the legislation addressed by that plan.

Plans shall be produced in the basis of the following (:

- The EU legal requirements to be complied with for the legislation cover by that plan.

- A register of controlled installations and activities within the plan area.
- A register of protected areas within the plan area.
- The levels of illegal activity in the area of the plan, where this is taking place and its drivers.
- A general assessment of major environmental issues within the plan area and a general appraisal of the state of compliance with EU legal requirements.
- Data on the performance of the regulated activities, condition of sites and other relevant information.
- Data on and from previous inspection and enforcement activities.
- Data on the effectiveness of sanctions applied and their influence on compliance behaviour.
- The risk assessment undertaken to identify inspection and enforcement priorities across the legislation covered by the plan.

Each plan for environmental inspections should as a minimum:

- Define the geographical area which it covers, which may be for all or part of the territory of a Member State.
- Cover a defined time period.
- Include specific provisions for its revision.
- Identify the specific sites or types of activities and enforcement issues covered;
- Prescribe the mechanisms for establishing the programmes for routine environmental inspections, where appropriate, taking into account environmental risks; including, where appropriate, the frequency of site visits for different types of enforcement action.
- Provide, where appropriate, for and outline the procedures for non-routine environmental inspections, in such cases in response to complaints, accidents, incidents and occurrences of non-compliance.
- The role of intelligence-led investigative approaches to the detection of offences.

Wherever possible, inspection and enforcement plans shall be developed using a risk-based approach. The objective shall be to maximise the effectiveness of inspection and enforcement action to where non-compliance is most likely and would have the most negative impacts. This shall be relevant to the type of enforcement activity undertaken, its location and duration.

Where a risk-based approach is used, Member States shall set out in their inspection plans the basis for the assessment of risk and how this has been used to specify the planned inspection and enforcement actions.

For intelligence-led approaches the planning for inspections should be undertaken on the basis of an analysis of the risks posed by illegal activity and the ability to gain intelligence to tackle these risks.

Where more than one organisation is involved in inspection and enforcement activity relevant to an item of legislation in [legislative annex] or group of legislation, Member States shall ensure that the respective responsibilities of those organisations are clear and that co-ordination mechanisms are in place to ensure efficient and effective inspection and enforcement activity and that this is reflected in the inspection plan(s). In particular, Member States shall ensure that there is efficient sharing of necessary data between these organisations.

Site visits

Member States shall ensure that, where applicable, routine and non-routine site visits are undertaken to conduct inspections or other enforcement action relevant to the legislation in [legislative annex].

Site visits shall be undertaken to determine:

- whether conditions of a permit or licence (as required under EU law) are being complied with;
- to ensure prohibited activities (as required under EU law) are not taking place;
- to ensure limits to activities (as required under EU law) are complied with; and/or
- to ensure the condition of a site is maintained (as required under EU law).

The frequency of routine site visits shall be sufficient to achieve a progressive reduction in non-compliance of the relevant area of legislation as specified in [legislative annex].

Site visits shall also examine whether the activity being inspected is at risk of causing a failure to achieve the environmental objectives set out in [separate legal annex of EU environmental law setting quality standards]⁷³.

Member States shall ensure that inspectors or other relevant enforcement officials entitled to carry out site visits have a legal right of access to sites and information, for the purposes of environmental inspection.

[This draws on the RMCEI, amended]:

Where site visits are required to ensuring compliance with the national legislation transposing EU environment law in [legislative annex], Member States should ensure that these are regularly carried out by inspecting authorities as part of their routine environmental inspections and enforcement work and that the following additional criteria are applied for such site visits:

- That the full range of relevant environmental impacts is examined, in conformity with the applicable EU legal requirements and the environmental inspection programmes.

⁷³ Note this provision is similar to that introduced in the Industrial Emissions Directive (Article 23) whereby inspection is not simply a check of compliance with permit conditions.

- That such site visits should aim to promote and reinforce the regulated person's knowledge and understanding of relevant EU legal requirements and environmental sensitivities, and of the environmental impacts of their activities.
- That, where appropriate, the risks to and impact on the environment, whether compliant or not, of the activity are considered in order to evaluate the effectiveness of existing authorisation, permit or licensing requirements and to assess whether improvements or other changes to such requirements are necessary.

Member States should also ensure that non-routine site visits are carried out in the following circumstances:

- In the investigation by the relevant inspecting authorities of serious environmental complaints, and as soon as possible after such complaints are received by the authorities.
- In the investigation of serious environmental accidents, incidents and occurrences of non-compliance, and as soon as possible after these come to the notice of the relevant inspecting authorities.
- Where appropriate to assist in the issuing of an authorisation, permit or licence or renewal thereof.

Other enforcement investigations

Where necessary to detect non-compliance and enforce the provisions of national legislation transposing EU environment law in [legislative annex], Member States shall conduct additional investigations and actions, either separately from site visits or in support of site visits. These may include, but are not limited to:

- Checking of documents, including electronic documents and registers.
- Evidence gathering of related non-environmental criminal activity.
- Evidence of compliance with other EU law not included in [legislative annex].
- Evidence of compliance with other national law.

Action following site visits or other enforcement action

[Based on RMCEI with amendments]

Member States should ensure that after every site visit or enforcement action (such as investigation of illegal activity) the inspecting and enforcement authorities process or store, in identifiable form and in data files, the inspection data and their findings as to compliance with EU legal requirements, an evaluation thereof and a conclusion on whether any further action should follow, such as enforcement proceedings, including sanctions, the issuing of a new or revised authorisation, permit or licence or follow-up inspection activities, including further site visits. Reports should be finalised as soon as possible.

Member States should ensure that such reports are properly recorded in writing and maintained in a readily accessible database. The full reports, and wherever this is not

practicable the conclusions of such reports, should be communicated to the regulated person or entity or otherwise the individual committing the offence; these reports should be publicly available within [timescale] of the inspection or enforcement action taking place.

Member States shall ensure that there are sufficient civil and criminal sanctions available to address non-compliance with EU environmental law and that the level and application of these sanctions is dissuasive and proportionate. Full details of the use of such sanctions (for each case) shall be published by the relevant authority.

Investigations of serious accidents, incidents and occurrences of non-compliance

Member States should ensure that the investigation of serious accidents, incidents and occurrences of non-compliance with EU legislation, whether these come to the attention of the authorities through a complaint or otherwise, is carried out by the relevant authority in order to:

- Clarify the causes of the event and its impact on the environment, and as appropriate, the responsibilities and possible liabilities for the event and its consequences, and to forward conclusions to the authority responsible for enforcement, if different from the inspecting authority.
- Mitigate and, where possible, remedy the environmental impacts of the event through a determination of the appropriate actions to be taken by those responsible for the incident and the authorities, without prejudice to the obligations of the Environmental Liability Directive.
- Determine action to be taken to prevent further accidents, incidents and occurrences of non-compliance.
- Enable enforcement action or sanctions to proceed, if appropriate; and
- Ensure that those responsible take appropriate remedial measures or are subject to adequate follow-up actions.

Compliance promotion/awareness raising

For each item or area (as appropriate) of legislation in [the legislative annex], Member States shall determine the main risks of non-compliance that arise through failure of legal entities to understand the provisions that are required of them. For each item or area (as appropriate) of legislation in [the legislative annex], Member States shall develop a programme or programmes of information and awareness raising that focus on the risks identified and ensure that these are implemented. Where appropriate the effectiveness of these programmes shall be reviewed and the programmes revised [at an appropriate frequency].

[Note: an annex could provide a non exhaustive list of possible actions]

Member States shall publish online and make available a report on the determination of the main risks of non-compliance that arise through failure of legal entities to understand the provisions that are required of them by [date]. This shall be forwarded to the EC by [date].

Member States shall produce the programme or programmes of information and awareness raising by [date]. This shall be forwarded to the EC by [date]. Subsequent revisions to that programme shall be undertaken.

Member States shall produce an [at an appropriate frequency] report of the results of the programmes of information and awareness raising.

Application of sanctions.

Member States shall ensure that competent authorities responsible for the enforcement of the legislation in [the legislative annex] are fully aware of the penalties that can be applied.

Member States shall ensure that the results of all actions (including penalties) applied in response to cases of non-compliance are published and are publicly available. A report on the actions (including penalties) applied in response to cases of non-compliance covering all of the legislation in [the legislative annex] shall be published online.

Public access to information.

Without prejudice to the requirements of Directive 2003/4/EC, Member States shall ensure that the public has full access to the following:

- Inspection and enforcement strategy:
 - Reports on the identification of competent authorities and other organisations [as per above]
 - Reports on the assessment of the capacity of competent authorities [as per above]
 - Report on the main risks of non-compliance that arise through failure of legal entities to understand the provisions that are required of them and subsequent revisions [as per above]
 - The programme or programmes of information and awareness raising and subsequent revisions [as per above]
- Inspection plans [as per above]
- The results of individual inspections and enforcement actions, routine, non-routine and in response to incidents. [as per above]
- Reports on the results of the programmes of information and awareness raising [as per above]
- The results of the application of action taken and/or penalties applied in each case of non-compliance [as per above]

Reporting

Member States shall report [frequency to be determined] on the implementation of this instrument by reporting on the effectiveness of the inspection and enforcement plans, including:

- The number of inspection and enforcement actions undertaken – for routine actions, non-routine, in response to incidents and other actions.
- Levels of non-compliance and how these are changing over time.
- Reasons for non-compliance.
- The actions taken in response to non-compliance.
- The role of compliance promotion activity.
- Constraints on inspection and enforcement action identified by the relevant authorities.

5 IMPACT ASSESSMENT OF THE OPTIONS

5.1 Introduction

Delivering improved compliance with the environmental acquis requires improvements in control in Member States in a number of areas. The different elements of this can be considered as a 'control chain'. The term 'control chain' is a holistic approach to understanding compliance assurance, consisting of inspection/surveillance, enforcement and compliance promotion. In essence the following elements are necessary to ensure that the control chain is effective:

- Establishing an inspection and enforcement strategy
- Compliance promotion and awareness raising
- Sufficient capacity of inspection and enforcement institutions
- Inspection and enforcement planning
- Co-ordination of control activities within Member States
- Co-ordination and co-operation across borders
- Follow-up to inspection and other control actions
- Transparency and the role of the public
- Evaluation of effectiveness of the control strategy and performance of national inspection bodies

The term 'chain' is used deliberately as the effectiveness of the control system is only as strong as the weakest link in the chain and, therefore, each link needs to be in place and effective in its delivery.

In assessing the impacts of taking forward the control chain this has, therefore, to be considered in two ways. The first is the impacts of the chain as a whole, i.e. what are the impacts of closing the implementation gap which an effective control chain would achieve? The second is the impacts of the individual elements of the control chain as, for example, some would have greater administrative costs than others.

As a result, the first part of this section is in two-sub-parts addressing the impacts of the control chain – the first on the impacts of the control chain as a whole and the second on the elements of the control chain.

This analysis does not, however, consider the legal nature of the instrumental setting taking forward implementation of the control chain. It simply considers the impacts of closing the implementation gap. The elements of the control chain could be implemented voluntarily or mandated in a binding instrument. The consequences of the type of instrument chosen would not be the impact of control chain, but the efficiency and effectiveness of implementing the control chain due to the type of instrument. As a result the second part of this section examines the efficiency and effectiveness of the different options for the instrument.

The section concludes with an overall comparison of the options.

5.2 The impacts of implementing the control chain as a whole

There is a cascade of impacts. A full implementation of the whole control chain will lead to improvements in overall quality, effectiveness and efficiency of inspection activities in the EU. These should contribute to increases in overall compliance levels in Member States. Closing the implementation gap and thus realising the objectives enshrined in the environmental acquis will lead to advances in overall EU environmental quality, resulting in greater social benefits (i.e. avoided health cost). It will also trigger progress with regard to creating a level-playing field for the operation of the Internal Market, thus reducing overall cost to business and industry as a consequence of greater certainty and coherent application of inspection activities. These benefits need to be contrasted with overall administrative and economic costs that differ between Member States and between sectors and are difficult to generalise and quantify given the wide range of legislation included, the diverse environmental issues covered and the very different environmental contexts across the MS.

Improvements in quality, effectiveness and efficiency of inspection activity

Implementing a full control chain according to common European criteria but in view of national circumstances should directly impact on the overall quality of inspection regimes. Up to now, there is still a large disparity with regard to the overall organisation and implementation of inspection activities in the EU, and often not all aspects of the control chain are effectively addressed and carried out. Closing the enforcement gap should lead to improvements in overall control levels as a consequence of better determination of compliance gaps and risks, determination of objectives, better coordination of activities and targeting of sectors to increase compliance.

Quality improvements are particularly relevant for coordination of inspection and enforcement activities across environmental media and sectors within and between Member States. They are also relevant for cases where enforcement of the environmental legislation is shared between a wide range of authorities and agencies and where the respective responsibilities and competences are divided among different actors. The investigation of accidents and definitions of requirements for plans and their public availability stood out as weak areas in a previous assessment⁷⁴. Realising a full control chain would help tackle these.

Providing a strategic framework in the form of an implementation and enforcement strategy allows compliance promotion actions and capacity-building efforts to be based on an assessment of good practice, while streamlining these and re-prioritising scarce inspection capacities. This should lead to greater effectiveness and efficiency. Better planning and coordination of control activities will help to facilitate better exchange of knowledge and

⁷⁴ Cowi, Ecorys, Cambridge Econometrics (2011) Impact Assessment study into possible options for revising Recommendation 2001/331/EC providing for minimum criteria for environmental inspections (RMCEI), Final Report.

information, both within a Member State and between Member States. It can advance cooperation across administrative boundaries and lead to better anticipation of joined problems and response needs. As a consequence the number of bad applications of inspection practice is supposed to drop in Member States, and consequently gaps in implementation and breaches of law should be prevented and detected earlier on and be addressed in a more effective manner.

Improving the role and relevance of public participation is likely to provide a major impetus to improving overall effectiveness of inspection activities. It provides additional source of information that can help to better prioritise and target inspection activities on the one hand and to achieve a more timely overview and response to alleged abuses of environmental law on the other hand.

Support to the creation of a level-playing field in the internal market

The greater variety of approaches to organising environmental inspections in Member States and their application can lead to situations of unfair competition between EU regions and municipalities due to different requirements and related costs for business and industry. Implementing the full control chain according to coherent criteria would help to ensure a level playing field and fair, even competition in the single market.

Reducing cost of non- or bad implementation

The lack of a complete, effective control chain in many Member States to detect and prevent breaches of EU environmental law is a key root source for implementation failures, and their related costs. These include costs of not-realised environmental and economic (markets for eco-industries) benefits, costs of damage repair and other costs. But they also contain costs related to market uncertainty and frictions, as uneven implementation of EU environmental law distorts internal market competition due to different administrative and compliance costs for business and industry. Greater coherence between EU and national requirements and within national practices will reduce overall cost for business and industry, as needs to assess and plan for compliance with different regimes are reduced, though costs to business and industry or inspection authorities can be initially increased in Member States with weak or insufficient inspection regimes.

In a rough assessment a study prepared for the EC has indicatively estimated the potential cost of non-implementation of around 50 billion Euro per annum (noting the vast uncertainties inherent to any such assessment, however).⁷⁵ Implementing the control chain as a whole will help reduce these costs.

Environmental and social benefits

Greater effectiveness and efficiency of environmental inspections will help realise the environmental benefits linked to the full implementation of the EU environmental acquis. Particularly reduced air and water pollution will lead to health improvements and help avoid

⁷⁵ Cowi, Ecorys and Cambridge Econometrics (2011) The cost of not implementing the environmental acquis, Final Report for DG Environment, http://ec.europa.eu/environment/enveco/economics_policy/pdf/report_sept2011.pdf

potential cost of non-action.⁷⁶ Full and even compliance with the environmental acquis as a consequence of improved control chain can lead to greater exploitation of the job potential that is linked to full implementation of the environmental acquis: this concerns particularly the stimulation of market-demand for new technologies and services in partially labour-intensive sectors. Implementing the full control chain can also have a direct impact in terms of increase of related jobs in administration and target sectors, though it can be considered to be low.

5.3 Administrative costs

Introduction

The costs arising from implementation of the different elements of the control chain arise from both the individual elements and the application of the control chain as a whole. Here we examine costs arising initially from the key individual elements and then the control chain as a whole.

Elements of the control chain

With regard to public administrations, the types of activity resulting in costs are:

- Planning activities – these include both development of overall enforcement strategies as well as annual inspections plans.
- Individual control actions – these include inspections, as well as intelligence-led enforcement campaigns. Costs include preparation, undertaking the control action and reporting.
- Individual enforcement actions – these are actions taken in response to detection of non-compliance or illegal activity.
- Compliance promotion activities.

With regard to businesses and individuals, the types of activity resulting in costs are:

- Individual control actions – preparing for inspections, time spent during inspection, etc.
- Individual enforcement actions – costs arising from acting in a non-complaint or illegal manner.
- Compliance promotion activities – attending events, etc.

Therefore, we can distinguish costs within the individual elements of the control chain, which combined, concern three types of activity:

- Individual inspection and control activities (a cost to both the public administration and regulated businesses and individuals).

⁷⁶ EEA 2010. The SOER 2010 Synthesis provides an overview of the European environment's state, trends and prospects, integrating the main findings of SOER 2010. <http://www.eea.europa.eu/soer/synthesis/synthesis>

- Planning (largely a cost to the public administration).
- Compliance promotion (a higher cost to the public administration, but some possible cost to business).

Individual control actions

In assessing monetary costs of individual inspections, it is necessary to determine an average personnel cost. Clearly the costs (direct and indirect) for personnel vary considerable across the EU. Furthermore, where organisations charge for their time, this may not reflect full costs. For example, the UK Drinking Water Inspectorate's 2013 daily charging rate is £380, but this is well below the full economic cost of an inspector.

Determining an appropriate average staff cost is difficult. As a result, in this study we have drawn upon examples of costs to administrations and to business found within the IA⁷⁷ for the then proposal for the CCS Directive and which have been used subsequently in IA due to limited changes in public salaries in the EU in recent years. Costs relevant to enforcement activities (i.e. not including permitting, etc.) from this IA are set out below.

Type of obligation	Description of action	Tarrif (€ per hour)	Time (hr)	Price per action
Administrative costs to operators				
Ongoing collection of new monitoring data and submission of reports (ongoing cost)	Producing the required information	65	90	5,850
Compliance assurance (ongoing cost)	Working with regulators on inspection and compliance checking	65	4	260
Administrative costs to administrations				
Compliance assurance (ongoing cost)	Inspection and compliance checking of facilities	65	24	1,560

This study, therefore, assumes the same daily staff rate. However, it should be noted that other cost estimates may be higher. For example, the IA⁷⁸ for the proposed revision to the Waste Shipment Regulation assumes an average cost per day for an inspector of €1,200, which is more than twice the cost assumed for the CCS IA. This figure is based on a study on

⁷⁷ Commission Staff Working Document Accompanying Document To The Proposal For A Directive Of The European Parliament And Of The Council On The Geological Storage Of Carbon Dioxide, Impact Assessment, 23 January 2008.

⁷⁸ Commission Staff Working Paper (SWD (2013)268, 11.2.2013). Accompanying document to a legislative proposal and additional non-legislative measures strengthening the inspections and enforcement of Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste.

the implementation of waste legislation in the MS⁷⁹. However, the study also states that the average cost for an inspector for a year is €60,000, which is very close to the figure for the CCS IA. Alternatively, there are lower cost estimates also. Thus the UK National Audit Office states⁸⁰ that the hourly cost for ‘front-line staff’ from the Environment Agency and from the Rural Payments Agency for farm inspections is £19/hour (about €21 per hour). As a result of both higher and lower costs, this assessment uses the data from the CCS IA as a middle figure, but it must be noted that variations will occur across MS.

The time taken to undertake different types of inspection and enforcement activities varies. For example, the information below describes the time spent on investigating Seveso plans for different types of activity by the health and safety and environment regulators in the UK. These figures are large numbers. We do not propose that their scale is representative of many areas of supervision activity under the environmental acquis – indeed it would be expected that Seveso compliance work is some of the most complex and time consuming. However, the numbers do show that similar activities can vary significantly in staff time requirements.

Type of activity	Health and Safety Executive Time	Environment Agency time
Complex oil refinery employing 350 staff	996	90
Medium sized petrochemical processing plant employing 287 staff	511	50
An establishment comprising a number of large agrochemical warehouses with 25 staff on site	142	45.6
A medium sized company employing approximately 150 people engaged in manufacturing pharmaceutical intermediates	169	-

As a result, we indicate the following average time inputs necessary to complete individual inspection tasks (based on figures above, etc.). These are set out below, but are only to be used as a guide. Clearly some activities are very difficult to define in time inputs, such as intelligence-led approaches which could come to fruition unexpectedly, be lengthened as intelligence and seriousness grows, etc.

Activity	Time	Cost (€)
Inspection (average) individual	2 person days	1,560
Intelligence-led small action (e.g. fly tipping)	5 person days	3,900
Intelligence-led large action (e.g. organised crime)	100 person days	78,000

Clearly, the number of inspections, intelligence-led approaches, etc., required would depend on:

⁷⁹ Assessment and guidance for the implementation of EU waste legislation in Member States, BiPRO, 16 November 2011, <http://ec.europa.eu/environment/waste/shipments/reports.htm>.

⁸⁰ National Audit Office. 2012. Streamlining Farm Oversight.

- The number of activities to be regulated.
- The extent to which compliance requires assessment (e.g. compare the relatively 'hands-off' approach to much inspection on waste water treatment compared to more detailed intervention for some waste activities).

These are all specific to individual regulatory regimes (EU directives and regulations) and are Member State specific. Therefore, no cumulative cost estimate is possible.

It is also important to note that control actions may involve other tasks, e.g. the auditing of plans produced by businesses or analysis of samples taken by businesses (e.g. drinking water). While some through costs (e.g. chemicals) may arise from such activities, most of these costs will arise from time spent. It is not possible to provide a mean figure for such activity as the variation is enormous. For example, the information above on time spent on checking Seveso plans indicates that some plans require major time inputs to analyse. Conversely, the UK Drinking Water Inspectorate charges only £37 (2013 prices) to analyse 100 drinking water samples – less than one tenth of its daily charge rate.

Inspection activity is a cost to business. However, with regard to costs to businesses and individuals, it is not appropriate to consider costs arising from actions which are non-compliant or illegal. Such costs (remediation, fines, imprisonment, etc.) arise from acting against the legal obligations for the business or individual. These are choices made and are avoidable costs.

At a minimum there is a time cost to accompany an inspector during a visit, but there may be preparation (where an inspection is announced) and follow-up work. Clearly, if an inspection is to a small Natura site to determine no prohibited activity is taking place, this might be a very short visit. An inspection for a large chemical installation would take considerable time. Furthermore, as noted above business may be asked to pay for the costs of the inspection incurred by the regulator.

In Sweden, for example, research⁸¹ has estimated that the total costs of inspections by both counties and municipalities across the country is €25.59 million per year (2010 prices) and that this represents only 3 per cent of industry spending on environmental protection. Costs for individual inspections vary, but the mean costs for inspections by counties were estimated at €174/inspection and for municipalities at €267/inspection to the businesses being inspected.

The costs of individual inspection activities for business are difficult to determine across the environmental acquis as a whole. A key sector where inspection is needed (e.g. landspreading of fertilisers, abstraction of water, habitats and species protection, etc.) is the agriculture sector and there is significant concern over regulatory costs to farmers. However, where detailed studies have been attempted, it is difficult to determine the precise regulatory cost from inspection. The following box highlights this issue in England

⁸¹ Gren, I. and Li, C. 2011. Enforcement of environmental regulations: inspection costs in Sweden. *Environmental Economics*, Vol 2.

and Wales, noting the benefits that would arise from combining inspection regimes (an aspect of planning), but also the relative importance of EU regulation for this burden. Where attempts have been made, for example, to apply the Standard Cost Model to inspection in the agriculture section, the level of data necessary to come to sensible conclusions is simply not available⁸².

Box: estimating the costs of inspection to the agriculture sector

The UK National Audit Office undertook a detailed study⁸³ of farm inspections in 2012. It found that there were 114,000 governmental inspections in England and Wales to farms in 2011-12. 35,120 of these were to check compliance, 5,050 to check a complaint and 12,460 to provide advice. It was estimated that 38% of inspections derived from obligations under EU law. It was estimated that the current cost of complying with the regulations is around €600 million per year – about 10% of farm profits. However, this is total cost of compliance, not of inspection and the study found it impossible to determine the costs of inspection alone. Furthermore, the total benefits of the regulations were estimated at about €9 billion annually – 15 times the costs.

However, while detailing specific costs on inspection was not possible, farmers and the National Audit Office called for greater streamlining of inspection to reduce costs. Effective planning and inter-institutional co-ordination are key to this as would be addressed by taking forward the elements of the control chain as a whole.

MacLeod et al (2008)⁸⁴ undertook a detailed assessment of the costs and benefits of regulations affecting farmers in Scotland. They made the following conclusions on specific regulatory regimes:

- Cross compliance: “cross compliance has a very limited cost for farmers (and crofters). Indeed for many farmers the administrative cost of CAP related form filling has eased for most farmers where a country has decoupled income support from production. ...Stakeholders also voiced limited concerns about cross compliance with the exception of duplication of inspections.”
- Regulations implementing the Water Framework Directive: it is difficult to determine costs and benefits and early assessments have treated individual aspects separately, whereas the Directive and farm management are integrated activities. Therefore, costs and benefits will only become apparent at a later stage.

⁸² See for example the attempt to use the standard cost model to evaluate the effectiveness of the initiative to reduce regulatory burdens on farmers in Scotland: <http://www.scotland.gov.uk/Publications/2010/07/08161002/6>

⁸³ National Audit Office. 2012. Streamlining Farm Oversight.

⁸⁴ MacLeod, M., Moxey, A., McBain C., Bevan, K., Bell, J., Ahmadi, V. and Evans, S. 2008. Overview of Costs and Benefits Associated with Regulation in Scottish Agriculture.

- Nitrates regulations: there are “low administrative costs expected from completing manure management plans and co-operating with inspections”. There are considerable benefits to farmers from improved storage and reduced fertiliser costs. Furthermore, impact assessments undertaken for Scottish and UK governments have failed to take full account of the benefits of reduced nitrogen levels.

In conclusion, it is difficult to determine costs of business (and particularly SMEs such as farmers in particular) in a general way for inspection activity. This is potentially more manageable for a specific inspection regime, but not for the general obligations that would be part of options in this study.

Planning

Planning involves the development of overall control strategies and annual inspection planning. Given the assumed staff costs set out in the assessment of costs for individual inspections, the following table provides an estimate for the preparation of these plans.

Activity	Time	Cost (€)
Preparing overall control strategy	3 person months	46,800
Preparing inspection plan (small organisation)	2 person weeks	7,800
Preparing inspection plan (large organisation)	2 person months	31,200

The preparation of such plans should only result in costs to administrations, not business. Furthermore, a key aspect of the plan development is to identify how to make inspection and enforcement actions more efficient and effective – providing for better targeting of resources. Where inspectorates do not current undertake such planning, it is highly unlikely that the costs association with the adoption of planning would not be compensated for by efficiency savings from improved inspection and enforcement actions.

Compliance promotion

With regard to costs arising from attending or contributing to compliance promotion activities, these costs can be minor. For example, production of posters or a video for travellers on CITES enforcement is of low cost, while time intensive campaigns working with traders or schools is more expensive. However, such costs should be more than made up for in benefits to the businesses and individuals in avoiding non-compliance. In other words, there should be net economic benefits from compliance promotion. However, it has also proved difficult to quantify this. Surveys of those affected by compliance promotion activity routinely express their value of such activities, such as the views of SMEs for the NetRegs support tool in the UK. However, campaigns on CITES, wildlife crime, etc., all avoid illegal activity, but the economic effects are not quantified. It is important to note that this study is not suggesting that a particular type of compliance promotion activity should be undertaken. Rather, regulators should engage in effective compliance promotion and this has to be tailored to the individual situation. Effectiveness requires those undertaking compliance promotion to ask those in receipt of such activities whether the activity is

useful. Clearly if both regulators and businesses/individuals find such activities beneficial, then it is likely that economic benefits occur. If businesses/individuals do not find the activity useful, then it should cease or be changed.

No two compliance promotion activities are the same, but the following gives some examples of major actions that have been taken in Member States and their associated costs⁸⁵:

- Austria: the Ökoprofit initiative was first developed in Graz and has since spread to the whole of Austria. It is an environmental programme supporting the avoidance/reduction of waste and emissions in companies (alleviating the environmental impact of a company), including SMEs. It involves the provision of information, support for training workshops and individual consultative support. It requires a yearly budget of about €200,000 to operate, half of which is generated by the private sector.
- Spain: in the Basque region the IHOBE service is a government-funded initiative that provides information and expert advice for businesses from all sectors to help them improve their environmental performances. Services include a phone line, provision of tailored guidance, and a more in-depth consultancy. The phone services are free, while the consultancy services are 50% funded by the recipient company. The annual budget is around €635,000.
- UK: the NetRegs initiative is a web-based information system for SMEs to provide detailed information on issues necessary to ensure SMEs are compliant with environmental law. NetRegs spent about €36,000 in its first pilot year and this was followed by governmental funding of about €5 million for the subsequent three years, one third of which was for communication. It runs with funding of about €1.45 million per year and is supported by a staff of 20.

It can be seen, therefore, that while such compliance promotion initiatives require reasonable sums of money to be created and to continue, these sums are not large compared to the costs of compliance generally. A study⁸⁶ for DG ENTR in particular stressed ways to ensure the efficiency and effectiveness of the funding of such initiatives for compliance promotion and it would, therefore, be important to take these into account to ensure that costs are minimised, while the outcomes of such actions are maximised. The key elements from this study are:

- “Long term financial security is important, but this should be combined with shorter term milestones to encourage evaluation and continual improvement.
- Some source of public funding is needed in most cases, especially to fund the start-up of initiatives, or initiatives where there are no clear competitiveness benefits for SMEs taking part. Funding therefore needs to be available, and SMEs or potential deliverers need to be aware of these possibilities. Accessing funding (i.e. application) should not be overly burdensome and prohibitive to SMEs or potential deliverers.

⁸⁵ Sources for this information: http://ec.europa.eu/environment/sme/pdf/netregs_en.pdf

⁸⁶ IEEP (2006). Environmental Compliance Assistance for SMEs: Analysis of Specific Initiatives at National and Local Level and Identification Of Best Practices. Report to DG ENTR.

- Some initiatives will need to be delivered to SMEs free of charge, for example one-way information services. Where SMEs do pay, costs should be kept low so that participation is not deterred.
- Where possible, initiatives should avoid dependence on one source of funding, particularly public funding where priorities can change over time.
- The administrative burdens placed on the deliverers should be as low as possible, so that important resources are not diverted away from delivery of the objectives of the initiative. Otherwise this can be a problem, especially in cases where funding is secured from different sources at the same time.
- Cost savings can be made by transferring existing support tools elsewhere – although resources will be needed to apply these effectively in a new context.
- Cost savings can be made by transferring practical experience of delivering SME support initiatives, and this should be encouraged.”

The control chain as a whole

Implementing the full control chain can result in higher costs for policy, administration target groups due to:

- Potential need for policy and legal changes and related implementation costs - *higher administrative costs* (as noted above for the individual elements of the chain).
- The need to fund activities under a full control chain (i.e. enhanced enforcement activities as set out in the individual elements above) – *higher administrative costs*.
- The need to adapt to legal and administrative changes for inspection activities for both public and private business and industry – *higher overall economic costs*.
- The need to increase overall private expenditure (business, industry) and public expenditure to comply with the environmental acquis as a consequence of improved inspections – *higher overall economic costs*.

Taking forward a full implementation of the control chain is likely to result in increased implementation costs due to needs for modifying or complementing existing policy and legislative frameworks. The nature of these costs and their relevance will differ between Member States and will naturally be greater in those Member States with poor or insufficient policy regimes for environmental inspections. The nature of these costs and their relevance will also depend on the policy approach chosen, i.e. if criteria for the design and implementation of the full control chain apply directly implementation costs will be lower compared to the need for transposing criteria (i.e. in federal political systems) which required greater cooperation between authorities across different scales of governance. Higher implementation costs induce higher *administrative costs*.

The concrete need to additionally fund activities under a full control chain (i.e. enhanced enforcement activities) and hence additional *administrative costs* due to a higher administrative burden is again dependent on the specific institutional structures and administrative capacities in Member States, which will continue to differ. Implementation of the whole control chain is likely to result in additional upfront and also continued running cost for public authorities, particularly in cases where no or insufficient inspection capacities

and broader administrative capacities are in place to draft strategic frameworks, draft programmes and set up communications and awareness-raising strategies that complement the original inspection activity. However, it should also be noted that on the other hand there would be costs savings from the application of a balanced approach using a good mix of compliance promotion, inspection and enforcement activities.

These activities lead to increased administrative costs in cases where insufficient staff numbers will need to be overcome through either employing more staff or changing overall staff responsibilities with draw-backs in other areas of administrative activity. This is difficult to generalise. Resource constraints are a key issue in many Member States. The baseline analysis found staff availability is an issue in some of the MS (e.g. for nature protection in ES, water in SE and PL, etc.) and this is unlikely to change given the current trend of cutting down administration capacity in reaction to public budget consolidation. However, our baseline analysis has also shown significant capacity issues in Member States such as Sweden. Public authorities are often vulnerable to changes in budgetary decisions, which lead to cuts in personnel, missing training opportunities etc. In Member States with fairly advanced capacities and better enforcement records, cost could nonetheless arise as the wider environmental acquis becomes subject to inspection and surveillance. Moreover, it is important to note that ensuring that adequate competencies of inspectorate staff are available is likely to require training, which increases both budget and also costs in terms of the times where inspections are not performed due to training. However, it should be emphasised that trained staff are more likely to be efficient in their inspection activity and less likely to undertake unnecessary inspection actions, so reducing unnecessary burdens on business.

The options considered in this study involve different types of administrative activity with different types of administrative costs. Furthermore, such costs arise both to public administrations and to businesses/individuals affected by the relevant regulatory activity.

Costs to public administrations

Costs to public administrations are partly predictable and partly unpredictable. Planning, planned inspections, compliance promotion – these can all be fully planned and costed in advanced. However, inspections in response to incidents and follow-up to non-compliance cases are inherently not predictable, although many regulators plan on the basis of previous experience.

It is important to note that while these actions result in costs to public administrations, in some cases they may not be net costs to those administrations. This is because in some countries cost-recovery is practiced (e.g. PL, UK). Cost recovery may apply to different aspects of environmental administration (e.g. permitting, inspection, etc.). The extent to which it applies to supervision and control activities varies and may vary between institutions in a Member State. It is not, therefore, possible to state whether some of the costs would be passed to business or where this would occur.

One more widespread case of cost recovery concerns the use of sanctions. Where administrative sanctions are applied, the fines, etc., may be of fixed scales and not recover

all costs. In contrast, larger fines, prosecutions, etc., may recover all costs. In some cases in the baseline analysis (e.g. for regulation of industrial activities in the UK) it was noted that moneys raised through fines are retained by the environmental regulator and in other cases are passed to the general public purse.

New or existing obligations?

A further consideration on costs to public administrations is whether new obligations in EU law would result in new costs to the public purse. It is likely that in some cases these new obligations would not result in new spending, but would be implemented by re-prioritisation within the administrations.

Introduction of new legislation or the modification of existing legislation as well as changes to non-legislative approaches and tools to organise inspection activities will incur *higher overall economic costs* for both public authorities and private entities (industry, business) that are subject to inspection activity and have to adapt to the new rules. This might include a need to re-train staff or hire new staff to comply with reporting requirements. Again the nature of these costs is context-dependent and will vary from sector to sector. While difficult to qualify these costs should decrease over time with target sectors becoming familiar with the changes. Costs will also be influenced by the degree of flexibility that is granted to inspectorates to adjust implementation to different sector realities. In line with a previous assessment, the impact on jobs in business and industry are considered to be minor, as existing staff will mainly be used to ensure compliance.⁸⁷ The changes to administrative costs in business and industry as a direct consequence of policy and legislative changes with regard to inspection regimes can be considered small in many cases.

What are the net costs of the proposed options?

With the above costs of different elements of the control chain considered above, it is important to consider how these translate to costs of the proposed options in a comparative way.

Costs depend on the nature of the options taken forward for each aspect of the control chain and the corresponding provisions and capacities in Member States. They also depend on the nature and approach taken towards the overall enforcement of the environmental legislation, i.e. whether and to what extent this is shared between a wide range of authorities and agencies. A larger number of regulatory authorities with overlapping responsibilities increases coordination needs and hence costs. However, greater cooperation of authorities can reduce initial costs and better planning and coordination should reduce overall costs and lead to cost-savings (per unit) as a consequence of greater effectiveness and efficiency.

However, it is extremely important to stress that the costs that would arise from effective planning, inspection, compliance promotion, etc., are not net costs from taking forward any one of the options. This is for two very important reasons:

⁸⁷ Cowi, Ecorys (2011) Impact Assessment study into possible options for revising Recommendation 2001/331/EC providing for minimum criteria for environmental inspections (RMCEI), Final Report.

- Many of the activities, such as CITES inspections, waste shipment inspections, compliance promotion for nature protection, etc., are already being undertaken extensively by some Member States and in part by others, so there would not be new costs in such cases. Costs arise where the proposed options result in the gaps in the control chain being filled.
- Many of the activities are already necessary to ensure implementation of the existing acquis and, therefore, can be argued are already costs for implementing that acquis and not new costs.

The Explanatory Memorandum by the EC to the proposal for the RMCEI written in 1998 (COM(1998) 772) made this point clearly 15 years ago and it still remains valid today. It stated:

“Numerous sectoral Community directives provide for the carrying out of some kind of environmental inspections by the Member States. Thus, Member States should already have in place systems and mechanisms for carrying out such inspections. Other directives which do not foresee inspections tasks, have to be fully implemented and thus, according to the case law of the European Court, of Justice, have to be properly applied and enforced on the ground. Complying with such obligations implies a cost. However, to the extent that they should already be complying with Community law obligations, there should be very little additional cost involved for Member States in applying the Recommendation. The only identifiable extra cost could arise from the reporting requirements and making available to the, public of certain reports, for example in relation to site visits. This cost will most probably be reflected in human resource needs, which could be met by redeployment, rather than infrastructure building.”

Having said this, it is important to consider if there are differences between the options that affect the level of administrative costs.

To do this, it is easiest to start by considering options 3 and 4 – an expanded Recommendation or a general binding instrument. In both cases the degree of detail of the requirements for the control chain are similar – the only difference is the nature of the instrument. However, for the purposes of consideration of cost, one has to assume full implementation of the instrument and, therefore, costs would be very similar for both options. Clearly (as is explored elsewhere) the non-binding Recommendation is likely to be less effective, but this is a separate issue.

As explained above it is not possible to state the absolute costs of options 3 and 4 given the current state of control activity in Member States, the existing requirements in EU law, etc., but potential examples of costs of activity are provided above.

Option 2 is a non-legislative approach based on guidance, etc. One could argue a similar case on the extent of administrative costs as with the Recommendation (option 3), but noting that the option would be likely to be even less effective. However, there are likely to be limitations on option 2 in its scope that would not apply to option 3. The option is focused around support for networks, major areas of law, etc., and it is likely that some

parts of the acquis might be difficult to address in this way. Thus full 'implementation' might result in fewer costs, but also fewer benefits.

Option 5 is a binding instrument with detailed requirements set out for individual directives, etc., i.e. it is far more prescriptive than option 4. In this study we have not stated what such detailed prescriptions should be (not least because they would cover all major elements of the environmental acquis includes issues not addressed in this study). At this level of analysis, therefore, it is possible to make one key point. If the levels of prescription merely spelled out in detail what would arise from application of option 4, the costs would be same as option 4. However, if the levels of prescription meant that Member States had to take specific administrative actions which they considered to be sub-optimal for application of the control chain in some circumstances, then costs may well be higher.

Taking account of benefits

As is argued elsewhere, the environmental benefits arising from full implementation of the acquis, supported by application of the control chain, are benefits that arise from those directives and regulations rather than directly from the options considered here. Even other benefits (e.g. social benefits from public participation in control planning, etc.) should arise from effective application of existing law. This is clear from the comparison of costs and benefits of regulation in the agriculture sector in the UK in the box above.

However, a key issue on benefits that arises in the context of the above discussion of costs, is that where implementation of one or more of the options set out here is a new cost, the related benefit is not straightforward to determine. For example, if a new instrument results in increased inspection capacity and increased numbers of inspections, the benefits that would arise would depend upon how well such inspections were targeted, etc. Thus the quality of information and quality of institutional management are important in translating spending (cost) into net benefit for health and the environment.

5.4 Other impacts of the elements of the control chain

Inspection and enforcement strategy

Description

There is a need for an overarching inspection and enforcement strategy to provide the priorities and key elements of the 'control chain'. Such a strategy would set out the main issues and problems faced in achieving compliance and contextualises inspection and enforcement work within a compliance promotion context. Such a strategy is a high level, top-down approach. It sets out major priorities. It can set overall policy for directing resources to the major compliance needs. A strategy would normally be expected to last several years.

The strategic approach should cover the EU environmental acquis and should specify issues for the different elements set out below for each major item of legislation or sectors of

environmental legislation in the acquis. This is necessary to ensure all compliance issues are addressed and that the focus is not only on 'high profile' legislation.

A strategy is also able to include consideration of issues such as better/smart regulation, examining the nature of different types of intervention and their impacts of business as well as on delivering effective compliance.

An effective enforcement strategy should contain, at least, the following elements:

- A clear identification of the compliance gaps, and the main problems and risks for ensuring implementation.
- A description of the objectives for implementation and enforcement and how these each contribute to delivering overall compliance. This should include the following elements:
 - Prevention of non-compliance
 - The role of compliance promotion and awareness-raising
 - Detection, identification and characterisation of breaches in compliance
 - Taking action to ensure cessation of illegal activities
 - Remediation of environmental harm
 - The imposition of sanctions and their role in dissuading future non-compliance
 - Timetables for application of elements of the control chain to deliver deadlines for compliance
- The key requirements for inter-institutional co-operation to deliver the objectives of the strategy.
- The key requirements for transboundary co-operation to deliver the objectives of the strategy.
- The objectives across the control strategy with regard to transparency of actions to the public and specific stakeholders and how authorities can be held accountable.

An inspection and enforcement strategy should ideally be as comprehensive as possible. However, given the variation in governance structures within Member States, it is likely to be necessary in practical terms for sub-strategies to be needed. These could be:

- For specific governance levels, e.g. a strategy for each regional government within Member States with federal or highly devolved administrations.
- For specific environmental sectors, e.g. for waste or nature. This might be particularly relevant where the institutional and enforcement context is complex.
- For specific economic sectors. This is perhaps less likely, but it might be appropriate where consideration is being given to wider (non-environmental) regulation on the sector and how to optimise overall regulatory activity (e.g. to farmers).
- For the individual institutions. Where there is a major institution responsible for many aspects of environmental enforcement, it might be appropriate to develop a strategy at this level.

In any case, it will be necessary for a Member State to bring these specific elements together to provide a coherent overall strategy for ensuring compliance with the environmental acquis.

Economic impacts

A strategy for implementation and enforcement of EU environmental acquis at MS level would help to ensure effective compliance with rules and regulations, as well as create trust in the functioning of the society and in governments. When inspections are conducted well, they are beneficial to business by supporting a positive change in behaviour and can support economic growth. On the other hand, inspections can be time consuming and require a high level of staffing as it can require a significant amount of resources for both inspection authorities and businesses. Therefore, if conducted inefficiently and in an un-coordinated way, inspection activities can act as a drain on government resources and hinder business growth.

The development of an inspection and enforcement strategy (see above) for inspections would probably involve one or several meetings with the relevant public authorities (at various levels of national government, especially in the case of decentralised systems like in Germany, Sweden or Spain), economic actors, experts and civil society. The main administrative steps and requirements involved in setting up an implementation and enforcement strategy would most likely entail the following:

- The time needed to develop with and agree upon the strategy among the relevant actors (including preparation work, discussions, and any follow-up activities needed to finalise the strategy)
- Necessity of designating a competent authority (or creation of a Planning Committee) to be in charge of the planning process: organising, presenting and preparing the strategy for discussion, identification of specific issues and information to be collected to help make sound decisions (i.e. gather information on current strengths and weakness and performance that will highlight the critical issues to be addressed in the Control strategy)
- Necessity of defining the approaches to be taken, and the goals and objectives to achieve in order to address the main identified issues and challenges. Strategies, goals, and objectives can be sought from individual inspiration, group discussion, formal decision-making techniques, etc. This process takes time and flexibility and will possibly frequently need additional information or re-evaluation of former conclusions.
- The drafting of the control strategy is the final step of the process, which should be written after agreement on the strategy.
- In terms of material costs, there would not likely be any other costs involved other than the staff costs of those involved which could also potentially include some transportation and accommodation costs, as well as translation costs, if relevant.

Ideally, the secretariat of the MS environmental ministry would be designated to organize the coordination between the concerned actors, as they would be the best suited to determine the most important actors needed to develop an implementation and

enforcement strategy across the environmental acquis of the country. In the case of Sweden for example, inspection and enforcement responsibilities are at three levels: national, regional, and local. Authorities carrying out inspection and enforcement include the surgeon general's office, the county administrative boards (CABs), municipalities and a few authorities to ensure that sufficient resources and competent personnel are available. These authorities would all work together in order to draw up a Control strategy based on an examination of needs, and also keep a supervision register, conduct follow up actions and evaluate supervisory activities.

In Sweden, approximately 1 250 full-time officials work on environmental inspections. One-fifth of their time is spent on inspection and enforcement at licensed installations. In terms of the amount of resources invested in inspections, this varies greatly by municipality, even among those of similar size. This would also most likely be the case in other Member States as the frequency of inspections would depend on the resources available and the number and extent of high risk sites for inspection. In the late 1990s, each inspector in Sweden conducted nearly 100 inspections per year. The total cost estimated to municipalities for inspections in environment, health and animal protection was more than 1 billion SEK (1.6 billion Euros) in 1999. Operator fees cover about one-fourth of inspection costs⁸⁸.

In the context of an inspection and enforcement strategy, guidance on inspection and enforcement is usually implemented at national and regional level, and the operative part of the implementation and enforcement is mainly carried out at regional and local level. The guiding responsibility can include support, advising and evaluating the inspection and enforcement work carried out at regional and local level. It should be noted that while the delegation of many regulatory powers to local level takes into account local circumstances in implementation, it also creates some difficulties. One such challenge is the risk of environmental concerns being superseded by development interests in municipal decision making. Further, smaller municipalities or regions that may have fewer monetary and human resources for inspection, could find it hard to give sufficient priority to what is often considered a "policing" function. The lack of uniformity among municipalities in enforcement and inspection may hinder achievement of environmental objectives. For example, certain municipalities have put less priority on enforcement in order to attract business, which would complicate efforts to guarantee a level playing field for businesses across the country. Therefore, when developing a control strategy, it is important to consider approaches to encourage uniform and harmonised implementation of environmental legislation as well as clarify the roles of different authorities.

The key challenge for governments is to develop an inspection and enforcement strategy that supports the highest possible compliance while keeping costs as low as possible. A well-developed inspection and enforcement strategy with the right incentives can reduce monitoring efforts and costs for both the regulated subjects and the public sector. Many countries are starting to recognize the importance of inspection and enforcement in order

⁸⁸ OECD (2004), OECD Environmental Performance Reviews: Sweden

to ensure the quality of regulatory policy and to address the overall level of regulatory burdens imposed on businesses and citizens⁸⁹.

A full inspection and enforcement strategy would have important economic impacts. Ensuring improved compliance with the EU environmental acquis will deliver benefits to business such as improved quality of environmental resources used, delivery of a level playing field, etc. A compliance strategy also provides a coherent tool for working with business, providing the certainty of the role of governmental authorities, which is necessary for business planning.

A critical part of an inspection and enforcement strategy would be to ensure that better or smart regulation principles underlie the analysis supporting the strategy and inform its components. This should assess the burdens placed on businesses of control activities and ensure these are reduced without affecting the purposes of delivering compliance with EU law. Furthermore, the positive benefits of compliance promotion within a control strategy would be integral to a better regulation approach. Therefore, an effective inspection and enforcement strategy integrating better regulation can reduce costs to businesses and individuals.

The Hampton principles for regulation in the UK⁹⁰

The Hampton principles of better regulation are adopted at UK government level and the aim is for them to be consistently applied throughout the regulatory system. They are:

- Regulators, and the regulatory system as a whole, should use comprehensive risk assessment to concentrate resources on the areas that need them most.
- Regulators should be accountable for the efficiency and effectiveness of their activities, while remaining independent in the decisions they take.
- No inspection should take place without a reason.
- Businesses should not have to give unnecessary information, nor give the same piece of information twice.
- The few businesses that persistently break regulations should be identified quickly and face proportionate and meaningful sanctions.
- Regulators should provide authoritative, accessible advice easily and cheaply.
- Regulators should be of the right size and scope, and no new regulator should be created where an existing one can do the work.
- Regulators should recognize that a key element of their activity will be to allow, or even encourage, economic progress and only to intervene when there is a clear case for protection.

Social impacts

A control strategy has to be produced through consultation with stakeholders including the public and specific communities potentially affected by non-compliance. This inclusion into

⁸⁹OECD, Julie Monk (2013) Reform of Regulatory Enforcement and Inspections in OECD countries, www.oecd.org/regreform/Reform%20of%20inspections%20-%20Web%20-%20Julie%20Monk.pdf

⁹⁰Source: <http://www.bis.gov.uk/brdo/resources/knowledge/better-regulation-principles>

the strategic planning of control processes and actions is important to deliver confidence in governmental control and the rule of law.

A control strategy provides the foundation for subsequent interaction of the regulatory system with the public. By setting out the principles of the regulatory process and objectives it allows for the public to judge future performance. This ability for proactive engagement is a major benefit of this aspect of the control chain.

Environmental impacts

A control strategy provides the foundation for better targeting of environmental control activities. This does not deliver a specific environmental impact, but the objective is that the problems of compliance are better understood and regulatory action better tailored to address this. As a result, instances of non-compliance should be more effectively reduced, thus delivering significant environmental impacts in those areas of environmental law where this is currently a problem.

Compliance promotion and awareness-raising

Description

Many cases of non-compliance are not the result of deliberate action by business or individuals to break the law, but result from a failure fully to understand the obligations which apply to them. An effective 'control chain', therefore, has to include actions to raise awareness with the regulated community of their obligations, better known as 'compliance promotion'.

Compliance promotion has been shown across many areas of environmental law to improve compliance. Furthermore, business is generally highly supportive of such approaches as it helps reduce the risk of non-compliance and the negative effects this can have on a business.

Compliance promotion action should be identified for each area of environmental legislation. A compliance promotion approach should be set out in the overall strategic control strategy described above as well as within the routine planning of individual institutions (see below). To be effective compliance promotion should:

- Identify the regulated community most affected by the relevant legislation.
- The particular risks of non-compliance arising from lack of information/awareness and to which elements of the regulated community such risks apply.
- The most appropriate vehicles for provision of information/advice to address these risks taking account of resources available.
- The role of others in contributing to delivering information and advice. Business associations, NGOs and others can be highly supportive and effective in distributing information and advice and this avenue reduces resource costs to public authorities.

There are two primary approaches to delivering compliance promotion. The first is an ex-ante approach – providing information and advice prior to action by the regulated community or the enforcement institution. The aim is to prevent non-compliance behaviour (and the costs that result from this) before it happens. The second is to provide information and advice during inspection and enforcement actions. In this case the aim could be to avoid a repetition of a detected offence or help provide detailed advice to prevent other future instances of non-compliance.

Economic impacts

Compliance promotion is essential in rendering environmental inspection and enforcement activities more efficient. Repeated and persistent non-compliance increases the costs to inspectorates, whereas a higher level of compliance can effectively contribute to the reduction of these costs. Compliance promotion can reduce compliance costs to businesses by allowing them to achieve and maintain compliance as efficiently as possible, and may allow a reduction of compliance assurance costs to regulators by increasing the efficiency and effectiveness of compliance monitoring and enforcement activities. Several factors contribute to creating a responsive climate for compliance. They include:

- Provide awareness and technical assistance to the company;
- Build public support;
- Publicise success stories;
- Provide economic incentives and create financial arrangements;
- Build environmental management capability within the companies;
- Maintain a transparent inspection and enforcement system;
- Show flexibility in implementing enforcement actions⁹¹.

Compliance promotion includes assistance, incentives, and other activities designed to promote observance of environmental requirements⁹¹. Activities under assistance can include education, training, outreach, and other activities to help the regulated community understand and meet its obligations. Incentives encourage the regulated community to comply. Other instruments, including market mechanisms, can also be used to encourage compliance. As previously explained, regulation that imposes obligations on business can at times be perceived as complex and unclear, which can result in non-compliance. Compliance assistance and promotion can help businesses understand and comply with such regulation by raising awareness and providing guidance on their environmental responsibilities and requirements to fulfil in order to comply with legislation.

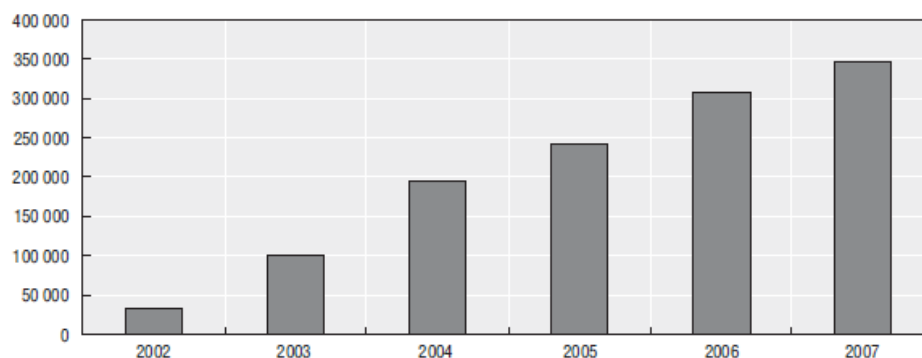
Compliance promotion is growing in importance. For example, in the US, the number of regulated entities reached by compliance assistance more than doubled between FY 2002 and FY 2007: from 590 000 to 1 228 000.⁹² Web-based compliance assistance resources are also becoming increasingly popular among the regulated community. In 2007, the US

⁹¹ OECD (2009) Ensuring Environmental Compliance: Trends and Good Practices, www.iadb.org/intal/intalcdi/PE/2009/03570.pdf

⁹² OECD (2009) Ensuring Environmental Compliance: Trends and Good Practices, www.iadb.org/intal/intalcdi/PE/2009/03570.pdf

Compliance Assistance Centers were visited almost two million times. In the same year, the UK, saw over 300 000 businesses using NetRegs (see Figure below), which was expected to increase to 600 000 (25% of all UK businesses) in 2011. NetRegs is an Internet-based Compliance Assistance Tool in the UK. It is a web-based tool created in partnership between the UK environmental regulators (for England and Wales, Scotland, and Northern Ireland) to provide free environmental guidance to small and medium-sized businesses throughout the country. Further, NetRegs also conducts surveys to look at environmental attitudes and behaviours among the country's SMEs as well as user testing.

Figure 4. Web-based Compliance Assistance in the UK: Number of NetRegs Users



The development of compliance promotion tools requires additional resources, mostly for producing the content, marketing and communications. US and UK regulators nonetheless consider this a worthy investment. For instance, it is estimated that NetRegs delivers annual administrative cost savings to business of about GBP 10 million after the upfront investment of GBP 3.5 million⁹³. If inspection authorities do not provide sufficient advice and guidance, they are failing to communicate effectively with their businesses, creating confusion and contributing to regulatory failure. Provision of advice is a key role for regulators because it helps to secure compliance - resources released from unnecessary inspection could be re-directed to providing advice to businesses to improve compliance⁹⁴. This could also reduce the administrative burdens placed on businesses by reducing the time taken to comprehend regulations and any data requirements under them and would enhance regulatory outcomes.

Providing compliance information to businesses can be done through direct communication between inspectors and operators, such as during inspection visits. For example, the Environment Agency of England and Wales provides guidance to businesses during site visits to help managers identify opportunities for resource efficiency gains and pollution prevention. The Agency also offers up to 15 hours of free assistance as part of the permit application process. Other types of information dissemination to industry include the provision of sector-specific best practices guidance, which is often made available through dedicated websites. Industry associations usually actively participate in the design of

⁹³ Environment Agency of England and Wales, 2008 and OECD (2009) Ensuring Environmental Compliance.

⁹⁴ OECD, Julie Monk (2013) Reform of Regulatory Enforcement and Inspections in OECD countries, www.oecd.org/regreform/Reform%20of%20inspections%20-%20Web%20-%20Julie%20Monk.pdf

guidance documents and circulate them among their members.⁹⁵ Finally, in the example of Ireland, one of the first identified steps of the 2013 National Inspection Plan for Domestic Waste Water Treatment Systems (DWWTS) is a national public awareness campaign to promote best practice relating to the operation and maintenance of DWWTSs. The campaign will communicate key messages via a series of channels e.g. web based, videos, animations, FAQs workshops, presentations, TV, local radio interviews etc. and inform DWWTS owners of the role they can play to protect their health, that of their neighbours and the environment. Owners will be made aware of the simple steps they can take to properly operate and maintain their system as well as raising awareness as to the health implications in the case of a non-compliant DWWTS.⁹⁶

Compliance promotion has significant economic benefits to businesses and individuals. Non-compliance often arises due to lack of knowledge either of the law or how to ensure compliance. Such non-compliance can be costly, due to sanctions imposed, interruptions to business, etc. Compliance promotion helps to avoid these costs. Furthermore, business owners or managers and individuals can be more confident in their activities when they are actively informed of their obligations and how to meet them and this can provide additional business certainty.

Compliance promotion in Finland

Compliance assistance is integrated into the Finnish permitting and compliance monitoring system. Direct communication between inspectors and operators is often observed to discuss existing and potential compliance problems and possible solutions. Such discussions are recorded in a dedicated compliance monitoring system (the VAHTI). National-level negotiations with representatives of specific industrial sectors are also organised on a regular basis. Direct technical assistance is also provided to SMEs (e.g. inspectors may help operators to develop their environmental management plans to better comply with regulatory requirements).

The Confederation of Finnish Industries and sectoral industry associations use their own means (websites, newsletters) to disseminate regulatory and technical guidance. Best practice guides are widely disseminated in the context of compliance promotion in Finland. These are jointly funded by environmental authorities and industry associations. The Finnish Ministry of Environment also produced and made available online a series of fact sheets describing Finnish companies' eco-innovations. Certain industry associations organise compliance promotion seminars for their members. Substantial supporting activities have been conducted in order to strengthen and enhance the application of BAT (Best Available Techniques) in permitting, including the creation of a "BAT Network" co-ordinated by the Finnish Environment Institute. Half of the members are representatives of permitting and enforcement authorities and the other half are industry experts.

Source: OECD (2009), Ensuring Environmental Compliance: Trends and Good Practices

⁹⁵ OECD (2009) Ensuring Environmental

Compliance: Trends and Good Practices, www.iadb.org/intal/intalcdi/PE/2009/03570.pdf

⁹⁶ Ireland Environmental Protection Agency, National Inspection Plan 2013, Domestic Waste Water Treatment Systems, www.epa.ie/pubs/advice/water/wastewater/EPA_National_Inspection_Plan_2013.pdf

Social impacts

Compliance promotion has strong positive social impacts. Businesses, the public and civil society can have greater confidence in the ability of business to be compliant. For individuals, promotional activity avoids unintentional non-compliance and this raises confidence in the regulatory system.

Environmental impacts

Compliance promotion aims to avoid unintentional non-compliance with the acquis, with its resulting environmental impacts, which are significant. It can also have further environmental impacts where regulators work closely with business. For example, an inspector may discuss ways to ensure compliance with limit values in a permit (i.e. strict compliance), but take the opportunity to discuss ways to reduce resource or energy use, which may not be a legal obligation, but are environmental and business benefits.

Sufficient capacity of enforcement institutions

Description

In order for control institutions to perform their functions effectively in enforcing the acquis, as well as meeting obligations such as public participation and working with stakeholders, they have to have sufficient capacity. Capacity includes having sufficient staff to fulfil the responsibilities. It also includes the skills of the staff and support systems for effective working (IT, laboratories, etc.).

Of course the capacity required is totally dependent upon the scale of the control challenge. This will reflect a combination of the number of sites, activities, etc., to be control under a particular regulatory regime as well as levels of non-compliant/illegal activity. This part of the control chain, therefore, requires an objective assessment of the capacity of the enforcement institutions to deliver the necessary levels of control activity and to ensure that the funding to deliver this capacity is provided. The assessment of capacity should take account of contributions from non-governmental bodies supporting control action. Such assessments should be made public.

Economic impacts

Inspections require a considerable amount of regulators' resources because they are time consuming and involve staff travel to sites for assessments. The costs and benefits of inspection are often very difficult to determine as is judging whether the right amount of resources is being allocated. Further, it is also very difficult to assess whether this activity has any positive impact on the performance of businesses. Therefore, there is a pressing need for more work to be done in this area to accurately assess the costs and benefits of inspections, particularly in the context of the global economic crisis with constrained

government resources and the need for governments to demonstrate to the public that they are being effective.⁹⁷

In the context of environmental inspections and enforcement, the calculation of staff time is largely based on the level of total regulatory effort. The regulatory effort depends on the number of regulated entities and their relative size, complexity and associated risk. This is because in addition to compliance monitoring and non-compliance response, environmental enforcement authorities often exercise a range of other responsibilities, such as permitting and ambient air quality monitoring. A range of other activities are also often carried out by inspection authorities:

- Training;
- Administration (including accounting);
- Reporting, checking, and maintaining public registers; and
- Appeal and prosecution work.

As has been observed during interviews and literature reviewed in the context of this study, the total amount of staff available is limited and does not necessarily correspond with the staff time needed for carrying out prioritised inspection activities. Staffing needs and availability should be determined as accurately as possible so that during the planning process, priorities, targets and inspection strategies can be adjusted as needed. For each type of controlled installation or activity, it is essential to know the average time needed for performing a certain type of routine inspection, including preparation, travelling, the actual site visit, reporting, (possible) enforcement actions and court cases. Enforcement response actions (e.g. sanctions or repressive actions) cannot be planned in advance and therefore the average time based on experience must be used. Resources must also be allocated for non-routine inspections (e.g. responding to complaints and accidents). On average the amount of time needed for non-routine inspections could be between 20% and 40% of the total time of an inspectorate.⁹⁸

The real availability of the inspectorate's staff for compliance monitoring is determined by subtracting the level of effort that is not related to inspection from the total number of staff person-hours. It should then be compared with the minimum requirements of inspection frequency, scope and duration. Calculation of staff time and number needed to conduct inspections can be done via the following steps:

- a) Assessing how much time (days) is spent annually on tasks at the competent inspection authority other than regular planned inspections (such as annual and sick leave, meetings, regulatory tasks besides inspection, unplanned inspections, etc.);
- b) Calculating the average effective time each inspector has available for inspection (days per year);

⁹⁷ OECD, Julie Monk (2013) Reform of Regulatory Enforcement and Inspections in OECD countries, www.oecd.org/regreform/Reform%20of%20inspections%20-%20Web%20-%20Julie%20Monk.pdf

⁹⁸ IMPEL (2008), Doing the Right Things II, Step-by-step guidance book for planning of environmental inspection, <http://impel.eu/wp-content/uploads/2010/02/2007-11-dtrt2-step-by-step-guidance-book-FINAL-REPORT.pdf>

- c) Estimating the compliance monitoring effort per risk category (low, medium, high), in hours or days that need to be spent at a certain type of facility;
- d) Assessing the total time that needs to be dedicated to inspection (person-days);
- e) Dividing the total time required for inspection by one inspector's available time in order to evaluate the number of inspectors required.⁹⁹

To determine the requirement and the availability of staff resources necessary the above exercise needs to be carried out in the MS. Some information has been identified through the literature to provide some insight on the administrative impacts and costs involved in assuring sufficient capacity of enforcement institutions. In terms of cost, the salary of inspectors is one of the most significant elements of an inspection authorities' budget¹⁰⁰. Regulatory agencies in the UK both at the national and local level employed 41 000 staff with a budget of £4.2 billion.

In addition to in-house staff, MS may also need to consult with external experts for assistance related to enforcements tasks (i.e. investigation on alleged non-compliance, inspections of a very technical nature that requires very specific expertise, etc.). This approach is often observed under the Bern Convention (for addressing complaints on nature conservation). In terms of the funding of experts, the Bern Secretariat¹⁰¹ estimated that experts are paid approximately 175 Euros a day (based on rates for Strasbourg), in addition to the reimbursement of their travel, food, and lodging costs.

With regard to the capacity of enforcement institutions, ensuring that there is sufficient capacity aims to ensure compliance with the *acquis*, with its resulting positive or negative economic impacts. It does not have any other economic impacts.

Social impacts

As with the economic impacts, ensuring that there is sufficient capacity aims to ensure compliance with the *acquis*, with its resulting social impacts. It does not have any other social impacts beyond this. Note that additional capacity allowing for greater engagement with the public is still an aspect of compliance with the *acquis*.

Environmental impacts

As with the economic and social impacts, ensuring that there is sufficient capacity aims to ensure compliance with the *acquis*, with its resulting environmental impacts. It does not have any other environmental impacts beyond this, even though this delivery of compliance itself would have significant environmental impacts.

⁹⁹ OECD (2010) Improving the Effectiveness and Efficiency of Environmental Inspections:

Risk-based Prioritisation and Planning in Moldova, www.oecd.org/env/outreach/46960063.pdf

¹⁰⁰ OECD, Julie Monk (2013) Reform of Regulatory Enforcement and Inspections in OECD countries, www.oecd.org/regreform/Reform%20of%20inspections%20-%20Web%20-%20Julie%20Monk.pdf

¹⁰¹ http://www.coe.int/t/dg4/cultureheritage/nature/bern/default_en.asp.

Inspection and enforcement planning

Description

Control activities, in particular inspections, should be set out in a plan. A plan enables the identification of priorities for control activities, it can target activities where there are the most concerns about non-compliance and it can balance effort with other actions, such as compliance promotion.

The scope and nature of a plan depends on the nature of the control activity being undertaken. Where there are fixed facilities or sites that are subject to routine inspection, it is possible to plan these ahead. However, some flexibility will be need to address control activity in response to incidents. Some other types of control activity might be more routinely response focused (e.g. investigating damage to Natura sites). Furthermore, intelligence-led approaches have their own planning logic. However, in all cases institutional planning is needed.

The plan should aim to target the resources available to maximise compliance control. This is likely to require a risk-based approach to much control work. Risks can be determined based on different factors, such as the threat to the environment if non-compliance occurs (i.e. large facilities with toxic substances are a higher risk than small ones without toxic substances) or compliance history. For intelligence-led approaches there is a different assessment of risk, but targeting is still needed to maximise efficiency.

Plans should drive operational activity and would routinely be produced annually. Within a plan responsibilities for its implementation should be clearly set out and inter-institutional relationships necessary to deliver the plan identified. A plan should contain a requirement for its evaluation in order to inform the subsequent plan development.

The scope of a control plan can vary. An institution may produce a plan covering all of its control work (e.g. weighing up risks between different areas of environmental enforcement). It might also produce separate plans for specific areas (e.g. waste control and industrial control).

Economic impacts

Effective inspection and enforcement planning enables control bodies to target inspection activity away from activities that pose lower risks to the environment. For such businesses and individuals they will experience lower administrative burdens and, therefore, potential cost savings to themselves. However, it should be noted that such approaches do not necessarily result in lower overall levels of inspection activity, rather it is better targeted. Therefore, higher risk activities may experience higher levels of control with resulting costs.

The planning of control bodies also will address the role of compliance promotion within the wider range of control actions. This will result in better targeting of such action and better integration with inspection and enforcement. This contributes to the economic benefits of compliance promotion described above.

The development and implementation of an annual inspection plan is the product of an environmental enforcement authority's strategic priorities. An effective annual inspection and enforcement plan should be detailed and include time-specific description of inspection and other related activities with assigned implementation responsibilities. Based on recent OECD guidelines on an effective inspection plans, the inspection plan should be based on a well-defined frequency of site visits for different types or risk categories of regulated entities. The choice of facilities to be inspected in a given year by their risk rating, the date of last inspection and possibly other operator-specific factors should be justified. Further, the duration of each inspection and staff requirements should be indicated as well as procedures for non-routine environmental inspections in response to complaints, accidents, incidents, etc.¹⁰²

In most of the literature reviewed and interviews conducted, risk based methods are identified as being a key way for targeting inspections. Other methods to target inspections include spot checks, random samples, assessments based on the previous years' performance, the number of regulatory breaches, response to a complaint or to an unforeseen incident, time bound (e.g. once per year for permits), and ministerial priorities. Combinations of techniques can also be used i.e. use of a risk ranking model to drive time bound inspections once every one, two or three years.

- Risk-based: It is widely accepted that inspections should be based on risk. The use of a comprehensive risk assessment would allow inspection authorities to concentrate resources where they are most needed. The OECD recommends that governments develop and regularly update guidance on the methodologies for risk assessment, management and communication concerning the use of regulation to achieve public and environmental protection¹⁰³.
- Spot checks: are argued as being effective in some areas of compliance assessment. However, if not based on any evidence that a problem exists, either through intelligence or by receiving a complaint, there is the risk that the business could perceive this as burdensome, especially when they are already complaint. Lack of evidence for an inspection also lacks transparency so the business is unable to understand why it is being targeted which adds to the administrative burden.
- Random samples: random inspections can be seen as a way of making sure that everyone should be subject to an intervention at some point, thereby ensuring that everyone is prepared and increasing compliance. Where resources of inspection authorities are also limited, rogue businesses may take the risk that a random inspection will not involve them being selected, choosing to remain non-compliant. Conversely, random inspections can be a waste of resource, especially where the businesses or individuals selected are already complaint.
- Complaints: inspections driven by complaints are considered legitimate because it is assumed that there is a sound reason to justify intervention. However, inspectorates

¹⁰² OECD (2010) Improving the Effectiveness and Efficiency of Environmental Inspections: Risk-based Prioritisation and Planning in Moldova, www.oecd.org/env/outreach/46960063.pdf. Pp 14

¹⁰³ OECD (2012), Recommendations of the Council on regulatory policy and governance, www.oecd.org/regreform/regulatorypolicy/49990817.pdf

must be cautious of false complaints i.e. one business competing against another to obtain an edge in the market place.

- Time: inspections that are solely driven by time i.e. every six months can be ineffective because they do not necessarily tackle the high risk businesses, which may need to be inspected more often and leave the low risk businesses alone, so there is not an efficient use of resources.
- Track Record: the previous year's performance or track record of the business is useful in helping to assess risk because a company which has a poor track record of compliance is more likely to re-offend.¹⁰⁴

Some examples of innovation and good practice can be highlighted regarding the drafting of inspection plans and strategies. In Sweden, the inspection frequency and permit fees are lowered for those businesses that are considered low risk to help incentivise compliance. In the Netherlands a database has been developed to make it possible to digitally exchange inspection results between the national or regional inspectorates. The Netherlands has also introduced the concept of an "inspection holiday" in which the level of inspection activity is reduced for those who are complaint with the law. The objective is to reduce the inspection burden for businesses by introducing a risk categorisation to distinguish between businesses with good compliance (fewer inspections) and businesses with low compliance. They have also managed in the last two years to reduce the number of inspectorates (at national level) from 16 to 10.¹⁰⁵

Development of national inspection plans in Sweden and Ireland

In Sweden, inspection plans are drafted every year by the County Administrative Boards and based on the national environmental quality objectives decided by the Swedish Parliament, and adjusted to local or regional conditions. This means that inspection should primarily be concentrated on such activities, operations and installations that are important for meeting the environmental quality objectives, and where inspection can be expected to improve conditions. The annual environmental reports provided by operators are used as a basis for assessing the need for inspections. The authorities are requested to regularly follow up and evaluate their planning and implementation to improve inspection efficiency. In the County Administrative Board, the annual planning of activities, budget, and staffing addresses allocation of employee time to their various duties, including permitting and inspection, in a way that can be reviewed and compared with other County Administrative Boards. Plans are made at both unit and individual level, and are reviewed every 4 months.

In Ireland, developing the National Inspection Plan for domestic waste water treatment systems involved the expertise and experience of national and international experts, who provided ideas, information, and comments, including a peer-review of the risk methodology that underpins the inspection plan¹⁰⁶. Further, an international symposium on

¹⁰⁴ OECD (2010) Improving the Effectiveness and Efficiency of Environmental Inspections:

Risk-based Prioritisation and Planning in Moldova, www.oecd.org/env/outreach/46960063.pdf. Pp 14.

¹⁰⁵ OECD, Julie Monk (2013) Reform of Regulatory Enforcement and Inspections in OECD countries, www.oecd.org/regreform/Reform%20of%20inspections%20-%20Web%20-%20Julie%20Monk.pdf

¹⁰⁶ EPA (2013). National Inspection Plan. Domestic Waste Water Treatment Systems. http://www.epa.ie/pubs/advice/water/wastewater/EPA_National_Inspection_Plan_2013.pdf

domestic waste water treatment systems was held with Trinity College Dublin, held. This event was attended by over 250 researchers, policy makers, local authority staff and practitioners. The symposium provided a forum for debate and discussion between national and international delegates.

Social impacts

Inspection and enforcement planning will have increased social impacts if there is public and wider stakeholder engagement in the planning process. Planning needs to target inspection and enforcement actions and public consultation on priorities enables a two-way communication on such priorities. Enforcement bodies need to understand the priorities of communities and communities need to be educated on issues that underlie the priority setting of governmental bodies. The key social impact of this element of the control chain is, therefore, greater awareness and engagement of the public in understanding the risks posed to health and the environment of different activities and how governmental bodies work to address this.

Environmental impacts

Inspection or wider control plans should, as their principle objective, target control activity to reduce non-compliance where it has the largest impacts. For the environmental acquis the principle impacts are environmental. Therefore, effective planning must enhance environmental outcomes.

Focusing action on activities with the largest risk if non-compliance occurs (e.g. major emitters of pollutants or those in sensitive areas), or those with a history of non-compliance, will increase environmental benefits. Planning to ensure better use of intelligence will ensure the identification of greater numbers of illegal activities, so delivering environmental benefits.

Planning also encompasses activities other than enforcement actions, such as compliance promotion – the right balance of resources for each type of action. The appropriate balance of resources for each activity should be judged on the likely environmental outcomes of each action and, therefore, such planning delivers increased environmental benefits.

Co-ordination of control activities within Member States

Description

The nature of the competent authorities for the control and enforcement of the environmental acquis varies significantly across the Member States. In some cases more than one body may be responsible for control of one item of legislation and, in any case, implementation of a single Directive or Regulation cannot be viewed in isolation from other legislation. For example, implementing the Water Framework Directive relies on implementation of other water law, industrial pollution law, etc., and implementing the

Waste Shipment Regulation relies on effective implementation of the rest of the waste acquis.

Furthermore, the structure of Member State institutions is strongly influenced by the constitutional and cultural contexts of those Member States (e.g. federal structures, water management systems, etc.). It is not the role of EU environmental law to interfere in Member State administrative structures. However, given the importance of coherence in implementation and the nature of the structures that exist, it is necessary to support better co-operation and co-ordination between the institutions.

The provision, therefore, in the 'control chain' would be for the relevant institutions to identify the respective roles in delivering the implementation of the acquis for which they are responsible and establish effective mechanisms to deliver the necessary co-operation and co-ordination. This includes vertical co-ordination between levels of governance and horizontal co-ordination between different authorities at the same governance level.

Co-operation mechanisms could range from joint enforcement work, sharing of responsibilities (e.g. undertaking inspections including enforcement actions of other institutions), memoranda of understanding, joint information systems, etc.

It is also important to stress that the necessary co-operation systems do not just involve environmental authorities, but also those with key environmental enforcement roles, but which are predominantly non-environmental in their functions, such as the police and customs.

Coordination on wildlife crime in the UK

In the UK the Partnership for Action Against Wildlife Crime (PAW) was established to bring together representatives of all organisations involved in wildlife law enforcement. This includes statutory wildlife bodies, such as the conservation agencies, with the police and customs. It also includes non-governmental bodies, which are important partners. The PAW steering group sets the overall objectives for tackling wildlife crime, setting priorities. A Task and Co-ordination Group oversees that action is taken to meet the priorities.

Economic impacts

Improved co-ordination between institutions will result in more effective environmental control. Control activities will be better informed and targeted (from sharing information) and reach more activities (regulated, illegal, etc.) as control actions are spread across institutional roles. The economic effect is essentially the same as that of control itself, e.g. level playing field for business, ensuring environmental resources used by business is of sufficient quality, etc. In this case, the economic benefits of the control actions are delivered through the efficiency gains resulting from improved institutional co-ordination.

As is the case in most MS, more than one public authority or entity, across several sectors and at different levels of government are involved in environmental inspections and enforcement activities (e.g. environment ministries, customs, police, national experts, local

and national authorities, etc.). It is therefore crucial to ensure effective coordination among the different bodies involved in order to run an effective control system. The designation of roles and responsibilities of the various authorities is essential within the framework of the implementation and enforcement strategy to ensure that objectives are met and overlaps minimised. Where there are a number of inspection authorities inspecting independently of one another there is likely to be a cumulative administrative burden placed on businesses. For example, in the UK, the 2012 business perceptions survey (Institute for Fiscal Studies Research, 2012), found that 51% of the 2 294 businesses surveyed stated that being ready for inspections from more than one government agency was a burden. If inspection authorities act independently of one another, without coordination to share their rationale for intervention, how they take decisions, with the judgements they make, inconsistency and duplication of effort can occur. Therefore roles, remits and responsibilities should have minimal overlap, and co-ordinated to minimise the effect on businesses. Cross-sectoral policies are one way to avoid these unnecessary burdens.¹⁰⁷

It is also important to understand the regulatory burden each individual inspection authority places on particular businesses and to identify the sectors, which are adversely impacted upon. This will help inspection authorities to support a more co-ordinated approach and avoid situations where one sector (especially where it comprises small businesses) receives a disproportionate and unnecessary level of inspections relative to risk by separate authorities all acting independently. It may also affect the ability of businesses in this sector to grow and influence the economy.

Co-operation between institutions in the Netherlands on waste shipment

In the Netherlands inspections on waste shipment are carried out in cooperation with:

- the Dutch National Police Services Force
- the Dutch Transport and Water Management Inspectorate
- The Dutch Regional Police Force
- Dutch Customs
- Dutch Provinces

Cooperation between the relevant organisations is formalised in an agreement and brought into practice via joint inspections. The environmental inspectorate gives support to customs and police officers. The impacts of this co-operation are greater efficiency in the control functions of the respective institutions and improved understanding of the issues by the staff involving, thus enhancing capacity. Avoidance of duplication of effort or inefficient practices also reduces costs.

Social impacts

This element of the control chain has limited specific social impacts. Improved efficiency of the enforcement institutions enabling them to demonstrate that they are 'doing their jobs' better has a social impact in relation to the public's expectations of administrations.

¹⁰⁷ OECD, Julie Monk (2013) Reform of Regulatory Enforcement and Inspections in OECD countries, www.oecd.org/regreform/Reform%20of%20inspections%20-%20Web%20-%20Julie%20Monk.pdf

However, this depends on the wider expectations with regard to environmental enforcement, addressed elsewhere in this section.

Environmental impacts

The increased efficiency resulting from co-operation between institutions delivers improved environmental benefits. These arise from:

- General efficiency gains leading to the ability to undertake additional control activity.
- Sharing of information on intelligence on illegal activity, operator behaviour, environmental quality, etc., all leading to better targeting of control and, thereby improved environmental performance.
- Sharing of effort on compliance promotion reaching more businesses and individuals enhancing their environmental performance.
- Making additional 'capacity' available for environmental control – this is particularly the case where working with non-environmental authorities such as customs and police (but also others as shown by the experience of rural enforcement in Scotland through SEARS). In such cases enforcement officials may have not significantly considered environmental issues and ensuring they address environmental concerns in their routine work simply enhances the overall environmental control capacity and delivers additional environmental outcomes.

The nature of the environmental impacts will depend on the particular areas of the acquis subject to control by those institutions. However, the most obvious examples from improved co-ordination concern reduced wildlife crime, reduced trade in endangered species, improved waste management and enhanced benefits for river basin management.

Co-ordination and co-operation on cross-border inspections and other controls

A particular need is for effective co-ordination and co-operation between Member States on the control and enforcement of the acquis. For some of the acquis, transboundary issues are centre-most in their design, such as CITES and the Waste Shipment Regulation. Some parts of the acquis are focused on the management of natural systems and the acquis recognises that these cross frontiers, such as the Water Framework Directive and Marine Strategy Framework Directive. In these cases transboundary co-operation is needed on a case by case basis to ensure effective implementation. In other areas transboundary issues arise on an ad-hoc basis, such as with the Industrial Emissions Directive and the Seveso III Directive.

The specific requirements for transboundary co-operation can be established within the individual Directives and Regulations. However, in the wider context of an effective control chain, it is important for Member States to identify the specific issues across the environmental acquis that require transboundary co-operation in order to deliver effective implementation. The particular co-ordinating mechanisms that could result will vary according to the issue and need, but could include agreeing priorities, joint enforcement work, memoranda of understanding, joint information systems, addressing incidents, etc.

It is possible that transboundary agreement might not be reached in all cases. The EC could, therefore, play a mediation role where disagreements occur. It could be required of Member States that they inform the EC were agreement cannot be reached. It is important to note that a mediation role for the EC is not an arbitration role. A mediation role seeks to bring the parties to a greater common understanding on the issues they face and attempts for the parties to reach agreement on specific issues. An arbitration role would also include some decision making on the disputed issues. Therefore, the EC would not seek to force Member States to take decisions or impose decisions upon them.

Economic impacts

In EU legislation, the task of inspection and supervision of cross-border activities is mainly assigned to the national inspectorates and supervisory bodies. Cross-border co-operation is therefore mainly based on voluntary and self-imposed co-operation between supervisory bodies themselves.¹⁰⁸ There are several examples around the EU of co-ordination and co-operation on cross-border inspections and other controls. Examples include authorities responsible for implementing EU GMO legislation, as well as in fisheries enforcement. With regard to GMOs, joint inspections are organised through the European Enforcement Project (EEP), which is a European-wide network for inspectors and inspectorates of the EU Member States and non-EU countries to exchange experiences and establish methodologies for the harmonisation of approaches to inspection and enforcement of work with GMOs. It organises 'Joint Inspection Visits', but does not undertake peer review. The Community Fisheries Control Agency organises the joint deployment of the national means of control and inspection¹⁰⁹.

There are many positive impacts of implementing joint actions, but many of these are anecdotal in character and while EurInspect highlights the benefits of trans-boundary co-operation, it stresses a need to collect cost data as a starting point, which is lacking. For example, the interpretation of EU legislation would be shared and thus ensures a more harmonised enforcement of the regulation. Furthermore, more experienced MS would train less experienced MS and exchanges between inspectors in similar situations or facing similar issues (e.g. main seaports or illegal transports to Africa) would take place. Cooperation can also ensure that potential criminal networks known at national level in a country may be identified by authorities in another country and targeted for inspection actions. Joint inspections can also be taken as a model to implement inspection programmes and to provide background material for training at national level¹¹⁰.

Implementation of joint programmes and participation in such programmes can entail significant costs. For example, joint programmes implemented by IMPEL-TFS usually last for 3 days. Depending on MS, 0 to 10 inspectors are exchanged each year or take part in a joint

¹⁰⁸ EurInspect Vision Document, Simply go for it: simple and transparent inspection and supervision in Europe, www.eurinspect.eu/mediapool/64/643453/data/Brochure_Simply_go_for_it.pdf

¹⁰⁹ <http://cfca.europa.eu/>

¹¹⁰ BIO (2010), Environmental, Social and Economic Impact Assessment of Possible Requirements and Criteria for Waste Shipment Inspections, Controls and On-the-Spot Checks [http://ec.europa.eu/environment/waste/shipments/pdf/FinalReport_ENV\(10\)370155.pdf](http://ec.europa.eu/environment/waste/shipments/pdf/FinalReport_ENV(10)370155.pdf)

inspection programme in another MS. Costs are borne by the organising country, or by IMPEL-TFS and the EU (through LIFE+ for instance) and by the inspector's country of origin for subsistence and travel costs. Estimations for hotel costs are about EUR 125-150 a day without meals and transport costs up to EUR 500 per person. Furthermore, a daily allowance is perceived by the inspector, which is variable in each MS¹¹⁰.

The agreement of a Memoranda of Understanding (MoU), as seen under the Waste Shipment Regulation (WSR) makes a legislative change, as it is legally-binding for the participating authorities. This creates an additional administrative burden as it needs to be drafted and negotiated between the authorities. Even if the need for a MoU is usually quite well recognised, the negotiation of precise terms may take some time. MoU have positive impacts on ensuring the cooperation of authorities. Indirect impacts include the exchange of good practices as well as growing confidence in the other inspecting authorities. Sharing of data or creation of new databases may require specific access to databases or implementation of new communication channels, which may incur costs.

Similar to co-ordination of control activities within Member States, co-ordination and cooperation on cross-border inspections and other controls can also place significant administrative burden on businesses. For example, a company could be located in one EU country and also do business in another. The company would need to comply with the locally enforced EU regulation, local regulation and local supervisors in both countries. If cross-border cooperation is not effectively carried out, companies may risk having to comply twice (or more) with essentially the same rules, reporting requirements, inspections and enforcement procedures. Consequently, the cross-border costs rise as an effect of differences in implementation and enforcement¹¹¹. If procedures were harmonised mutually recognised and inspectorates co-operated effectively, administrative burdens and costs for the company would be reduced. EurInspect highlights the following as important in improving co-operation across borders and reducing business costs:

- “More cross-border co-operation between inspectorates: Intensified research into possibilities for more effective cross-border co-operation between inspectorates and supervisory authorities including more attention to better cross-border regulation and enforcement; Visible support for inspectorates and other supervisory authorities that effectively work together in Europe; More training of inspectorates and supervisory authorities;”
- “More transparency for businesses regarding differences at the EU level through exchanges of information on cross-border enforcement, inspection and supervision; Harmonise differences in implementation of EU regulation;”
- “Increased mutual recognition of national procedures in cross-border activities and promotion of harmonised procedures through good tracing and tracking; Where possible accept single inspection or supervision per activity;”
- “Reduction of inspection by more risk-based supervision and inspection, with greater effect; Introduce if proportionate a single supervisory authority per policy area, responsible for reduction of cross-border costs of supervision and inspection in Europe by introducing more risk-based inspections per policy area;”

¹¹¹ EurInspect Vision Document, Simply go for it: simple and transparent inspection and supervision in Europe, www.eurinspect.eu/mediapool/64/643453/data/Brochure_Simply_go_for_it.pdf

- “Make e-solutions more accessible for inspectorates in the different Member States.”

The principle economic benefits of improved trans-boundary co-operation on control actions are to ensure a level playing field for business across a boundary and effectiveness of inspections. If businesses (e.g. farmers) on one side of a frontier are subject to a control regime which allows greater non-compliance than the equivalent business across a frontier, then unfair competition can result. Furthermore, the economic disbenefit of the environmental damage caused may transfer across a frontier. For example, pesticides used in a non-compliant way in one Member State may not affect a drinking water source in that Member State, but one downstream, with resulting significant costs for water treatment.

Trans-boundary co-operation: Ireland and the UK¹¹²

A working group under the Irish Environmental Enforcement Network was set up to deal with illegal waste movements out of the Republic of Ireland. This working group uses the combined skills of the local authorities, the EPA, government departments, An Garda Síochána, the National Bureau of Criminal Investigations, and the authorities in Northern Ireland to identify the issues that need to be tackled and to work together towards better enforcement. This includes joint enforcement action, such as co-ordinated action in Ireland, Northern Ireland and Scotland. The impacts of this co-operation is to ensure criminals do not use borders to escape detection and, therefore, to increase markedly the efficiency of compliance enforcement.

Social impacts

The particular social impacts from greater trans-boundary co-operation on control are those underlying the justification for all trans-boundary co-operation, i.e. increasing social cohesion across Europe’s frontiers as well as enhancing public confidence in the inspection and enforcement process across Europe. Non-compliance with environmental law is one specific threat to such cohesion. If communities feel that lack of obedience to the law is not being address across a border and they suffer as a result, then this can be a source of social tension. Thus improved trans-boundary co-operation has important social impacts which are part of the driving purpose of the EU.

Environmental impacts

The environmental impacts arising from improved trans-boundary co-operation on control will vary according to the type of trans-boundary interaction. Control may be needed to target a pollution source which has trans-boundary impacts. In other cases more integrated co-operation is needed, such as for river basins with sharing of information on pressures and co-ordinated control of these.

¹¹² IEEP, Bio IS and Ecologic. 2009. Study on Inspection Requirements for Waste Shipments.

It is important to stress that there are important aspects of trans-boundary co-operation which are not localised. This is particularly the case with shipments of waste, CITES, etc., and also in the case of the protection of migratory species. Co-operation through sharing of intelligence and experience is needed to ensure that there is effective control across the EU and across all its borders and that weak elements do not result in transfers of environmental problems, etc.

Follow-up to control actions

Description

Enforcement authorities in different countries have different possible enforcement tools available from the stage of informal warnings to the criminal enforcement. In general, competent authorities have enforcement policies or guidelines describing how to treat violations and what actions should be taken.

Enforcement actions would normally be expected to result in a follow-up action and this is important for the control chain to be effective and for transparency with stakeholders. The follow-up activities can be considered to be of the following types:

- Administrative responses to enforcement actions.
- Use of sanctions where there is non-compliance.
- Causing illegal activities to cease.
- Taking remedial action in the case of environmental or other harm.
- Directing investment to help reduce the compliance gap.

Administrative responses may include anything from a simple report of an inspection to the operator noting that there is compliance to warning letters in the case of small infringements. Sanctions range from small civil fines to extended custodial sentences depending on the severity of the offence. It is important to note that much EU environmental law requires that sanctions be put in place by Member States in the case of non-compliance and that these are proportionate and dissuasive. A key aspect of an effective control chain is to determine the effectiveness of sanctions – i.e. whether they are dissuasive and amend the approach if needed. Alongside the use of sanctions, it may be appropriate to require an illegal or non-compliant activity to cease. Powers need to be in place to achieve this.

Apart from the immediate response to the activity itself and the individual involved, a key follow-up action may be to seek remedial action where there is harm caused. The Environmental Liability Directive establishes a liability regime for certain types of harm, but liability regimes are often wider at Member State level. For different issues and parts of the *acquis*, the obligation to restore may be appropriate within the control chain.

Finally, assessing compliance performance overall allows for a reconsideration of the compliance gap (which is a necessary contributor to developing the control strategy – see above). Thus one follow-up action is to reassess the compliance gap and inform (or develop) financing plans to address the gap (where this is needed).

Economic impacts

It is generally discouraged for inspection authorities to keep fines from successful prosecutions to help fund their activities. This is to avoid creating any perverse financial incentives for regulators that might influence their choice of sanctioning tool. It is also accepted, in most countries, that revenue streams should be separated to avoid perverse incentives and regulatory capture¹¹³.

In certain MS (e.g. in the UK and France), enforcement actions are being streamlined to be more proportionate to non-compliance. More emphasis placed on administrative versus criminal response to non-compliance allows decriminalisation of less severe violations and makes enforcement more expedient and efficient. Countries are also taking more account an offender's economic benefit from non-compliance. Economic methods to calculate and extract this benefit via monetary penalties are used in the United States and, increasingly, in the UK and the Netherlands¹¹⁴.

The appropriate follow-up actions (sanctions, etc.) have economic impacts. Of course the imposition of fines through administrative or criminal procedures is a cost to the business or individual, but this is for failure to obey the law and should be regarded as necessary. Furthermore, the deterrent effect of such penalties is important for businesses which are compliant. Such businesses suffer from unfair competition with those who routinely 'cut corners' with the laws on environmental protection. For example, illegal export of WEEE is a significant loss of material for recycling businesses in Europe¹¹⁵. Farmers who do not take the necessary actions to protect waters or habitats may be at a competitive advantage to their neighbours who are compliant. Thus the use of penalties is an important aspect of ensuring a level playing field within the single market.

A specific aspect of follow-up action is reporting on control activities, including use of warning letters, etc. Such communication is critically important for those being regulated. It presents them with the information either to reinforce their compliant behaviour or to take the necessary steps to avoid future non-compliance. Such actions help businesses to plan investment (if needed) within business plans, which are less costly than reaction to future non-compliance. Furthermore, it has to be emphasised that not all advice to avoid non-compliance results in any costs. For example, in the case of CITES, traders and shop keepers can react to warnings in ways that do not result in costs from stopping specific purchases, but do avoid future fines for non-compliance.

The specific element within follow-up action to require those who damage the environment to restore it has potential economic impacts. The costs of restoration would, of course, be significant to those who have committed offences. However, this can be viewed as

¹¹³ OECD, Julie Monk (2013) Reform of Regulatory Enforcement and Inspections in OECD countries, www.oecd.org/regreform/Reform%20of%20inspections%20-%20Web%20-%20Julie%20Monk.pdf

¹¹⁴ OECD, Julie Monk (2013) Reform of Regulatory Enforcement and Inspections in OECD countries, www.oecd.org/regreform/Reform%20of%20inspections%20-%20Web%20-%20Julie%20Monk.pdf

¹¹⁵ Note that a current FP7 project - Countering WEEE Illegal Trade (CWIT) – is working with commercial recycling businesses to quantify the economic losses arising from illegal export of WEEE. It will conclude in 2015.

consistent with the need to make sure that non-compliant or criminal activity does not pay and is also consistent with some concepts of restorative justice. Furthermore, it increases deterrence. However, this element may also have positive economic impacts for others who use the environment, e.g. users of water that becomes polluted. Indeed such economic costs of damage may ordinarily be passed to consumers if companies have to increase costs to accommodate such damage.

Social impacts

The principle social impacts from follow-up actions, such as use of sanctions, arise from the economic impacts on businesses as set out above, i.e. benefits to business result in knock-on benefits to employment, etc.. Alongside this, the use of appropriate sanctions is necessary for the rule of law to be seen to be upheld. People compare the penalties imposed for different types of offences and lack of use of sanctions in many cases sends the signal that the environment is not as important as other aspects of community wellbeing.

The specific element within follow-up action to require those who damage the environment to restore it has potential social impacts. Communities view the damage to local environments as a significant loss to the community. That this has been done through the actions of businesses or individuals who are acting in a non-compliant or illegal manner can even appear as an affront to the legitimate concerns of community cohesion. As a result, communities look to the relevant authorities not only to prevent this happening, but to restore damage when it does occur. This element of the control chain, therefore, has important impacts both for social cohesion and wellbeing as well as for the social contract of the relationship between communities and relevant governmental authorities. The type of loss experienced by a community would, of course, be highly dependent on the environment and the damage caused and each case is different – from damage to a water body with which the community frequently engages (e.g. as a drinking water source and for recreation), damage to a neighbouring wilderness area or degradation of air quality for the community.

Environmental impacts

The environmental impact of the use of follow-up actions to control activity is of two types. The deterrence effect of the use of sanctions contributes to avoiding future environmental damage. The nature of this damage and its location (which of course can be global) will depend on the legislation in question.

The use of inspection reports, warning letters and similar communications are important to avoid future damage. Such follow-up is, therefore, critically important. For some types of environmental regulation there is a permitting or licensing process and this provides an opportunity for a regulator to talk to a business or individual effectively to improve their behaviour and enhance compliance. However, for many issues enforcement is the first point of contact and, therefore, good post-control communication is a critical opportunity to avoid future non-compliance and deliver environmental protection.

A critical environmental impact from effective follow-up action is the obligation on those causing environmental damage due to non-compliance with the law to restore the damaged environment. Such damage may occur through pollution or damage to habitats, etc. In some cases the damage may be extensive. The EU's environmental liability regime covers this to some extent, but national regimes are often broader in scope. In any case, these tools must be used to ensure damage is reversed and environmental benefits are delivered.

Transparency and role of the public

Description

The public represent a critical element of the control chain. Citizens can be important in identifying incidents or risks of non-compliance. They are also important in helping to shape the priorities for control strategies and individual enforcement work. The specific requirements on access to information and justice are already addressed within relevant Directives.

This element of the control chain includes two issues:

1. The disclosure of inspection related information to the public.
2. Mechanisms to allow for active engagement of the public in elaborating elements of the control chain.

The following documents should be made available to the public in order for the public to understand the priorities and capabilities of governmental bodies to enforce the law:

- The control strategies described earlier, including assessments of compliance gaps.
- Control or inspection plans described earlier.
- Analyses of the capacities of enforcement institutions necessary to address compliance gaps.
- Formal agreements on inter-institutional co-ordination and transboundary co-ordination.
- Individual administrative, criminal or other actions taken in response to incidents of non-compliance.
- Policies of control institutions regarding the application of sanctions and other follow-up actions.

Active engagement of the public (e.g. via consultation) should be sought on the development of control strategies and priorities for inspection plans and enforcement policies. In some cases the public or civil society plays an important role in detecting or even helping to enforce the *acquis* (e.g. on species protection or CITES). In such cases the control strategy should identify where this is the case and encourage such active engagement. At a higher strategic level, however, it is difficult to prescribe details of what this should mean.

Finally, it should be noted that developments in information sharing and reporting on the environmental *acquis* will aid public participation. Inter-operable databases between Member States and EU level institutions will allow for more rapid sharing of data for

different purposes. This will also allow public access to data and the ability to compare performance across Member States.

Economic impacts

As seen in the section on compliance promotion and awareness raising, awareness raising and activities to communicate information (e.g. guides, handbooks, posters, leaflets, toolkits, websites (including tweets), seminars, networks, campaign, etc.) can be quite costly. For example in 2011, the Ireland Environmental Protection Agency spent € 536 584 on advertising and communications activities¹¹⁶. However, informing the public and seeking public consultation can contribute to a more effective inspection system as civil society plays an important role in detecting non-compliance and putting public pressure on businesses to comply.

The use of public disclosure is also closely related to the public access to environmental information in general and compliance information in particular. Examples have been seen of countries using instruments of environmental information disclosure to trigger market reactions and community pressure against violators. For example, in 2000, the EU created the European Pollutant Emission Register, the first EU-wide register of industrial emissions into air and water, and is now replacing it with a broader European Pollutant Release and Transfer Register (E-PRTR) also cover releases to land, waste transfers, etc., In France, Local Information and Dialogue Committees (CLIC) are dedicated to informing the public about the risks and performance of Seveso high-risk industrial installations.

Transparency is a central element of effective regulation and supports accountability, sustains confidence in the legal system, makes regulations more secure and accessible, less influenced by political or special interests and therefore more open to competition, trade and investment. Without transparency on how inspection authorities are organised and how they work together, additional burdens are imposed onto businesses. This is because they are not aware of how inspection authorities operate, who sets their objectives and goals, how independent they are and who is accountable for their performance¹¹⁷.

The economic impacts of improved transparency are positive, based on greater confidence of stakeholders in business compliance with environmental law. Lack of knowledge can be an impediment to business reputations and transparency overcomes this. Furthermore, compliant businesses will benefit from consumer reaction to instances of non-compliance by competitors being publicised.

The publication of regulatory plans, enforcement activity, etc., also provides business with the opportunity to engage directly with the public based on these publications, promoting their own good practice. For business the publications from governmental bodies reflect an objective assessment of their performance and help overcome trust barriers that can arise when business produces its own information.

¹¹⁶ Ireland Environmental Protection Agency (2011) Annual Environmental Report
http://www.epa.ie/pubs/reports/other/corporate/EPA_An_Rep_%202011_LR.pdf

¹¹⁷ OECD, Julie Monk (2013) Reform of Regulatory Enforcement and Inspections in OECD countries, www.oecd.org/regreform/Reform%20of%20inspections%20-%20Web%20-%20Julie%20Monk.pdf

Social impacts

Transparency of different elements of the control chain has significant social benefits. The operation of governmental bodies enforcing the law is a social contract requiring buy-in from the public to the objectives and actions of those bodies. A lack of transparency raises concerns about the operation of these bodies (whether justified or not).

Transparency is not only about the relationship between public bodies and the public. It also highlights issues in the relationship between the public and regulated activities. Business reputations are at stake and good environmental performance can enhance the relationship between the business sector and public.

Transparency is a first step, but more efficient is the concept of active engagement. This brings the public, local communities, etc., into an understanding of the importance of environmental compliance and the priorities of government bodies and allowing those bodies to understand public bodies. This brings the public, at least sometimes, into the control community to the extent that they contribute to control actions (e.g. on species protection). This type of administrative-public relationship is an important benefit from this element of the control chain due to its benefits of social cohesiveness.

It is important to note that importance of transparency or active involvement depends on cultural contexts. Some Member States have greater traditions of active involvement than others (see box for an example) and this will affect the extent of the social impacts of this element of an improved control chain. However, it also has to be noted that greater emphasis is being given to public engagement (e.g. 'active participation' under the Water Framework Directive) and cultural expectations are changing. Therefore, the social impacts of this element of the control chain could be expected to increase over time.

Variation in public involvement affects control chain choices

The BEST project examined best practices in the Member States on environmental permitting and inspection. One approach in several Member States to reducing burdens has been to, where appropriate, move from provision of bespoke permits to standard permits or notifications. When this was proposed in Finland there was considerable opposition due to the fact that moving to notifications removed the opportunity for the public to comment on permit applications. In many Member States few comments are received for permit applications for such small activities, but this is not the case in Finland where there is very active engagement with the permitting process. Therefore, this proposal was not proceeded with¹¹⁸.

¹¹⁸ DG ENTR. BEST project on streamlining of environment related regulatory requirements for companies. <http://ec.europa.eu/enterprise/policies/sustainable-business/policy-integration/best-projects/simplifying-implementation/>

Environmental impacts

Increased transparency results in environmental benefits through providing a pressure to ensure the efficiency of the control system. Information on the performance of regulated activities and illegal activities as well as information (plans, evaluations, etc.) of control authorities throw the spotlight on the control system as a whole and individual elements within it. This all provides added impetus to comply and undertake efficient controls. These are preconditions for delivering environmental benefits. The specific nature of those benefits would depend on where efficiencies are enhanced by transparency.

Transparency also engages the public with control actions themselves. For some specific areas of compliance assurance the public can play an important role in the detection and reporting of non-compliance. Increased transparency helps to bring the public into a control 'community' and, therefore, this additional detection can deliver further environmental benefits.

Evaluation of performance of the control strategy and national inspection bodies

Description

The above sections follow the different elements of the control chain from the development of a strategy to the individual facets of effective control and enforcement. The final necessary element is evaluation of the control chain. It is important to note that individual strategies and plans developed within the control chain also require their own evaluation processes. Inspection plans should be evaluated to determine if the actual control activities matched those predicted, that resources were correctly allocated, which problems occurred, etc., in order to provide the basis for the next plan. Compliance promotion plans or strategies also require evaluation – how is the regulated community changing behaviour as the result of information/advice given, which types of support activity are most effective, etc., in order to improve compliance promotion and hence reduce risks of non-compliance. However, the overall control strategy also requires evaluation.

A key requirement of the control chain would, therefore, include the need for the periodic evaluation of the control strategy, taking account of revised (and improved) understanding of the compliance gaps across the acquis and the effectiveness of different elements of the control chain in reducing these gaps. Evaluation should also include consideration of wider priorities of smart regulation and opportunities arising from improved technologies, etc. Evaluation should also include transparent consultation with stakeholders to obtain their views on the effectiveness of the control system and future priorities.

Evaluation of farm visits in the UK

The UK National Audit Office (see Annex I, UK case study for full details and reference) undertook a study 'streamlining farm visits' in 2012. This reviewed the effectiveness of governmental visits to farms, including those for environmental inspections. While it noted that the relationship between numbers of visits and compliance was complex, it was critical

of enforcement bodies for failing adequately to analyse this relationship both to deliver better enforcement and to reduce administrative burdens on farmers. It was also critical of the fact that 83% of farmers surveyed said that they regularly have to supply the same information to more than one government body, illustrating lack of sufficient inter-institutional co-ordination. Having said this, the Environment Agency has sought to better target farm visits, reducing them by about half since 2007, but with a small increase in the rate of detection of non-compliance.

Economic impacts

Evaluation of inspection activities has the potential to reduce unnecessary business costs. If control actions are not properly targeted, business can be subject to unnecessary burdens. Evaluation can examine the information supporting risk-based approaches, the effectiveness of self-auditing and reporting, etc., all of which aim to reduce business burdens. Furthermore, if the evaluation is open to stakeholder inputs, businesses will have the opportunity to raise issues of the costs of control and present ideas for improved targeting of control activities.

Evaluation should result in an increased efficiency of the control chain. This, therefore, links to the improving the impacts of improved compliance as set out in the introductory section on the control chain as a whole, i.e. helping to deliver a level playing field for business across the EU. Evaluation helps to deliver these economic impacts.

There are a variety of methods used to assess the performance of inspection authorities and their control strategies. Methods include for example independent audits, publication and review of annual reports, benchmarking against performance indicators, carrying out surveys of local authorities, etc. All of these activities imply some level of administrative burden on both regulators and operators; however contribute to ensuring overall compliance and improvement in national inspection systems.

Concerning the publication of annual reports, MS already partake in this activity, especially when required by specific environmental legislation (e.g. under CITES, MS are required to publish annual reports on all trade in specimens of species and biennial reports on legislative, regulatory and administrative measures adopted by the country to implement and enforce the regulations).

Annual reports provide important information on how a particular inspection authority has performed and are useful for financial reporting. However, it is important to consider that the quality and contents of annual performance reports vary from country to country and from one sector to another. Reports are usually produced internally. There is a vested interest in using them to promote the good work the organisation has achieved in the last year and at times it is difficult to identify weak performance or areas that need improvement.

Independent audits are also frequently carried out as this allows for independent scrutiny of inspection authorities performance using a consistent approach so that regulators can be compared against one another. For audits to be independent they should have a separate

audit committee comprised of members recruited from outside of the organisation and ideally from outside of public administration.

Several MS have also adopted formal quality management systems to evaluate the performance of their inspection authorities. For example, many Directions Régionale de l'Industrie, de la Recherche et de l'Environnement in France, as well as most provinces and some municipalities in the Netherlands, have been certified to the ISO 9001 quality management standard with elaborate sets of targets and performance indicators and conduct regular self-audits. Belgium also carries out audits of their procedures against ISO9001 & ISO14001 standards. Finally, the Dutch Association of Municipalities is currently developing a benchmarking scheme (with voluntary participation) to compare performance of individual municipalities in environmental compliance assurance.¹¹⁹

Social impacts

The evaluation of the control strategy and national inspection bodies should include an evaluation of the direct interaction between the elements of the strategy(ies) and actions relating to enforcement that concern the delivery of specific social outcomes. These include:

- Transparency of the elements of the strategy.
- Linking priorities for control actions with social/community priorities.
- Transparency of the results of control actions and follow-up to such actions.

All of these elements should be part of the development of control strategies and control actions, but evaluation will determine how well these objectives have been met and enable refinement of the elements of the control chain better to deliver such social objectives. For example, evaluation can examine the relationship between the strategic objectives of control and individual enforcement actions to address problems of higher levels of environmental degradation/pollution in areas of higher social depredation and, therefore, how well the twin objectives of environmental protection and improving social conditions are being combined.

Evaluations should be made public and this provides an additional social impact of increasing respect for the operation of governmental bodies and the rule of law more generally. Of course, this impact will be enhanced if such evaluations are open to input from stakeholders, enabling their views on the implementation of the control chain to be taken into account.

Environmental impacts

The primary purpose of the evaluation of control strategies and individual inspection activities is to ensure better targeting of the control chain. Assuming limitations on resources, intelligence, etc., improving efficiency and effectiveness is critical in maximising environmental outcomes for the resources that are spent.

¹¹⁹ OECD (2009), Ensuring Environmental Compliance: Trends and Good Practices. <http://www.oecd.org/env/tools-evaluation/ensuringenvironmentalcomplianceandgoodpractices.htm>

Evaluation should result in increasing refinement of risk-based inspection strategies, focusing controls on those activities most likely to result in greater environmental impacts. Evaluation of intelligence-led approaches similarly ensure that the nature of intelligence is examined and illegal activity is better targeted. This all reduces the environmental impact of non-compliance. The nature of the environmental benefits could occur across the suit of issues addressed by the acquis and would depend upon where specific improvements in the control chain are identified and acted upon. Evaluation should also specifically examine the effectiveness of compliance promotion activities, identifying where these are effective, what tools, etc., enhance effectiveness and how better to target awareness raising. This will further enhance environmental outcomes.

The environmental impacts of evaluation of aspects of the control chain would be further enhanced if those evaluations are linked with other planning processes where these are required by the acquis. For example, ensuring such evaluations are undertaken to inform the development or operationalization of River Basin Management Plans or Marine Strategies would enhance their utility and enable more precise targeting of measures in the respective programmes of measures.

5.5 The effectiveness and efficiency of options for instruments to take forward the control chain

This section analyses the effectiveness and efficiency of the six proposed options. The main objective is to set out the key advantages and disadvantages of each option and enable a structured comparison of the options. The basis of this analysis is the baseline assessment set out earlier in this report. Examples from this baseline assessment will be used to clarify and highlight arguments as much as possible.

Option 1 - Baseline

This option would not see any significant changes from the situation as it has evolved in recent years. Some implementation gaps will be addressed in the future, if their cause is a legally insufficient implementation of the EU law and there is pressure to close this gap. For all other implementation gaps, which are due to lacking administrative and enforcement structures it can well be assumed that the situation will not change much from the current situation as implementation deadlines have passed and without further EU action the situation would not improve.

There are significant disadvantages to this option:

- Currently the implementation situation differs significantly between Member States and over different sections of the acquis. Sometimes due to the situation before the implementation of the Directives, the control regime for some parts of the acquis is very strong while in others significant gaps exist. As robust and transparent control regimes provide a positive pressure to address weaknesses, it is very likely that those differences over time will increase.

- This is especially true due to the fact that in many areas analysed in this project it was found that information on the performance of the control system was seriously lacking. In many parts of the environmental acquis (e.g.. water or nature conservation in Spain, Sweden, Germany or Poland) local authorities have a very important role in the control system. The information base on the performance of such decentralised control systems is patchy which means that identifying and rectifying the failures of systems is difficult.

The advantage of this option is that Member States would not face any extra costs for reporting and similar tasks.

In conclusion the effectiveness and efficiency of this option can be summarised as follows:

- Effectiveness: Currently an important part of the potential positive impacts of the acquis cannot be established, as the control systems do not guarantee a robust implementation and enforcement of the provisions. The situation is not likely to change without any intervention making this option not effective.
- Efficiency: The option does not impose any new costs but does not address the identified challenges either.

Option 2 – Non-legislative measures.

This option includes non-legislative measures to improve the functioning of the control chain in MS. These measures would include an emphasis on network cooperation involving three key networks, namely that of inspectorates (IMPEL), prosecutors (ENPE), judges (EUFJE). Network cooperation would aim at promoting sharing of experiences and best practices. It might be combined with initiatives focussed on awareness raising and training/capacity building.

The following advantages of this option can be identified:

- The differences in the current state of the control systems in Europe mean that many control systems are very effective and suited to the specific situation. In many areas analysed in the baseline it was found that the control systems do ensure compliance in a robust way (e.g.. water in Germany and nature in Sweden). For those control systems that are working, the non-legislative option would not incur extra costs as they could operate in the networks in the way most suited to them.
- On the other hand the promotion of better networking would enable a better exchange of best practice especially in decentralised control systems. The baseline has found that in some systems the differences even within the Member State are significant and information exchange on best practice is lacking (e.g.. Poland and Spain). Providing a platform for exchange might help officers to catch up with best practice.
- Some lack of compliance is based on lack of knowledge, for example with CITES, when tourists purchase souvenirs abroad (not realizing they are endangered and illegal e.g. elephant ivory). One interviewed expert said: “The majority of cases occur

in the case of tourists travelling to Germany, e.g. bringing a piece of ivory, a stuffed turtle, a schnapps bottle with a snake inside, etc. This is a large problem and requires constant public awareness raising efforts. The currently available internet information is not sufficient.” Awareness raising efforts could help with that.

On the other hand the following disadvantages are apparent:

- The challenges of the different control systems vary widely and the non-legislative option would only address some challenges while letting others remain unchanged. If the control systems lack robustness due to lack of information and specialisation of the competent authorities the network approach might be of use, but if for example a lack of funds is at the heart of the problem than a network approach will not help to boost the performance of the challenged systems. In systems with lack of funds the officers concerned are even less likely to participate in these networking activities.
- Due to the lack of a fixed structure on what a robust system should look like, the networking activities could potentially focus too much on smaller problems of already very advanced control systems as these already advanced systems tend to dominate networking activities. That would be an additional reason for officers in challenged systems not to participate as their problems are little discussed.

In conclusion the effectiveness and efficiency of the option can be summarised as follows:

- Effectiveness: The option could potentially be very effective in tackling all identified issues that are caused by a lack of knowledge on best practice. On the other hand for all other root causes of lacking performance (e.g.. budget restrictions) the option is not likely to be effective. It is also likely that the gains in performance will not focus on the worst performers as a participation of those administrations in the networking is less likely.
- Efficiency: As potential extra costs are incurred voluntarily it is likely that for all organisations involved in the networking activity the participation will be worth while. So it is likely that the gains in the performance of the control system will be limited but reaped with relatively little costs.

Option 3 – Upgraded Recommendation

The current Recommendation on minimum criteria for environmental inspections in the Member States 331/2001/EC (RMCEI) would form the basis for this option but would be updated and upgraded. In particular, the option would involve the following elements: widening the scope of the RMCEI to cover additional parts of the environmental acquis, such as nature protection, clarification of term definitions (such as ‘intelligence-led approach’), more detailed criteria for organisation, planning, undertaking and reporting the results of environmental inspections and other control measures. The difference compared to option 2 and the baseline would be that option 3 would involve a structured approach with extensive non-binding criteria addressing all key aspects of the control chain and covering the wider environment acquis.

The following advantages of this option can be identified:

- Compared to option 2, the minimum criteria for environmental inspections would provide a solid benchmark for control systems to test themselves against. Any interested administration could use those criteria to test whether their control system would hold the criteria and can be regarded as effective and efficient.
- Again compared to option 2, it would be easier for authorities with small budgets and analytical capacities to apply a fixed framework to their specific case and compare it with its peers.
- Brought together with an on-going monitoring system based on these criteria the interested administrations could also test their relative quality in respect of these criteria and learn from these comparisons. Such a monitoring system, even if not made obligatory, could collect comparable information for all administrations as benchmarks.
- The formulation of criteria for assessment will provide the control systems with the necessary flexibility as the range of institutional setups would make it difficult to formulate specific working steps fitting for all Member States and for all parts of the EU acquis.

On the other hand the following challenges would need to be considered:

- As in option 2 the voluntary nature of the approach would make it difficult and unlikely for authorities with lack of funds to apply the criteria and learn from that analysis. If only relatively high quality control systems will use the criteria and provide their information, again the challenged control system might find the provided information to daunting and the danger of being singled out as underperformer to high.

The following conclusions on effectiveness and efficiency of the options can be drawn:

- Effectiveness: Compared to option 1 and option 2 it is likely that the formulation of criteria will help authorities to evaluate and compare the performance of their control systems. But again the voluntary nature of the criteria will make significant progress for the worst performers less likely.
- Efficiency: The voluntary approach of the criteria will ensure that the costs will stay limited as only authorities that do consider it worthwhile will apply the criteria. As the criteria provide a structure for an assessment it might be easier for small authorities to participate in the process.

Option 4 – General binding instrument on criteria on control mechanisms in Member States

This option would involve developing criteria focusing on the behavioural, governance and technical factors referred to above (previous section). This option would have a general character but the concept might need to be supplemented by additional more detailed

guidance on the application of the provisions of the instrument to specific inspection and enforcement regimes.

The following advantages of this option can be identified:

- Compared to option 2 and 3 a compulsory application of criteria for a robust control system will provide an incentive for all authorities to evaluate the robustness of their systems and to improve its effectiveness. The pressure will be especially strong on current underperformers and authorities that have currently little information on which to judge their performance.
- For underfunded authorities such obligatory criteria and the transparency they bring will support their bid for the necessary funding, and with that will help them to improve. The criteria will therefore need to include some notion of resources that are applied in the control system to help the authorities to assess and compare.
- If the criteria are formulated in an open way mainly proscribing the objectives and not the means of achieving those objectives, the different control systems in the EU can each find the best way of how to comply with the criteria. The national implementation of the binding legislation will also allow the Member States to tailor the criteria to the needs of their actors.
- One significant advantage of option 4 could be to ask Member States to provide a concise plan of their control system with a description of the responsibilities, necessary resources and indicators to measure the effectiveness. In many areas that were reviewed in the baseline such a plan could make a difference by forcing all institutions to think about the system as a whole.
- The implementation of the process could use existing national coordination structures like the German committee between the federal level and states which, for nature protection, is called LANA ('Bund/Länderarbeitsgemeinschaft Naturschutz, Landschaftspflege und Erholung'). There are different committees for different topics, one of which is concerned with species protection and thus CITES and the trade of endangered species. These groups meet often twice a year, including representatives from the responsible state environmental ministries, BMU and the BfN and – in some states – the representatives from the enforcement authorities.

On the other hand the following challenges would need to be considered:

- Again the national implementation will give some leeway to Member States to water down the effects on underperformers, which will limit the effectiveness of the option.

The following conclusions on effectiveness and efficiency of the options can be drawn:

- Effectiveness: The effectiveness of the option will be significantly higher than the previous options as the pressure to improve will be highest on the worst performers and the control systems with little information available.
- Efficiency: The costs of the option 4 will also be higher as of all previous options simply because of its binding nature. This cost will fell hardest on authorities with

currently little information available. Seeing that this is a necessary precondition for improvements in their performance the efficiency of the option should also be superior to all previous options.

Option 5 – Binding instrument setting out detailed requirements for environmental control in the Member States

This option builds on option 4 of a general binding instrument, but includes much greater detail on the obligations required of the Member States. Examples of the types of detailed obligations that could be included in this option are set out in Chapter 3.

This option has the following advantages:

- As with option 4, this option is compulsory and, therefore, provides a much greater incentive for all relevant authorities to improve the effectiveness of enforcement and control compared to options 2 and 3. This effect will be greatest where current enforcement and control is weakest and, therefore, will help to close the implementation gap of the acquis.
- This option also includes the other advantages that are seen with option 4 as described above.
- The additional advantage over option 4 is that a more prescriptive instrument would deliver greater harmonisation between the Member States as some details of requirements for individual elements of the control chain would be set out in law and these would have to be implemented by all Member States, whereas option 4 provides for greater flexibility for the Member States in how to address the elements of the control chain.
- With greater prescription, relevant authorities will have a stronger basis for ensuring sufficient resources are allocated by governments to deliver the obligations, particularly in comparison with option 4 where governments might use the flexibility to take a de minimis approach.

However, the option has a number of disadvantages:

- The level of prescription still needs to be elaborated and it is not clear if it is possible to define this in such a way to ensure the entire environmental acquis is adequately addressed. This relates both to the total coverage of the acquis as well as to ensure that including detailed provisions for higher profile areas of the acquis are fully appropriate for other areas.
- Depending on the level of prescription, it would need to be ensured that the obligations do not impact in a negative way on good innovative practice for control in Member States which might not fit traditional models.
- There is still an objective to introduce aspects of control within sectoral directives and a more prescriptive horizontal instrument could have unintended consequences with respect to interaction between the prescriptive elements in each instrument.
- There might be also subsidiarity concerns as the details of how to ensure implementation of the requirements of directives are the responsibilities of Member States and this includes the choices for delivering effective enforcement.

The following conclusions on effectiveness and efficiency of the option can be drawn:

- Effectiveness: The level of prescription in this option would drive improved enforcement and control to a greater extent than options 1-3. If properly formulated, the additional detail could be more effective than option 4, but there is the potential for unintended consequences with innovative approaches in some Member States or addressing control issues in sectoral directives.
- Efficiency: The costs of the option would be of a similar order to option 4 and would apply most to authorities where current control activity is most limited. However, the option would include prescription on elements which might not be taken forward by Member States fully implementing option 4 (e.g. minimum frequencies of inspection or timetables for review of control activity) and, therefore, option 5 could increase costs unnecessarily.

Option 6 - Combined option including elements of the previous options

The identified advantages and disadvantages of the different options show that a combination of several aspects of the different options could potentially make a more effective and efficient option. The number of combinations is large therefore we concentrate on one combination of option 2 and option 4, which seem to be very promising. In this option the EU would promote voluntary networking efforts based on existing networks but additionally a binding instrument would set out requirements for a working control system for the environmental acquis.

The following advantages of this option can be identified:

- As a combination of option 2 and option 4 the advantages of both options do logically apply.
- Additionally, the combination of the two options could bring added benefits. While the voluntary network activities would normally only draw in interested authorities, the combination with a compulsion to develop or document a plan for the control system, would give additional authorities an incentive to engage in the networking activities.
- The combination of the two options would not significantly add to the costs of option 4 as the networking activities would be voluntarily and therefore will be taken on only when the authorities deem this to be useful.

The following conclusions on effectiveness and efficiency of the options can be drawn:

- Effectiveness: As the networking activities could help national and regional authorities to catch up quicker with best practice the effectiveness could be even higher than in option 4.
- Efficiency: As on the other hand the costs will not differ much, the combination of the two options would be more efficient than only option 4.

6 CONCLUSIONS

6.1 Introduction

This Chapter provides a summary of the findings of this report. It initially describes implementation and enforcement problems common to the MS studied. It then provides a comparison of the impacts and effectiveness of the options analysed in the previous Chapter. The options are then examined for how their impact might vary between the MS studied and across the different areas of the environmental acquis that were studied.

6.2 Implementation and enforcement problems and best practice common to all Member States analysed

Detailed summary tables for each area of the acquis covering the five MS were presented in Chapter 2. It is important to stress that across the control chain within the baseline analysis there are many examples of good practice, but also severe constraints on effective enforcement of the environmental acquis in the Member States. There is, therefore, a need to enhance enforcement institutions, practice and capacity in many instances, which the options seek to achieve.

Table 11. Conclusions on enforcement problems in the five studied MS

Element of the control chain	Conclusions for the MS
Establishing an implementation and enforcement strategy	An overall enforcement strategy is lacking in the MS. However, some elements of such as strategy are available, such as assessments of particular areas (e.g. UK) or institutions (e.g. SE) or consideration of issues such as administrative burdens or particular sectors (also UK).
Compliance promotion and awareness raising	Compliance promotion is widely seen as necessary to ensure business and individuals understand their obligations and to reduce incidents of non-compliance. The MS show a number of compliance promotion examples, for CITES, farmers water utilities, etc. However, in many cases such activity is resource intensive, so that there is benefit from working with others where possible. Thus there is greater delivery of compliance promotion to farmers in Scotland than England. SE has put particular emphasis on working with farmers in areas of most risk. However, limited resources limit such activities in PL and ES.
Sufficient capacity of enforcement institutions	The baseline analysis found very different conclusions on the sufficiency of the capacity of institutions in the Member States. For example, the UK Drinking Water Inspectorate reports

	<p>sufficient staffing and budgetary capacity. Conversely, there are severe constraints in Member States with budgetary problems, such as Spain and Poland. Furthermore, the County Administrative Boards in Sweden has significant insufficient capacity.</p> <p>The nature of budgetary stability also affects capacity. For example, funding for the police wildlife crime unit in the UK was confirmed only for one year, affecting its ability to attract staff.</p>
<p>Inspection and enforcement planning</p>	<p>Inspection planning to varying degrees is widely seen in the MS. The level of planning depends on the type of enforcement activity – whether proactive or reactive (to incidents). Risk-based inspection is widely reported as the basis for control activities, from the UK Environment Agency’s detailed OPRA system, to the wider use of risk-based approaches by customs. However, while risk-based planning targets limited resources, it cannot overcome capacity problems.</p>
<p>Control activities</p>	<p>Within the baseline there are very different types of inspection or control activity. These include:</p> <ul style="list-style-type: none"> • Reliance on self-monitoring and reporting by regulated entities with minimal site based intervention by regulators (e.g. for drinking water in Germany). • Routine inspections to check compliance with operational conditions (urban waste water treatment, nitrates, etc.). For the latter there is strong reliance on the minimum requirements in CAP Regulations. • Incident-based controls, responding to reported cases of non-compliance, environmental quality problems, concerns by citizens (e.g. poisoning of species, pollution incidents, etc.). SE uses an environmental quality approach for water, but this is limited in application due to diversion of effort to other areas of the acquis. • Intelligence-led investigation, e.g. for CITES and wildlife. Here there are limitations due to capacity issues, such as in PL, and with highly devolved administrations.
<p>Co-ordination of control activities within and between Member States</p>	<p>Federal states have highly devolved enforcement structures, as do Member States such as SE and to some extent PL. This presents challenges for inter-institutional working with national/regional bodies, but the potential for more joined-up local thinking. However, it also means that it can be difficult to identify the level of capacity, etc., allocated to enforcement of individual aspects of the acquis. For example, in SE that enforcement effort has been markedly reduced with regard to water compared to other areas of enforcement. There are some good practices in the co-ordination of enforcement work between institutions (e.g. on wildlife crime in the UK).</p> <p>The baseline highlighted the importance of institutions that are not primarily environmental in scope, such as the customs and police. There are good examples of their role in enforcing the</p>

	environmental acquis, such as on CITES in the UK. However, even in the most active cases, environmental enforcement remains a small part of the function of these institutions and sits alongside other, often more pressing, priorities.
Follow-up to control actions	Follow-up varies between the MS. Civil sanctions have a wider use in the MS other than the UK, but most seen in DE and SE. However, in the UK this is changing. As a result, therefore, the UK has had a larger use of criminal sanctions. However, across all areas evaluation of effectiveness of sanctions is lacking, so that judging the variation between MS is problematic. The UK has, in some areas, established links between compliance issues and investment (e.g. for water). However, where the compliance gaps occur in MS with significant budget issues (e.g. ES and PL), there is a gap between determinations of compliance levels and investment planning.
Transparency and the role of the public	The transparency of enforcement activity across the Member States varies. There are variations in how far enforcement decisions (inspection reports and application of sanctions) are published, including within a MS. For some (e.g. UK drinking water inspections, ES abstraction inspection) this is proactive, for others (e.g. UK nature protection inspections, much local inspection in DE) information is on request.
Evaluation of performance of the control strategy and national inspection bodies	Full review of inspection and enforcement institutions and processes was only fully identified for some enforcement bodies in SE and UK. Reviews ask questions about the effectiveness of inspection and enforcement, compliance promotion and examine issues of regulatory burdens and links to better regulation principles.

6.3 Main conclusions on the impacts and effectiveness of the options

The following table provides a summary of the impacts of the options analysed in the previous Chapter. It is important to stress that the main impacts (economic, social and environmental) of improved compliance result from the environmental acquis as it is already in place – they are not additional new legal obligations on MS. MS are already under an obligation to enforce the acquis and so if a new instrument delivers improved compliance (with associated costs and benefits from the existing acquis), these should not be perceived as new costs and benefits. The primary distinguishing features of the options are the administrative impacts of taking forward the options and the effectiveness of those options.

Clearly, a binding instrument (particularly with balanced reporting obligations) would have higher administrative costs than non-binding options simply because there would be reporting obligations, etc. Having said this, improved compliance should result in delivering

of benefits that are the purpose of the acquis and, therefore, a simple focus on administrative costs alone would not be justified.

With regard to effectiveness, non-legislative options would deliver some outcomes. Indeed, the RMCEI has shown this. However, a non-legislative approach is probably easiest to take forward where enforcement action is easier to specify (e.g. routine inspections for industrial activities) than where it is not (e.g. incident responses). Furthermore, across the acquis there are major capacity constraints and some areas of law have poor enforcement as a result. In this situation a binding instrument would be significantly more effective.

Table 12. Summary comparison of the options

Option	Advantages	Disadvantages	Effectiveness	Efficiency
1 - Do nothing	<ul style="list-style-type: none"> No costs 	<ul style="list-style-type: none"> No progress on implementation No information on performance 	<ul style="list-style-type: none"> Very low 	<ul style="list-style-type: none"> Very low
2 – Non-legislative option	<ul style="list-style-type: none"> No extra costs for efficient systems Little other extra costs Promotion of best practice 	<ul style="list-style-type: none"> Underfunded agencies would probably not engage Progress would leave out the worst cases 	<ul style="list-style-type: none"> Limited positive impact due to focus on better performers 	<ul style="list-style-type: none"> Low due it is non-binding nature
3 – Enhanced Recommendation	<ul style="list-style-type: none"> Provides a framework for authorities on how to measure the quality of control systems 	<ul style="list-style-type: none"> It will still be difficult to involve the worst quality control systems Some administrative costs 	<ul style="list-style-type: none"> Higher than option 2 	<ul style="list-style-type: none"> Higher than option 2
4 – Binding instrument	<ul style="list-style-type: none"> Provides flexibility to tailor the criteria to national systems Provides incentive for the least quality control systems to improve 	<ul style="list-style-type: none"> Increased costs due to compulsion Higher administrative costs 	<ul style="list-style-type: none"> High 	<ul style="list-style-type: none"> High
Option 5 – Binding instrument with detail prescription	<ul style="list-style-type: none"> Sets out detailed requirements to ensure application in the MS Should ensure greater harmonisation between the MS 	<ul style="list-style-type: none"> Difficult to ensure all details cover the acquis in its entirety Potential issues of integration of detailed prescription between horizontal instrument and sectoral instruments 	<ul style="list-style-type: none"> Relatively high, but possible problems in interaction between instruments 	<ul style="list-style-type: none"> Generally high, but issues with possible unintended additional costs in some MS
6 – Combination of options	<ul style="list-style-type: none"> Legislation makes networking more effective 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> High 	<ul style="list-style-type: none"> High

6.4 The implications of the options for the Member States

It is important to note that the options are not specifically addressed to any particular type of approach in a MS, governance context, etc. The options are generic in character with regard to enforcement and, therefore, are likely to have some impact in all of the MS studied.

In the assessment of the options, a distinction was made between the elements of the control chain and the options for an instrument or other approach which could be used to take forward that control chain. It was assumed that whichever option was chosen the control chain as a whole would be addressed by that option. Therefore, in considering the implications of the options for the MS, it is useful firstly to consider the individual elements of the control chain and then the instrumental nature of the options to take this forward. The elements of the control chain are considered in the following table.

Table 13. Implications of the elements of the control chain for the MS

Element of the control chain	Implications for the MS
Establishing an implementation and enforcement strategy	This element requires an overall strategy to be developed. While there are some elements of this within the MS (e.g. on better regulation in the UK) or for individual enforcement bodies (in several MS), an overall strategy assessing compliance gaps and setting out the full control needs is not in place. This, therefore, would have implications for all of the MS studied.
Compliance promotion and awareness raising	This issue is recognised as important by all of the MS. The challenge, therefore, is not the principle, but the practice. This is especially the case where there are large numbers of affected persons (e.g. farmers for landspreading or the public for CITES). There are good cases of compliance promotion on these issues, but for fully effective action considerable resources may need to be applied. Furthermore, it is not clear how far MS have assessed the effectiveness of compliance promotion (other than specific instances) and, therefore, identified the cost/benefit assessment to determine where this activity would deliver higher levels of compliance than traditional enforcement action. Thus there are implications for all of the MS.
Sufficient capacity of enforcement institutions	Across most of the MS studied, capacity issues have been raised. This is especially the case in ES and PL, but also within the county enforcement structures of SE and specific cases in DE and UK, although for the latter sufficient capacity is noted for some of the legal areas addressed. As a result, a requirement to determine the necessary capacity for enforcement would be a major step forward for most of the MS in communicating resource needs with government, driving efficiency savings, applying more targeted

	enforcement, etc.
Inspection and enforcement planning	<p>Planning seems to be widespread across the MS enforcement bodies. However, the basis for planning varies, from detailed objective risk-based assessment for some authorities in the UK (but criticised for others) and less for some other MS. Establishing the criteria upon which plans should be produced (risks, costs of business, etc.) would have significant impacts on some MS/ some enforcement institutions.</p> <p>For authorities tackling crime (CITES, waste shipment, species, etc.) the basis for planning is different. Effective planning in such cases requires information/intelligence. Therefore, formulating criteria for effective criteria in such cases must require an improved understanding of the enforcement challenges that are faced. For some MS (e.g. UK on waste), this would have limited effect, but for others (e.g. PL) this would be a significant step forward.</p>
Co-ordination of control activities within Member States	<p>This issue is recognised as important in all of the MS studied. The level of necessary co-ordination will be highly case specific. In particular there are good cases of co-ordination between environmental authorities and police and customs, but this could be improved in ES, PL and DE.</p> <p>A specific challenge for effective co-ordination is data sharing and improved systems for real-time data sharing are required in most instances in the MS studied.</p>
Co-ordination and co-operation across borders	<p>This is highlighted as important in the study in particular on the issue of CITES, as it was for previous studies on waste shipment. Concern on water enforcement has also be raised by the Blueprint. However, the major link to problems in this regard has been via capacity and data sharing concerns (see above), although provisions on this issue would assist in developing enhanced co-operative arrangements for most MS.</p>
Follow-up to control actions	<p>The administrative practices for reporting on inspection activity do seem to be in place in the MS and, therefore, action on this issue may have little impact (depending on the level of detail). The application of sanctions is, however, variable. Currently EU law requires the application of sanctions which are proportionate and dissuasive, so it is not clear if new provisions would deliver more than this, other than ensuring a review of practice and highlighting where sanctions are not used to the extent that they dissuade future non-compliance.</p>
Transparency and the role of the public	<p>The practice of publishing enforcement action varies between and within the MS. It would certainly have implications for all MS to ensure timely and easily accessible publication of inspection reports and enforcement actions. However, there is little difficulty in providing this once commercial confidentiality issues, etc., are determined. Simply on-line presentation of this information, easily displayed or searchable is not a major burden, not least because</p>

	all of the authorities do already collect and store this information.
Evaluation of performance of the control strategy and national inspection bodies	No MS has a systematic review process in place, although we have highlighted good examples of such reviews, e.g. in SE and UK. The best practice for reviews is for them to be independent of the enforcement body, allowing for more objective assessment and criticism and ensuring full consultation with those affected by regulation. This would have implications for all of the MS studied, although those with experience of such reviews (as already noted) would find such a provision less of a departure from current practice.

With regard to the options themselves, the following table sets out some conclusions on the implications each option could have for the MS.

Table 14. Implications of the options for the MS

Option	Implications for the MS
Baseline	This option would largely leave the status quo in place in the MS (subject to continuing application of EU law current in the process of implementation). Therefore, the issues summarised above would remain. Compliance would not be ensured. The MS with larger enforcement challenges (e.g. ES, PL and SE) would deliver lower levels of compliance and the uneven playing field within the EU would remain. Furthermore, for MS under increasing government budget constraints, enforcement could decline rather than improve.
Non-legislative measures	The IA questions the effectiveness of non-legislative measures in ensuring change in the MS. It is difficult to distinguish the MS in this regard. Where there is guidance, MS that view it as useful will use it, but that would be driven by the priorities of the MS in the baseline. Therefore, we do not envisage any real distinction between the MS that is separate from the distinctions evident in the baseline. Indeed, with regard to networking, the evidence suggests greater participation by more active MS, which suggests potentially more impact in the UK, DE and possibly SE than ES and PL.
Upgraded Recommendation	An upgraded Recommendation is not binding, but it could have greater impact than non-legislative measures. However, where there are economic and social barriers to improving enforcement these might not be overcome by a Recommendation. It is likely that the same MS distinctions will apply in this case.
General binding instrument	A binding instrument would affect the MS to a much greater degree. The degree of impact would be driven by two major factors. The first is the baseline compliance/enforcement gap. Full implementation would have the greatest impact on those MS with the largest gaps (see above). The second is the likelihood of

	implementation. This depends on the political and administrative character of the MS in address implementation of EU law as well as the importance the EC places on ensuring implementation. The MS do have different compliance histories and these may reflect future application of a binding instrument.
Binding instrument with detail prescription	A more detailed prescriptive instrument would affect the MS to a greater degree than option 4. It would firstly deliver increasing closure of the compliance gap in a similar way to option 4 and, indeed, in some cases it would have a greater impact than option 4 as MS would have less flexibility to avoid implementation. However, the levels of prescription could have significant unintended consequences with the administrative characteristics and traditions or innovative approaches in the MS. Thus the costs could be more significant than expected.
Combined option	A combined option brings together possible elements of legislative and non-legislative approaches. These are not specifically defined and at MS level, difficult to determine the possible variations in implications for MS.

6.5 The implications of the options for the different legal areas of the study

The options are also not specifically addressed to any particular sector of the EU environmental acquis, but aim to improve the enforcement of the acquis as a whole as well as its individual elements. Thus the options are likely to have some impact in all of the legal areas of the study.

As with the MS assessment, it is useful firstly to consider the implications of the individual elements of the control chain for the different legal areas of the study and then the instrumental nature of the options to take this forward. The elements of the control chain are considered in the following table.

Table 15. Implications of the elements of the control chain for the legal areas of the study

Element of the control chain	Implications for the different legal areas of the study
Establishing an implementation and enforcement strategy	An overall enforcement strategy would cover all of the areas of the study. Indeed, one aim is to get beyond individual assessments. Such an approach would help to overcome the situation in SE where water enforcement seems to have been de-prioritised without clear reasons. An overall strategy would have to address all areas of law. Within this study, therefore, it would raise in profile those areas that have been less prominent. This would likely include non-IED emissions and some abstraction enforcement and potentially elements of species enforcement.
Compliance promotion	The importance of compliance promotion is recognised for each of

and awareness raising	<p>the legal areas of the study. However, it is clearly more prominent in some areas than others. CITES has a strong element, but it also should be stressed that it is also generally the case for UWWT and drinking water, but in these cases the audience is limited to utilities and results in much self-monitoring or auditing. Compliance promotion should not be of equal effort for each legal area, but appropriate to the issue. In the study areas, the sector requiring most improved awareness raising is the agriculture sector and, therefore, improved compliance promotion would assist in better compliance with land-spreading, farm infrastructure, abstraction and habitats compliance.</p>
Sufficient capacity of enforcement institutions	<p>It is clear that apart from differences between MS, there are differences in capacity between the areas of law examined in this study. SE has particular capacity issues for water enforcement and the UK for diffuse water pollution sources and some aspects of species protection. In ES and PL the main capacity issues arise away from major utility enforcement and the agriculture sector is an issue for DE. Ensuring sufficient capacity (or at least transparent estimates of the necessary capacity) would have particular benefits for the enforcement of these areas of the environmental acquis.</p>
Inspection and enforcement planning	<p>As noted earlier, inspection planning is fairly well embedded in the MS. In some cases there is specific planning for individual legal areas, in others it is planned by the institution (covering several areas). Improved risk-based planning would enhance controls for abstraction and land-spreading in particular and improved intelligence-led approaches would assist in enhancing species and CITES enforcement.</p>
Co-ordination of control activities within Member States	<p>Some of the areas of law are likely to involve more governmental bodies than others. This is particularly the case for any that involve agriculture and those involving the police and customs. This, therefore, covers most of the areas of this study. It is difficult to identify systematic areas of concern, as opposed to instances. However, potentially the most problematic will be the agriculture sector and the competing enforcement priorities between environmental authorities and payments agencies.</p>
Co-ordination and co-operation across borders	<p>CITES and species protection are the most obvious areas to benefit from improved cross border co-operation. However, control of land spreading and farm infrastructure and addressing damage to habitats are also important in immediate protection of water and biodiversity across borders.</p>
Follow-up to control actions	<p>Improved follow-up action through application of sanctions will be most effective in areas where it has currently been less prominent. Thus it is more likely to benefit enforcement of issues such as habitat protection and landspreading and abstraction than UWWT and drinking water. Of course, wider follow-up in terms of directing investment for</p>

	compliance will benefit those areas that are investment-heavy – which are UWWT and drinking water.
Transparency and the role of the public	Transparency is important for all of the legal areas. There generally appears to be easier access to enforcement action for major activities, such as UWWT and drinking water than for smaller activities, as well as for major application of sanctions. Therefore, it could be expected that provisions on transparency would have greater impact on these areas.
Evaluation of performance of the control strategy and national inspection bodies	The review provisions would apply across the entire acquis. It is likely that the greatest impact would be similar in distribution to those areas most affected by improved control strategies as set out in the first row of this table.

With regard to the options themselves, the following table sets out some conclusions on the implications each option could have for the different legal areas of the study.

Table 16. Implications of the options for the different legal areas of the study

Option	Implications for the different legal areas of the study
Baseline	The status quo would leave some areas of the acquis more at risk than others. In our study this would include controls relating to agriculture (abstraction and land-spreading in particular), as well as small point sources (non-IED emissions). Some habitats and species protection provisions would be less well enforced.
Non-legislative measures	The impact would directly relate to effectiveness and willingness of MS to apply such measures (see MS summary above). Where these are less effective, they would most likely be so for those most at risk in the baseline (see above).
Upgraded Recommendation	This option would be likely more effective than non-legislative measures, but with the same distributional consequences for the acquis as with non-legislative measures.
General binding instrument	A binding instrument, if implemented, would, conversely, deliver greatest benefits for those areas of the acquis which are weakest in the baseline.
Binding instrument with detail prescription	Such an instrument would deliver the greatest benefits where implementation is currently weakest. However, it would be most effective where it is possible to elaborate the most detailed obligations. Therefore, where control actions need to be most flexible, prescription is less appropriate. For the study areas, for example, it is potentially easier to prescribe control actions for regulated objects such as farm infrastructure or WWTPs than for issues requiring rapidly evolving intelligence led approaches.
Combined option	This would enhance the effectiveness of the legislative option, with the same distributional effect.

ANNEX: CASE STUDIES

Case studies from:

Germany

Poland

Spain

Sweden

UK

7 GERMANY

This case study addresses the following areas:

Water:

- Drinking water
- Land spreading

Nature:

- Species protection
- Habitats and protected areas

Trade in endangered species:

- CITES

In Germany national (federal) level competence for the environment is limited and much of the competence lies with the regional level. In this case study examples are given, therefore, of regional level inspection and enforcement systems and actions. These are not to be taken as representative of Germany, but as examples (just as the five Member States in this report are examples and not representative of the EU as a whole).

7.1 Water: Drinking water

Legislative framework

The implementation of the Drinking Water Directive in Germany is based on the drinking water regulation (Trinkwasserverordnung¹²⁰). The responsibility for implementation and enforcement sits with the regional level. In some regions this is the government department for health (e.g. Baden-Württemberg, Brandenburg, Saarland)); in others there are executive agencies for health (e.g. Bayern, Berlin, Nordrhein-Westfalen).

The actual monitoring and enforcement is conducted on a local level (Kreise und kreisfreie Städte) by health administrations, which undertake sampling, keep contact with the local water providers and provide the monitoring data to the regional authorities. For example in the region of Saxony all monitoring is conducted on the local (Kreis) level. The regional authorities are responsible for collecting the information and provide support for local authority staff in the form of seminars and workshops.

Strategic approach to inspection

Generally the regional authorities provide guidance to the local health authorities especially on implementing quality control plans, which are an important new aspect of the enforcement policy, setting out the objectives and processes for inspection activity. The

¹²⁰ http://www.gesetze-im-internet.de/trinkwv_2001/BJNR095910001.html#BJNR095910001BJNG000201310 .

drinking water regulation includes provisions which prescribe the scale and the number of samples to be taken.

The local health authorities have to assess at least once a year the quality assurance systems of the water providers including sample intervals and sample lists. Additionally they have to sample water at the point of consumption. The water companies have a duty to report if they find water samples to be over the legal quality thresholds (§ 13 Trinkwasserverordnung).

The local health authorities report to the regional authorities according to the reporting framework set out in the Drinking Water Directive and guidance from the EC. The regional authorities themselves report to the executive agency for the environment and the federal department for health.¹²¹

Drinking water as an issue is the joint responsibility of the department of health and the executive agency for the environment. The system as a whole is organized as a multi-agency system with regional authorities guiding the processes and local health authorities conducting the inspections.

For example in Saxony the regional authority organises four regular meetings every year for the local staff involved in the enforcement and monitoring of the Regulation and serves as an ad-hoc point for advice throughout the year. On a less regular basis the different regional authorities also meet with the federal authorities for exchange and strategy meetings.

Inspections

The scope and frequency of inspections are primarily defined by annex 4 TrinkwV 2001¹²². The schedule prescribed by the regulation provides an exact list of tests which have to be conducted and the frequency of those tests. Both the frequency and the tests are subject to the type of water and supplier which is inspected¹²³.

In the region of Saxony, the local health authorities conduct inspections mainly on the basis of the schedule provided in the Regulation. Additionally ad-hoc inspections take place when the water samples provide evidence that water is not acceptable quality. The inspections scheduling are not based on a risk assessment (but the schedule prescribed in the regulations is based on some risk measures).

The costs of the inspections to the regulator are born by the regulated bodies and are therefore also part of the water bills of customers.

121 Bericht des Bundesministeriums für Gesundheit und des Umweltbundesamtes an die Verbraucherinnen und Verbraucher über die Qualität von Wasser für den menschlichen Gebrauch (Trinkwasser) in Deutschland, Dessau, 2011, page 1.

122 Trinkwasserbericht, S. 7. <http://www.forum-trinkwasser.de/trinkwasser/qualitaet/artikel/73/trinkwasserbericht.html>

123 http://www.gesetze-im-internet.de/trinkwv_2001/BJNR095910001.html

Awareness raising

There is no published information on the federal level, but only at regional level. In recent years in Niedersachsen the regional authority (the health executive agency of Niedersachsen) has provided information and trained the local authorities in developing quality control plans. The main focus of these quality control plans was the change from a sample based prevention methodology, which, due to time lags, is only able to detect breaches when the water has already been consumed¹²⁴.

The local health authorities conduct prevention work especially on the issue areas of lead, copper, stagnation, corrosion and legionella. The prevention work includes specific advice (telephone or face to face), but also training sessions for local inspectors, exhibitions and other public campaigns¹²⁵.

On the local level many authorities do not have a written monitoring concept. All local authorities need to have at least one medical personal, but many nonetheless suffer from a lack of specialization.¹²⁶

Follow-up

If breaches are detected the health authority can suspend the water provider. The health authority has to inform consumers and investigate the reasons for the breach. The health authority can also grant a temporary exemption for a limited time period, if the breaches are not deemed to risk the health of consumers¹²⁷.

The regulation describes in detail the escalation plan. Small breaches are followed up by the local health authority. If a breach is either long standing or affects a certain number of people the regional authorities become involved. Regional authorities will also be involved when temporary exemptions from certain thresholds are granted.

Capacity

Due to the very dispersed structure of the authorities responsible for enforcement general assessments of the personal capacities of the authorities are difficult. There is some evidence that cost pressure on environmental administrations is too high and, as a result, the quality suffers¹²⁸. In the region of Saxony the budget is regarded to be tight especially when changes in the regulation have to be implemented as has happened recently. Overall 90 people are responsible on the local level for the monitoring and control of the Directive (covering 4.5 million of Germany's 82 million inhabitants). In Saxony, the regulation sets out

¹²⁴ Trinkwasserqualität -Untersuchungen zu selten, zu spät? Qualitätsmanagement als Präventionskonzept, Jahresbericht NLGA? 2008/09.

¹²⁵ Trinkwasserbericht, S. 82

¹²⁶ SRU – Sachverständigenrat für Umweltfragen, Umweltverwaltungen unter Reformdruck, Herausforderungen, Strategien, Perspektiven – Sondergutachten, Februar 2007, page 116f

¹²⁷ Trinkwasserbericht, S.58ff

¹²⁸ Sachverständigenrat für Umweltfragen, Umweltverwaltung unter Reformdruck, Februar 2007, S. 64, bundesländergenaue Aufstellung S. 84ff

in sufficient detail what information needs to be collected and the staff of the local health authorities is able to cover the full inspections and no extra expertise has to be bought in.

Effectiveness

The local health authorities and the water providers have a duty to report the quality of the water and the results of the test to the public.¹²⁹ Every three years the Member States have to report to the EC on the quality of the drinking water, which is published¹³⁰.

The drinking water report of the federal department for Health and the Executive agency for the environment is based on the reports from the regional level and provides detailed information every three years to change and retarget the inspection programme.

Overall the results of the samples have become better in recent years showing that the emphasis on monitoring the quality control systems and relying less on ex post assessments of water quality is successful. The number of nitrate polluted samples has been going down for the last 10 years (1.1% in 1999 to close to zero in 2010). Overall compliance is good with most samples complying with over 99% of the microbiological and chemical quality parameters.

The number of water areas¹³¹ where breaches have been detected has increased in recent years. This is though mainly due to the new structure of the water areas and the greater detail for reporting. Whether there is a real trend to more non-compliance or a higher detection rate needs to be analysed in the future.

Important drivers for non-compliant water samples, especially for cadmium, lead and copper, are the neglect of good technical standards sometimes caused by users installing the equipment themselves without any professional assistance and quality assurance¹³².

¹²⁹ Trinkwasserverordnung , §21 and Trinkwasserbericht, S. 3

¹³⁰ <http://www.forum-trinkwasser.de/trinkwasser/qualitaet.html>

¹³¹ Water areas are defined in the drinking water directive and Germany has currently. The main purpose of the water areas is that they are small enough to ensure that causes of lacking quality can be identified. If possible water areas have only one supplier or supplying system. Overall Germany is currently divided for monitoring purposes into 2,360 water areas each providing more than 1,000 m³ per year for more than 5,000 people.

¹³² Trinkwasserbericht, S. 3

7.2 Germany: Water: Land spreading of fertilisers

Legislative framework

The provisions of Directive 91/676/EC have been implemented by a federal regulation on Fertiliser use (Düngeverordnung¹³³) and by regional regulations, for example regional regulations on storing facilities for fertilizer. These regional regulations will be summarized to a federal regulation in the future. As many of the provisions are summarized in the “good professional practice rules” (gute fachliche Praxis), which apply on a federal level, the changes from such a new regulation on federal level will be small.

Responsibility for the implementation of the Directive sits on the regional level with responsible authorities¹³⁴, being mostly executive agencies of the regional governments. Enforcement is very often further devolved to the local level (Kreis) or to sub regional level (Bezirke). The responsible departments on the federal and regional level for the environment and agriculture cooperate on nitrate pollution¹³⁵. There is a standing Federal-regional (Bund-Länder) working group on fertilizer use. As very often the local inspection authority only acts on the basis of concerns collected by the regional authority, the cooperation between local inspection authorities and the regional enforcement authorities is also very close.

Strategic approach to inspection

The federal action programme Nitrat (Nitrat Aktionsprogramm) is implemented by the regional authorities. The programme focuses on providing information on good practice to farmers (see below for more details), but also on collecting the data on inspections conducted by local and regional authorities. The action programme sets out the targets which all regional authorities need to ensure are enforced.

The inspections are mostly decided on a regional level, but it depends on the region by which authority they are conducted. In some states this is the regional level, in others the local level. Cross compliance inspections are more often on the regional level than fertilizer specific inspections, but this is not uniform. The monitoring is coordinated by the regional authorities, which collect the results of the investigations, the water tests and report to the federal level on the outcomes.

¹³³ http://www.gesetze-im-internet.de/bundesrecht/d_v/gesamt.pdf

¹³⁴ Nitratbericht 2012, S.46 http://www.bmelv.de/SharedDocs/Downloads/Landwirtschaft/Klima-und-Umwelt/Nitratbericht-2012.pdf?__blob=publicationFile

¹³⁵ Nitratbericht 2012 http://www.bmelv.de/SharedDocs/Downloads/Landwirtschaft/Klima-und-Umwelt/Nitratbericht-2012.pdf?__blob=publicationFile

Inspections

A standard inspection collects the following information¹³⁶:

- Reliability and completeness of the nutrient balance.
- Files of soil samples and recommendations regarding nutrient load capacity of soil.
- Observance of maximum nutrient load.
- Compliance with storage instructions for fertilizers.
- Compliance of equipment.
- Compliance to instructions on the time of manure application, the distance of manure to water bodies, etc.

The responsible authorities will collect evidence on compliance with the farmer involved and collect necessary soil samples. The soil samples will then be analysed by specialised institutes.

Cross compliance controls are 75-80% based on risk, all other controls are based on complaints and results of water samples. The assessment method for the risk assessments differs regionally, but takes account of all risks to compliance, including non compliance on fertilizer use. Specific inspections on the fertilizer regulations are less often risk based (25-30%) and more often based on complaints and water samples¹³⁷. The risk assessment schedule is based on the size of the farm, animal stock, purchases or sales of fertilizer, and previous inspection results¹³⁸.

Awareness raising

The nitrate action programme provides for compliance promotion, awareness raising and prevention work:

- Advice to farmers on documentation and calculation of nutrient balances.
- Collection and provision of data for regulatory authorities.
- Publication of scientific information on most efficient use of fertiliser.
- Modernisation of storage capabilities for fertilisers.
- Further development of agro-environmental measures for water conservation.
- Further development of a systematic control system.¹³⁹

For example Bavaria states to have provided information to 150,000 people in 2008-2011 and Hessen has in the same period organized 80 workshops and seminars per year, provided

¹³⁶ Nitratbericht 2012, S.48 http://www.bmelv.de/SharedDocs/Downloads/Landwirtschaft/Klima-und-Umwelt/Nitratbericht-2012.pdf?__blob=publicationFile.

¹³⁷ Bund-Länder-Arbeitsgruppe zur Evaluierung der Düngeverordnung: Evaluierung der Düngeverordnung – Ergebnisse und Optionen zur Weiterentwicklung, Abschlussbericht, Anhang 5, 2012.

¹³⁸ Bund-Länder-Arbeitsgruppe zur Evaluierung der Düngeverordnung: Evaluierung der Düngeverordnung – Ergebnisse und Optionen zur Weiterentwicklung, Abschlussbericht, Anhang 5, 2012.

¹³⁹ Nitratbericht 2012, S.46f

advisory faxes to over 800 farmers per year and provided an internet platform and guidance notes.¹⁴⁰

Follow-up

The most likely sanction from non-compliance is a reduction in support from the Common Agriculture Policy, when negligent or deliberate breaches are detected. In cases of negligence normally the fine is 1%, 3% or 5%, while in cases of deliberate breaches the fine is at least 15%¹⁴¹.

The frequency of inspections can also be increased or focused when frequent or major breaches are detected as with the setup of regional inspection programmes as recently provided in Nordrhein-Westfalen.¹⁴²

Capacity

Due to the very dispersed structure of authorities responsible for enforcement general assessments of the personal capacities of the authorities are difficult. There is some evidence that cost pressure on environmental administrations is too high and quality suffers as a result¹⁴³. Due to the very decentralised structure of inspections no precise information could be identified.

While some regions have their own laboratories for analysing soil samples, others have external partners for this. Inspectors need a good understanding of the agricultural practice and how good practice is defined to assess the decisions of farmers. To provide that expertise in some regions the farmers' trade associations play an important part in providing experts for the inspections.¹⁴⁴

Effectiveness

The regional authorities report to the federal level which publishes the nitrate report every four years in line with the Directive. The regional authorities are responsible for assessing the performance of the inspection authorities. In 2002 the federal agriculture department commissioned a full evaluation of the fertilizer regulation.¹⁴⁵ The evaluation provided detailed recommendations on how to improve the practical use of fertilizer and to reduce the environmental impacts. In particular it recommends that administrative reform, reacting to the simplification agenda, take account of bottom-up needs determined by environmental enforcement authorities.

140 Nitratbericht 2012, S.65f

141 BMU+BMELV: Nitratbericht 2012, S. 49

142 Umweltinspektionsprogramm des Landes NRW

http://www.muellerbbm.de/upload/MBBM_Folder_IED_Richtlinie_200ppi_2531.pdf

143 Umweltverwaltung unter Reformdruck, S. 64, bundesländergenaue Aufstellung S. 84ff

144 BMU+BMELV: Nitratbericht 2012, Anhang II, S. 65ff

145 SRU – Sachverständigenrat für Umweltfragen, Umweltverwaltungen unter Reformdruck, Herausforderungen, Strategien, Perspektiven – Sondergutachten, Februar 2007, page 120. http://www.umweltrat.de/cae/servlet/contentblob/467486/publicationFile/36453/2007_SG_Umweltverwaltungen_unter_Reformdruck_Buch.pdf

Examples of good practice are set out below.

- A recent evaluation¹⁴⁶ confirmed the view that common limits for nutrient use as practiced in the Netherlands and in Denmark are not suitable for the more diverse soil structures of Germany. The good practice definitions take account of the different soil structures and allow more targeted controls.
- Overall the results of the nitrate tests show that the number of samples with a very high nitrate pollution has decreased, but there has not been a decrease in average nitrate concentrations. If this is interpreted as a response to targeting the highest polluting sources, this suggests the measures have been important¹⁴⁷.

However, the same evaluation explained that many shortcomings in the enforcement process stem from unclear definitions, which are either not defined closely enough in the regulations or handled differently by different authorities.

The nitrate report provides detailed reports on the nitrate pollution to the different water bodies, the nitrate balance of different regions and the inspection results in terms of whether farmers are compliant. This information is sufficient to retarget the inspection system if needed.

A recent evaluation¹⁴⁸ provided a list of suggestions for a revision of the fertilizer regulation. Most of the suggestions were targeting more precise definitions to allow better enforcement.

Overall the percentage of non compliance found (and punish with subsidy reductions) in the cross compliance inspections is found to be around 10% and slightly increasing over time (2007 – 9.5%, 2008 – 9.5%, 2009 – 10.4%, 2010 – 11.2%).

The most important areas of non compliance are measured higher phosphorus pollution, missing and incorrect nutrient balances and use of fertilizer on non absorbing soils¹⁴⁹.

¹⁴⁶ Evaluierung der Düngeverordnung, Ergebnisse und Optionen zur Weiterentwicklung Abschlussbericht Bund-Länder-Arbeitsgruppe zur Evaluierung der Düngeverordnung, 2012.

¹⁴⁷ Nitratbericht 2012, S.39

¹⁴⁸ Evaluierung der Düngeverordnung, Ergebnisse und Optionen zur Weiterentwicklung Abschlussbericht Bund-Länder-Arbeitsgruppe zur Evaluierung der Düngeverordnung, 2012.

¹⁴⁹ Evaluierung der Düngeverordnung, Ergebnisse und Optionen zur Weiterentwicklung Abschlussbericht Bund-Länder-Arbeitsgruppe zur Evaluierung der Düngeverordnung, 2012.

7.3 Germany: Nature Directives

Legislative framework

The legal implementation of the Habitats Directive in Germany into federal (national) law of Nature Conservation as a framework law was only achieved in 1998¹⁵⁰ (for legal aspects see Gellermann, 2001¹⁵¹), with amendments to include the marine environment beyond 12 nautical miles in the Exclusive Economic Zone in 2002.¹⁵² Under German Federal law, the Länder are also required to create a system of interlinked biotopes covering at least 10 % of Germany's territory. Unlike Natura 2000, this system of interlinked biotopes is not confined to specially designated habitat types and species, but instead incorporates all native species of fauna and flora and their habitats. Connecting the habitats is a top priority, even outside of protected areas.¹⁵³

In Germany, the delineation, management and monitoring of the protected areas that form the Natura 2000 network is the responsibility of the 16 Länder, which have their own ministries of environment and agencies. This federal structure leads to different ways and methods in site selection, site management and protection within the Länder and implies the necessity for national coordination in order to achieve a coherent network for Natura 2000.¹⁵⁴ As a review of all 16 Länder is not possible within this study, examples from selected states are provided below for illustrative purposes. The responsibilities of the Bundesländer include¹⁵⁵:

- Permanent protection of Natura 2000 areas (official protection, contract-based nature conservation etc.), including provision of the necessary financing.
- Drafting of maintenance and development plans and management plans for Natura 2000 areas.
- Establishment of a monitoring system for Natura 2000 areas.
- Compliance with the Natura 2000 reporting obligations (Articles 11 and 17 of the Habitats Directive).
- Performance of impact assessment in Natura 2000 areas.

National coordination is carried out by the **Federal Ministry of Environment** and – both technically and scientifically (including data aggregation and the final assessment of

¹⁵⁰ Bundesregierung (Hrsg.) (1998): Zweites Gesetz zur Änderung des Bundesnaturschutzgesetzes vom 30. April 1998, Bundesgesetzblatt 1998, Teil I, Nr. 25, 823-832.

¹⁵¹ Gellermann, G. (2001): Natura 2000, 2., neubearbeitete und erweiterte Auflage, Schriftenreihe Natur und Recht, Band 4, Blackwell Wissenschafts-Verlag, Berlin, Wien 2001, 293 pp.

¹⁵² ECNC (2005). Crossing Borders: Natura 2000 in the Light of EU Enlargement. Proceedings of an international workshop held in Dresden, May 7, 2004.

¹⁵³ Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (2007). Nationale Strategie zur Biologische Vielfalt, vom Bundeskabinett am 7. November 2007 beschlossen. Referat Öffentlichkeitsarbeit, Berlin, 180 pp.

¹⁵⁴ ECNC (2005). Crossing Borders: Natura 2000 in the Light of EU Enlargement. Proceedings of an international workshop held in Dresden, May 7, 2004.

¹⁵⁵ German Cabinet (2007). National Strategy on Biological Diversity. 242 pp.

conservation status at the national level¹⁵⁶) – by the **Federal Agency for Nature Conservation** (BfN, Bundesamt für Naturschutz).¹⁵⁷

Strategic approach to inspections

There is not a specific overarching policy, but rather the different relevant legislative items all contain their own control mechanisms which must be observed simultaneously. In the event that monitoring activities reveal that conditions have worsened, an investigation will be conducted to find the cause. When this is not anthropogenically caused, the issue cannot be pursued (e.g. due to climate change). However, when anthropogenic reasons are found to be responsible, the individual is obliged to restore the site to the original conditions. Should they not comply, legal action can be taken which may result in punishment.¹⁵⁸

The current techniques for management planning are characterized by an intense and productive involvement of local and regional stakeholders. In Schleswig-Holstein, this is particularly true via the Local Actions (see below). In order to increase the associated additional transparency, the results of the planning process - the management plans – are now made available in Schleswig-Holstein on the internet as well as the results of monitoring activities¹⁵⁹. This is done by means of a publicly acceptable version of the plan, taking into account the need to protect personal data, which means that e.g. maps with the representation of private ownership do not contain any names in the available documents. With this approach, not only is the transparency of the process increased, but the need for information such as planning offices for various applications - intervention schemes, EIA, eco-account etc. – are addressed.¹⁶⁰

In Schleswig-Holstein, there are also events planned surrounding the development and finalization of management plans which are open to all interested stakeholders to provide input and help determine which measures will be included in the plan¹⁶¹ and a regularly published newsletter¹⁶².

Inspections

Article 11 of the Habitats Directive requires MS to monitor / observe the conservation status of natural habitats (Annex I) and species of European interest (Annex II, IV and V). In a multi-year consultation process, the German federal government and the Länder have agreed on a uniform approach for monitoring under the Habitats Directive and have compiled a

¹⁵⁶ BfN and BMU (Hrsg.) (2010). Natura 2000 in Deutschland - Edelsteine der Natur. 75 pages.

¹⁵⁷ ECNC (2005). Crossing Borders: Natura 2000 in the Light of EU Enlargement. Proceedings of an international workshop held in Dresden, May 7, 2004.

¹⁵⁸ Interviewee from the Steering Group 'Umsetzung von Natura 2000' im Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein

¹⁵⁹ See www.natura2000.schleswig-holstein.de

¹⁶⁰ Projektgruppe „Umsetzung von Natura 2000 Freiwillige Vereinbarungen – Managementpläne“ (2008). Natura Nachrichten: II 2012

¹⁶¹ Interviewee from the Steering Group 'Umsetzung von Natura 2000' im Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein

¹⁶² http://www.schleswig-holstein.de/UmweltLandwirtschaft/DE/NaturschutzForstJagd/05_Natura2000/11_Newsletter/ein_node.html

national monitoring plan. The national monitoring concept and additional information can be downloaded¹⁶³. Accordingly, the following activities are coordinated with the nature conservation agencies of the Länder¹⁶⁴:

- Adaptation of existing approaches (primarily to arrive at a uniform cross-national survey method).
- Cross-national coordination of monitored parameters, field survey methods, survey intervals, sample sizes and sample distribution.
- Development and coordination of methods for identifying areas and habitat sizes.
- Utilization of synergies with other on-going survey programmes (e.g. monitoring under the EU Water Framework Directive, the National Forest Inventory, and habitat mapping programmes).
- Design of databases for data aggregation and analysis.

Taking the state of Schleswig-Holstein¹⁶⁵ as an example, **on-going monitoring** (kontinuierliches Monitoring) is conducted. This requires that every six years all designated Natura 2000 areas are monitored once by independently contracted biological offices and information on which habitat types and species are present and their condition will be gathered; in the scope of these monitoring activities, it can be determined if measures have been implemented (i.e. when the conditions have improved) or not (i.e. when the status has worsened).¹⁶⁶ The classification of the review may vary depending primarily on a traffic light scheme, with green being favourable in the evaluation, yellow corresponding to inadequate and red being poor.¹⁶⁷

Within Schleswig-Holstein, the responsibilities are distributed as follows¹⁶⁸:

- **The upper nature conservation authority (Oberenaturschutzbehörde)** creates management plans.
- **'Local actions'** (Lokale Aktionen) are a Schleswig-Holstein method allowing for a high degree of responsibility to be shared with the regions and local stakeholders in the implementation of Natura 2000. The actions are technically competent support structures that are largely independently responsible for the management of Natura 2000 sites. The Ministry of Agriculture, Environment and Rural Areas (MLUR) promoted a special directive (guidelines for the granting of aid for the work "Local alliances" for the implementation of Natura 2000 in Schleswig-Holstein; Amtsbl Schl.-H. 2007 p 63). In addition to the drafting of area-specific management plans, other tasks include the

¹⁶³ http://www.bfn.de/fileadmin/MDB/documents/service/skript_278.pdf

¹⁶⁴ http://www.bfn.de/0315_ffh_richtlinie+M52087573ab0.html

¹⁶⁵ Note, as elsewhere in this case study, examples are use of individual Länder. These are intended to serve as examples, as each state varies slightly in its approach and it is not feasible to provide 16 examples to make this completely representative.

¹⁶⁶ Interviewee from the Steering Group 'Umsetzung von Natura 2000' im Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein

¹⁶⁷ Interviewee from the Steering Group 'Umsetzung von Natura 2000' im Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein

¹⁶⁸ Interviewee from the Steering Group 'Umsetzung von Natura 2000' im Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein

actual implementation of management measures and a wide range of information, consulting and educational work.¹⁶⁹

- **The lower nature conservation authority (Unterenaturschutzbehörde)** – responsible for the implementation of the measures within the management plans; receive information themselves on whether or not the measures are being implemented or if illegal/forbidden activities are being carried out; they receive information from anonymous complaints, their own knowledge or the Local Actions:
 - When complaints are received or knowledge exists of wrongdoing, they are legally obliged to become active in the matter and engage in discussions with the individual or group committing the action. The original condition of the area must then be restored.
- **German Association for Nature Management (DVL)** in Schleswig-Holstein serves as a coordinating body which is responsible for initiating new and supporting existing communication and coordination between the Local Actions in the state.¹⁷⁰
- **Biological Offices** – are involved in the implementation of measures, which are outlined within the respective management plans.
- **Four integrated nature protection stations** in Schleswig-Holstein – regional structures/institutions employing one person as manager and 1-3 additional employees that monitor a specific area; the stations belong to the governmental nature protection administration; when non-compliance arises, they can report the activities to the responsible nature protection authorities.
- **Association for Rural Development (Landgesellschaft)** enters into agreements with individual farmers and monitors whether or not the measures which were agreed upon are being implemented as such.
- **Externally contracted offices** – are contracted to undertake the monitoring activities as part of the 6 year rotations.

In Schleswig-Holstein, there is cooperation and interaction taking place between the Local Actions (who are 'on the ground' and aware of developments, non-compliance, etc.) and the **lower nature conservation authority**. When the Local Actions report non-compliance to the **lower nature conservation authority**, they are legally obligated to follow-up on these claims and take the appropriate actions. Additionally, when claims are reported directly to the **upper nature conservation authority**, they will be relayed to the **lower nature conservation authority** and await follow-up actions.¹⁷¹

The German Natura 2000 monitoring scheme was compiled and developed as a nationally compatible, sample-based monitoring system. This sample-based monitoring meets the requirements of Article 17 of the Habitats Directive on a biogeographical level, but does not allow any conclusions about the conservation status of the habitat types and species in each

¹⁶⁹ Projektgruppe „Umsetzung von Natura 2000 Freiwillige Vereinbarungen – Managementpläne“ (2008). Natura Nachrichten: I 2008.

¹⁷⁰ Projektgruppe „Umsetzung von Natura 2000 Freiwillige Vereinbarungen – Managementpläne“ (2008). Natura Nachrichten: I 2013.

¹⁷¹ Interviewee from the Steering Group 'Umsetzung von Natura 2000' im Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein

specific area.¹⁷² Specific parameters are used to record population sizes, habitat attributes and the degree of derogation of species and habitats across their range in Germany. As far as possible, existing monitoring programmes are included in the concept, e.g. monitoring under the Water Framework Directive for fish species.¹⁷³

As part of the monitoring scheme, the following types of monitoring are carried out¹⁷⁴:

- Regular, on-going monitoring as part of the Natura 2000 legislation, as well as the other policies and laws in place.
- Targeted inspections on the basis of anonymous complaints, reports or tips to the Local Actions and responsible authorities.
- Coincidental discoveries (e.g. noticing non-compliance first hand).

Follow-up

The legal procedures for following up on non-compliance vary and are located not only in the EU or national nature protection legislation, but also in the state legislation (e.g. the State Act for the Protection of Nature, State Preservation of Historic Monuments Act, Game Law, etc.)¹⁷⁵, which are sometimes stricter.¹⁷⁶ These legislative items vary greatly across Bundesländer and are therefore not able to be more generally outlined on a federal level.

Capacity

In Germany, limited information is available on capacity-related issues. However, the estimated annual habitat management and monitoring costs combined with management planning costs amount to 17.9 million Euro; the average annual per hectare costs for habitat management and monitoring is 59.39 Euro.¹⁷⁷

It is difficult to estimate the number of inspectors as those responsible are also involved in other fields and areas, such as the water and species protection directives.¹⁷⁸ External experts are hired for monitoring activities (biologists). Within the nature protection agencies

¹⁷² Interviewee from the Steering Group 'Umsetzung von Natura 2000' im Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein

¹⁷³ Natura 2000 – The German Network Flyer. (Available at http://www.bfn.de/fileadmin/MDB/documents/presse/29_05_08_natura2000_und_monitoring.pdf)

¹⁷⁴ Interviewee from the Steering Group 'Umsetzung von Natura 2000' im Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein

¹⁷⁵ See http://www.schleswig-holstein.de/UmweltLandwirtschaft/DE/NaturschutzForstJagd/01_AllgInfo/04_Recht/ein_node.html

¹⁷⁶ Interviewee from the Steering Group 'Umsetzung von Natura 2000' im Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein

¹⁷⁷ Gantioler S., Rayment M., Bassi S., Kettunen M., McConville A., Landgrebe R., Gerdes H., ten Brink P. Costs and Socio-Economic Benefits associated with the Natura 2000 Network.

Final report to the European Commission, DG Environment on Contract ENV.B.2/SER/2008/0038. Institute for European Environmental Policy / GHK / Ecologic. Brussels 2010.

¹⁷⁸ Interviewee from the Steering Group 'Umsetzung von Natura 2000' im Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein

and Local Actions, there are experts in the areas of: town and county planners, landscaping engineers, biologists.¹⁷⁹

Effectiveness

There is no central, overarching committee that coordinates and collects all of the relevant information, but the **upper nature conservation authority** informally adopts this role to a certain degree. They see to it that the lower nature protection agency take action when non-compliance has been reported.¹⁸⁰

A publically available report to the EC is due every 3 years for the Birds Directive and every 6 years for the Habitats Directive (Article 17). The on-going monitoring activities (carried out over a six year period) are presented to the EU as part of the mandatory 6-year reporting requirements under the Habitats Directive and are then published.¹⁸¹ The national report is compiled on the basis of the Länder reports and presents information on the conservation status of habitats and species by biogeographical region, not the status of individual areas. More specifically, the report contains information on¹⁸²:

- Natural ranges.
- The area of habitat types and occurrences of species.
- Specific structures and functions of the types of habitats.
- Future prospects.

In Schleswig-Holstein, for example, monitoring results are also presented by area at www.natura2000.schleswig-holstein.de and are accessible to the public.

Schleswig-Holstein's way of implementing Natura 2000 as an intense cooperation-oriented process with the participation of regional stakeholders from agriculture, forestry, water management, tourism, local communities, conservation and other important for the region groups has been recognized on a European level. This recognition supports a successful implementation path in Schleswig-Holstein (in part through the informally developed 'social controls'), which is also crucial for the acceptance of the Natura 2000 network.¹⁸³ As part of this approach, the '**Local Actions**' serve to enhance the effectiveness of monitoring as they have a strong overview of and connection with the activities taking place on a regional level.¹⁸⁴

¹⁷⁹ Interviewee from the Steering Group 'Umsetzung von Natura 2000' im Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein

¹⁸⁰ Interviewee from the Steering Group 'Umsetzung von Natura 2000' im Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein

¹⁸¹ BfN and BMU (Hrsg.) (2010). Natura 2000 in Deutschland - Edelsteine der Natur. 75 pages.

¹⁸² Projektgruppe „Umsetzung von Natura 2000 Freiwillige Vereinbarungen – Managementpläne“ (2008). Natura Nachrichten: II 2008.

¹⁸³ Projektgruppe „Umsetzung von Natura 2000 Freiwillige Vereinbarungen – Managementpläne“ (2008). Natura Nachrichten: II 2008.

¹⁸⁴ Interviewee from the Steering Group 'Umsetzung von Natura 2000' im Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein

7.4 Germany: CITES

Legislative framework

The German Federal Nature Conservation Act (BNatSchG) and Federal Ordinance on the Conservation of Species (BArtSchV) contain provisions for implementation of the CITES regulations as well as conservation provisions which go beyond the terms of the international regulations. The additional national regulations principally cover species which require protection on the basis of the Birds Directive or the Habitats Directive of the EU. Furthermore in Annex 1 to the Federal Ordinance on the Conservation of Species, native species of fauna and flora whose populations are threatened by human intervention are placed under protection.¹⁸⁵

The CITES tasks are primarily divided between the BfN (Federal Agency for Nature Conservation) and the 16 State (Länder) Authorities (Landesbehörden). State authorities have powers for issuing intra-community certificates, to carry out investigations and for controlling trade within the EU.¹⁸⁶ Utilizing their organizational authority, the German Länder have regulated select responsibilities differently. Thus, the enforcement of CITES can be designated as follows:

1. to the lower level in the counties and larger cities (Landkreisen und kreisfreien Städten) (e.g. in North Rhine-Westphalia),
2. to the middle level of the regional councils and district governments (Regierungspräsidien bzw. Bezirksregierungen) (e.g. in Hessen), or
3. to the upper level by a central state authority or country operation (zentrale Landesbehörde bzw. Landesbetrieb) (e.g. in Lower Saxony, Brandenburg).¹⁸⁷

Additional responsibilities are also divided as follows¹⁸⁸:

- **Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)** is the enforcement agency for the contact with other Member States, the CITES Secretariat and the EC. The BMU provides suggestions for the COPs and sends the Secretariat the annual reports on the implementation of the convention in Germany.
- The **Federal Agency for Nature Conservation (BfN)** is the designated Management Authority responsible for the enforcement of the EU Wildlife Trade Regulation and consequently of CITES, including recognition of animal and plant breeding establishments. BfN also serves as Germany's scientific authority under the Regulation. The tasks of the scientific authority include:
 - Assessing applications for import/export permits for compatibility with conservation requirements;
 - Compiling basic data on the conservation status of individual traded species;

¹⁸⁵ http://www.bfn.de/0305_regelungen+M52087573ab0.html

¹⁸⁶ BfN (2011). CITES Biennial Report 2009 - 2010 of the Federal Republic of Germany.

¹⁸⁷ LANA (2010). Vollzugshinweise zum Artenschutzrecht (http://www.bfn.de/0305_vollzugshinweise.html)

¹⁸⁸ LANA (2010). Vollzugshinweise zum Artenschutzrecht (http://www.bfn.de/0305_vollzugshinweise.html); http://www.bfn.de/0302_wa+M52087573ab0.html

- Further processing of live animals and plants as well as non-living samples of strictly protected species which have been seized by customs;
- Approval of caviar packers;
- Advising on and conducting training, and
- Compiling enforcement aids and checklists.
- **Customs authorities** (Zollbehörden) are responsible for the monitoring of CITES legislation in trade with third countries. This includes animals and plants that are subject to import or export regulations of the EU or which are coming from third countries and require an exception for import or transport by the BfN. Customs authorities will also impound, seize and confiscate animals and plants when they are lacking the necessary permits or documents. The responsibilities are outlined in detail in the document "bans and restrictions/conservation" (Verbote und Beschränkungen/Artenschutz) of the Federal Ministry of Finance, SV 0832, see also Section 9.1.3.2).
- **Federal Customs Administration** (Bundeszollverwaltung) has the authority to act as an enforcement authority directly in contact with the CITES Secretariat to exchange information in the field of conservation crime. The **Customs Criminal Office** (Zollkriminalamt) is the national agency for the enforcement of custom infringements (Zollfahndungsdienst) and for the information and communications of the customs administration. Other tasks of the Customs Criminal Office include the Market surveillance, the coordination and guidance of the investigation of the customs investigation service and communication with public agencies in other states, intergovernmental bodies, bodies of the EU and associations and institutions such as the central customs administrative office.
- **Customs Investigation Service** (Zollfahndung) is responsible for investigating criminal actions committed commercially or habitually (gewerbs- oder gewohnheitsmäßig) or relating to specimens of strictly protected species.

Strategic approach to inspection

The Enforcement information for Species Protection Law' ('Vollzugshinweise zum Artenschutzrecht')¹⁸⁹ outlines more general information (such as administrative principles, fundamentals of species protection, etc.) as well as specific information regarding:

- **Powers of enforcement authorities**
 - Request for information
 - Right of access and right to inspect
 - Blood and tissue analysis for breeding control
 - Seizure for species identification
 - Seizure and confiscation
 - Order of immediate enforcement
 - Confiscation in case of infringements
- **Criminal and misdemeanour cases**
 - Criminal and misdemeanour offenses
 - Offenses committed abroad

¹⁸⁹ LANA (2010). Vollzugshinweise zum Artenschutzrecht (http://www.bfn.de/0305_vollzugshinweise.html)

- Investigation (cooperation between authorities, intent detection, powers of the prosecution authorities in summary proceedings)
- **Follow-up after a confiscation**
 - Responsibilities
 - Procedure for living specimens
 - Procedure for dead specimens and parts and products

Germany has started a process to implement further actions recommended in the EU Enforcement Action Plan. All relevant enforcement and management authorities involved in the implementation of CITES have been invited to collaborate on the creation and implementation of a national action plan. To meet these objectives an Interagency National Action Plan Working Group (IANAP-WG) was established at the Federal Agency for Nature Conservation. The IANAP-WG includes representatives from German customs services, the police, national and local CITES Management Authorities and other enforcement bodies.

The main objectives and targets of this group are:

- to improve overall inter-agency cooperation;
- to collect and distribute relevant information;
- to identify enforcement priorities;
- to coordinate public relation activities; and
- to control and coordinate adequate training activities.

During the reporting period, as summarized in the Biennial reports¹⁹⁰, significant preparatory input and cooperation was provided to the CITES Enforcement Working Group of the EC, the Interpol Wildlife Crime Working Group and the WCO Working Group on CITES issues. Furthermore, numerous exchanges of intelligence with different countries occurred during the reporting period such as with:

- Belgium, Austria, Netherlands and UK on the illegal trade in birds of prey;
- Czech Republic, United Kingdom and Belgium on the illegal trade in tortoises;
- Czech Republic on illegal transactions of parrots;
- Estonia on the illegal transport of whale meat; and
- Hungary on the illegal transport of tortoises.

Enforcement authorities report to the Management Authority (BfN) on:

- Mortality in transport,
- Seizures and confiscations, and
- Discrepancy in number of items in permit and number of items actually traded¹⁹¹

As outlined in the Biennial Report from 2009-2010¹⁹², Germany's CITES Management Authority of the BfN has issued an electronic CITES Newsletter ('Artenschutz-Info des BfN')

¹⁹⁰ BfN (2011). CITES Biennial Report 2009 - 2010 of the Federal Republic of Germany.

¹⁹¹ BfN (2011). CITES Biennial Report 2009 - 2010 of the Federal Republic of Germany.

¹⁹² BfN (2011). CITES Biennial Report 2009 - 2010 of the Federal Republic of Germany.

regularly since 2004 which provides information on recent developments on CITES relevant legislation, on significant infraction cases and developments in illegal trade, on court cases or on any other issues of relevance to CITES implementation and enforcement government agencies within Germany. The newsletter is generally well received and is sent by e-mail to all regional CITES management, enforcement and implementation authorities of the 'Länder', to customs and criminal investigation agencies and to the CITES Scientific Authorities. During the reporting period six newsletters were issued in 2009 and four in total in 2010.

There is also a committee between the federal level and states which, for nature protection, is called LANA¹⁹³ ('Bund/Länderarbeitsgemeinschaft Naturschutz, Landschaftspflege und Erholung'). There are different committees for different topics, one of which is concerned with species protection and thus CITES and the trade of endangered species. In this context, a special national programme was developed in which discussions and work on certain topics should be strengthened across Bundesländer boundaries. The group meets twice a year, including representatives from the responsible state environmental ministries, BMU and the BfN and – in some states – the representatives from the enforcement authorities.

Inspection

The powers of the Enforcement Agencies (Vollzugsbehörden) include¹⁹⁴:

- **Requests for information:** At the request of the responsible federal and state agencies, natural or legal persons must disclose the information necessary for implementing the conservation law (e.g., information on the animal's and plant's origin) (§ 52 Abs. 1 Federal Nature Conservation Act). The duty of disclosure also applies to the operators of web portals, if the law enforcement agencies have inquires about the anonymous tender of specimens under special protection. The request for information is an administrative act. Violations due to missing, incorrect, incomplete, or not timely issued disclosures are subject to a fine pursuant to § 69 Abs. 3 Nr. 24 Federal Nature Conservation Act.
- **Access and inspection rights:** Where required, the responsible federal and state agencies or authorized persons are permitted within their range of authority to enter operational or business-designated properties, buildings, rooms, and transport during the business and operating times and to look at the repository and business documents (§ 52 Abs. 2 Satz 1 Federal Nature Conservation Act). The principles of proportionality are to be observed here. The responsible party must not only tolerate, but also support the persons responsible (e.g. to allow the discovery of and access to living animals). As a general rule, the police will aid in the enforcement when direct force is used. According to § 6 Abs. 3 Federal Nature Conservation Act, the record and delivery book is to be handed over for examination. In the case of electronic accounting, the authorities can demand that the trader provides the tools (e.g. special programmes) to enable the reading of the documents as per §261 HGB. If necessary, legible reproductions are to be furnished upon request. Infringements according to § 69 Abs. 3 Nr. 25 Federal Nature Conservation Act and § 16 Abs. 2 Nr. 2

¹⁹³ <http://www.la-na.de/servlet/is/10514/>

¹⁹⁴ Translated from: LANA (2010). Vollzugshinweise zum Artenschutzrecht (http://www.bfn.de/0305_vollzugshinweise.html)

Federal Regulation for the Protection of Species are subject to a fine. Generally, the members of the responsible nature conservation authority are the officers. Other appropriate persons (normally representatives of authorities, e.g. police or customs) may be explicitly assigned. The order can be made informally, but should be made in writing for reasons of legal certainty. The officers must identify themselves as such. They must have sufficient knowledge of the relevant legislation. The appointment of private persons is not allowed, but they may accompany the officers as experts or witnesses (e.g. mayors, community representatives). However, a judicial search warrant (§ 105 Code of Criminal Procedure, § 46 Abs. 1 German Law on Administrative Offences) is necessary if it is taken against the will of the person concerned: -private property and rooms should be entered or searched, - business premises or operating rooms should be searched or entered outside the business or operating hours. In the case of imminent danger, the judicial issuance of a search warrant can be dropped (§ 46 Abs. 2 German Law on Administrative Offences in connection with § 105 Code of Criminal Procedure). Additional search warrants can result from the countries' enforcement or administrative laws.

- **Blood and tissue analysis for breeding control:** If the authority has doubts about the origin of animals belonging to the A-C species for legal breeding (see section 4.3.1), Article 25 DVO warrants the demand for a blood or tissue analysis from the owner.
- **Seizure for species identification:** If in doubt whether or not animals and plants belong to specially protected species or populations, the customs authorities or responsible national authorities have the option to proceed according to § 51 Abs, 1 Federal Nature Conservation Act (for the national authorities in connection with § 47 S. 2 Federal Nature Conservation Act). The authorities can hereafter require the owner to clarify the affiliation of animals or plants to a particular species or population.
- **Seizure and confiscation in the objective procedure of the Federal Nature Conservation Act (nach dem BNatSchG), order of immediate full train:** Both the customs authorities (§ 51 Abs. 2 to 6 Federal Nature Conservation Act) and the responsible state authorities (§ 47 Satz 2 in connection with § 51 Federal Nature Conservation Act) have the power to seize and confiscate without connection to criminal actions or administrative offences. The measure is not punitive in nature. Rather, the aim of the scheme is to withdraw illegal specimens from commercial traffic.
- **Arrangement of immediate inspections:** It should be noted that the objection to a seizure or confiscation according to § 47 Federal Nature Conservation Act has a suspensive effect. This means that the effectiveness of the notice is suspended by the objection. To avoid this, the suspensive effect can be interrupted by the arrangement of immediate enforcement following § 80 Abs. 2 Nr. 4 VwGO, as long as the immediate enforcement is of particular public interest or is a prevailing interest of an involved party.

Taking the German state of Saxony-Anhalt as an example, the technical guidance activities for the task area entitled "Monitoring duties of species protection/CITES-Office" („Kontrollaufgaben des Artenschutzes/ CITES-Büro“) is carried out by the CITES Office in the State Agency for the Environmental Protection of Saxony-Anhalt (Landesamt für Umweltschutz Sachsen-Anhalt) and is supported by city and county Nature Protection

agencies (Naturschutzbehörden).¹⁹⁵ Responsibilities of the CITES office include the following¹⁹⁶:

- Assessment of necessary requirements (Grundlagenermittlung) for compliance with international and national CITES requests and reporting requirements.
- Technical advice and guidance for all conservation authorities in Saxony-Anhalt on changes and developments pertaining to species protection legislation.
- Public information to address concerns about the CITES Convention and advice to citizens and associations about species-protection requirements.
- Comments on legal standards, monitoring requirements and the protection of wildlife crime.
- Professional consultations with experts as well as state and federal agencies.
- Inspections in animal and plant trade as well as of private owners and breeders of protected species.
- On-going documentation as well as testing and evaluation of the animal stock reports.
- Monitoring of the legal labelling requirements and processing of appropriate exemptions.
- Granting of EU certificates for strictly protected animals and plants according to the implementation of the EC Regulation No 338/97 and No. 865/2006 on the request of citizens.

So-called ‘Schwerpunktkontrollen’, or targeted inspections, are used to establish concrete areas which are necessary to apply resources and increased efforts. These areas are determined via an evaluation of information obtained from seizures or enforcement problems or from responses from surveys of the Bundesländer. When such controls are carried out, the date/location/time are all determined in advance and – when necessary – such actions are accompanied by police, customs officials, locally responsible nature protection agencies, etc.¹⁹⁷

The focus areas of the targeted controls are determined in several ways¹⁹⁸:

- They are not always determined by the CITES regulations themselves, but also are influenced by the priorities of effectively implementing national regulations and, to a lesser degree, the Birds and Habitats Directives.
- Several subcommittees specialized in CITES matters deemed to be of high priority have been additionally been created under the national “Standing Committee on Species and Biotope Conservation”. These include a CITES timber enforcement committee which evaluates timber markets, including national internet trade, and a

¹⁹⁵ Landesamt für Umweltschutz Sachsen-Anhalt (<http://www.sachsen-anhalt.de/index.php?id=33788>)

¹⁹⁶ Landesamt für Umweltschutz Sachsen-Anhalt (2007). Die Umsetzung des Internationalen Artenschutzes in Sachsen-Anhalt.

¹⁹⁷ Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

¹⁹⁸ Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn; Crook (2012). Analysis of EU Member State CITES Biennial Reports 2009–2010. Report prepared for the European Commission.

newly established CITES turtle and tortoise enforcement subcommittee with a remit to identify those species for which controls need to be enhanced and intensified and to organize and handle co-ordinated controls of traders and private reptile keepers. National 'Meldepflichten' (registration requirements) exist regarding animal husbandry, entry/exit of a specimen (including the death of an animal), transfer and identification (§ 7 paragraph 2 BArtSchV). This requires that when someone acquires a protected species, the relevant person is obliged to register that specimen with the locally responsible nature protection agency. The registration reports of the individual specimens provide an overview on a national level of trade connections, offspring, the number of held animals, and transactions within Germany. This information is analysed and inconsistencies are highlighted and used to target the focused controls.

- Trade analyses from e.g. the World Conservation Monitoring Centre also help to focus efforts on areas which were perhaps unnoticed beforehand and highlight where action is necessary.

Internal studies at BfN also help to track the usage and supply of given products when information holes exist. Furthermore, The German customs has established a special unit which specifically deals with risk assessments only and which provides the relevant customs offices with substantial information. This unit is closely linked to and co-operating with similar units in other EU Member States.¹⁹⁹

Awareness raising

Public awareness campaigns, press releases and conferences, newspaper articles, brochures and leaflets, presentations, displays and information at border crossing points are all being implemented in Germany. Examples are as follows²⁰⁰:

- Cooperation between Germany's Customs Criminal Investigation Service, Police, Federal and National CITES Authorities co-ordinated law enforcement action in late September 2010 against the illegal trade in rare CITES protected tortoises which ended with the confiscation of 98 extremely rare tortoises resulted on 3rd October 2010 in a common press release²⁰¹ between the Customs Criminal Investigation Service and the Federal Agency for Nature Conservation (BfN). The press release triggered a nationwide media response.
- An internet-based information forum was established as a common project between German customs and the CITES Management Authority of the BfN which specifically targets tourists by providing information on protected species in the relevant tourist regions of the world (www.artenschutz-online.de).
- In order to promote the objectives of the Convention among tourists the FANC undertook in 2009 a common venture with one of the leading tour operators in Germany, the TUI company. The promotion of CITES was among others undertaken

¹⁹⁹ BfN (2011). CITES Biennial Report 2009 - 2010 of the Federal Republic of Germany.

²⁰⁰ BfN (2011). CITES Biennial Report 2009 - 2010 of the Federal Republic of Germany.

²⁰¹ [http://www.bfn.de/6914.html?&cHash=5ff0b90ad5&tx_ttnews\[backPid\]=6913&tx_ttnews\[tt_news\]=3297](http://www.bfn.de/6914.html?&cHash=5ff0b90ad5&tx_ttnews[backPid]=6913&tx_ttnews[tt_news]=3297)

through a very wide distribution of various leaflets produced in different languages and advertisements of CITES in the tour operators catalogues.

- For future awareness raising activities about CITES at public events such as expositions in schools, zoological and botanical gardens or trade fairs the FANC had commissioned a series of new exposition boards. The 13 new boards addressing CITES trade commodities such as ivory, reptile leather, invertebrates, furs, succulents and orchids, caviar or traditional Chinese medicine were first shown to the public in early 2009.

The philosophy of the investments in education and awareness raising is the idea of 'multipliers'. For example, educating pet shop owners and their employees about the legal background of CITES can serve as a preventative measure in the future and reduce non-compliance. In Brandenburg, the Chamber of Industry and Commerce ('Industrie- und Handelskammer') offers trainings or the employees themselves act as educators. Courses/seminars (Lehrgänge) are also given for people doing apprenticeships (Ausbildung) to work in pet shops (on e.g. animal protection and CITES).²⁰²

A further prevention example involved cooperating with the online auctioning website 'eBay', which also serves as a 'good practice' example and is explained below under "Effectiveness".

Follow-up

There is a policy framework governing follow-ups and sanctions, as outlined in LANA's 'Vollzugshinweise zum Artenschutzrecht' (2010):²⁰³

"Penalties and fines rules in the field of biodiversity conservation consist of the BNatSchG, BArtSchV, other federal laws implementing international conventions and the relevant nature conservation, hunting and fishing laws of the states... Referring to the ban, the penalty offenses are listed. Here the constituent elements objects which in other qualifying circumstances may also constitute a criminal offense are highlighted in bold...The competent authority (BfN, central customs office or state authority) for the prosecution and punishment of the offense follows from § 70 BNatSchG, with fines in the amount of up to 10,000 or 50,000 Euro from § 69 para 6 BNatSchG."

The following tables outline the follow-up activities which occurred for seizures and sanctions that took place for regulatory offences imposed in 2008, 2009 and 2010 as well as the proceedings that resulted in fines.

²⁰² Interviewee from Referat für Landschaftsentwicklung und CITES, Abteilung für Ökologie, Naturschutz und Wasser, Landesamt für Umwelt, Gesundheit und Verbraucherschutz. Potsdam.

²⁰³ LANA (2010). Vollzugshinweise zum Artenschutzrecht (http://www.bfn.de/0305_vollzugshinweise.html)

Table 17. Follow activities for seizures and application of fines

Follow-up on seizures and sanctions for regulatory offences imposed in 2008, 2009 and 2010			
Status of procedures (01.11.2011)	from 2008	from 2009	from 2010
Outstanding procedures	18	31	121
Discontinued by Federal Agency for Nature Conservation	667	969	1.151
Cautions, in some cases with cautionary fines	147	117	84
Administrative orders imposing a fine	237	206	144
of which: currently being enforced by Federal Agency for Nature Conservation	0	2	6
of which: under appeal	1	2	4
Ongoing investigations into suspected criminal offences	4	9	29
Discontinued by public prosecutors/courts	48	54	43
against payment of a fine (Art. 153a Code of Criminal Procedures)	28	29	19
Orders imposing punishments, sentences	8	13	16
Total procedures	1.129	1.399	1.588

Source: *Federal Agency for Nature Conservation*
http://www.bfn.de/0305_stat_bund+M5054de7a952.html

Proceedings resulting in fines	
Import of elephant ivory carvings	up to 1,200,- Euro
Import of caviar	up to 5,000,- Euro
Bear gall (<i>Ursus thibetanus</i>) from Vietnam	up to 3,000,- Euro
One live <i>Testudo graeca</i> from Tunisia	1,250,- Euro
One skull of <i>Panthera pardus</i> from USA, origin Zimbabwe	900,- Euro
One stuffed <i>Caretta caretta</i> from Vietnam	1,000,- Euro
4 garments with wolf and one garment with Felidae, especially because of tax offence	4,200,- Euro
34 reptile leather goods from Egypt (<i>Boidae</i> , <i>Varanus</i> , <i>Crocodylus</i>)	1,200,- Euro
110 Cacti of Appendix A and 306 cacti of Appendix B species from Peru	2,520,-Euro
Import of more than 2500 dead <i>Anthus pratensis</i> for consumption, protected under the EU Birds Directive, shipped from Romania via Munich (DE) to Italy, each of the 4 offenders:	1,300,- Euro

Source: *Federal Agency for Nature Conservation*
http://www.bfn.de/0305_stat_bund+M5054de7a952.html

Capacity

In 2010, there were²⁰⁴:

- 26 staff working at the management authority (BfN), but the percentage of time they spend on CITES related matters cannot be estimated; and
- 8 staff in the scientific authorities working on CITES issues (corresponding to approximately 3.5 full time posts).

Taking into account the large number of administrative districts which have their own authorities responsible for CITES, there are over 350 authorities (each with at least one employee) dealing with CITES across the country.²⁰⁵

There is also a list of experts for species identification which is published in the Federal Gazette. A revised list of experts has been published in the Federal Gazette (No. 105: 2458-2469) on 21. July 2009. In addition, lists of laboratories undertaking DNA analysis or other forensic analyses (i.e. isotope-analysis) are available at the CITES Management Authority of the BfN. These lists include hundreds of specialized experts who can be commissioned for specific tasks or are involved in specific controls and accompany customs, or police, or Federal Criminal Police Office ('Bundeskriminalamt'). These people are sworn in ('werden vereidigt') by the ministry and receive a certificate of appointment ('Ernennungsurkunde'). Some do this voluntarily and some receive a payment for their services.²⁰⁶

In the centrally managed example of the state of Brandenburg, for example, there are 6 people employed to work on CITES.²⁰⁷

The skills needed are dependent on what inspection activities are being carried out (e.g. caviar requires laboratory specialists). It can be broadly said, however, that a high degree of specialized knowledge is necessary given the number of species included in the convention and the need to identify differences unrecognizable to the untrained eye between many of the species. Skills are necessary in the areas of administration, biology, (administrative) law/policy, veterinary medicine, forestry, botany, ecology, geography. The highly specialized skills of the independent surveyors/experts are also an absolute necessity within the implementation of CITES.

Within Germany, educational and training opportunities for the federal police and local management/enforcement agencies are also offered to increase effectiveness. The main issues focused on in such seminars are understanding basic legal provisions of international species conservation legislation, enforcement and implementation of seizures and

²⁰⁴ BfN (2011). CITES Biennial Report 2009 - 2010 of the Federal Republic of Germany.

²⁰⁵ Interviewee from Referat für Landschaftsentwicklung und CITES, Abteilung für Ökologie, Naturschutz und Wasser, Landesamt für Umwelt, Gesundheit und Verbraucherschutz. Potsdam.

²⁰⁶ Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

²⁰⁷ Interviewee from Referat für Landschaftsentwicklung und CITES, Abteilung für Ökologie, Naturschutz und Wasser, Landesamt für Umwelt, Gesundheit und Verbraucherschutz. Potsdam.

confiscations and follow-up procedures after confiscations (such as hearings, writing of penalty notice, objection and court proceedings).²⁰⁸

There is a reporting duty (Berichtspflicht) to the German Bundesländer to list all the controls that were undertaken within the respective Bundesland that year. This is formalized and each Bundesland has to fill out a form and specify how many controls they carried out, who they controlled, where and what was seized and report to BfN. The BfN keeps these records and only publicizes significant seizures. The bigger cases are also immediately reported to the EC. This can happen through BfN, or through customs directly. This information is also collected by the World Customs Organization. These lists are publically accessible and look as follows²⁰⁹:

Number of controls carried out in 2009 and 2010						
Federal States	2009			2010		
	1)	2)	Σ	1)	2)	Σ
Baden-Württemberg	3)	3)	3)	79	39	118
Bavaria	491	203	694	391	206	597
Berlin	923	56	979	984	53	1.037
Brandenburg	32	17	49	28	25	53
Bremen	65	21	86	71	14	85
Hamburg	43	11	54	37	9	46
Hesse	403	50	453	391	30	421
Mecklenburg-Western Pomerania	240	17	257	3	0	3
Lower Saxony	395	112	507	384	97	481
North-Rhine/Westphalia	843	230	1.073	813	246	1.059
Rhineland-Palatinate	351	111	462	303	77	380
Saarland	3)	3)	3)	380	21	401
Saxony	305	37	342	270	38	308
Saxony-Anhalt	233	62	295	270	45	315
Schleswig-Holstein	64	21	85	47	18	65
Thuringia	470	48	518	494	50	544

- 1) Routine inspections
- 2) Inspections based on information received
- 3) Data unavailable

²⁰⁸ BfN (2011). CITES Biennial Report 2009 - 2010 of the Federal Republic of Germany.

²⁰⁹ http://www.bfn.de/0305_stat_land+M52087573ab0.html;
http://www.bfn.de/0305_tab_zolldiagramm+M5054de7a952.html

Number of seizures by customs at the main points of entry to Germany 2009	
Customs office	Number of seizures
Airport Frankfurt (Main)	619
Airport Munich	132
Customs office Germersheim	101
Airport Düsseldorf	46
Airport Berlin Tegel	44
Customs office Weil (Rhein) motorway	37
Airport Stuttgart	21
Other customs offices	358

Number of seizures by customs offices at the main points of entry to Germany 2010	
Customs office	Number of seizures
Airport Frankfurt (Main)	810
Airport Munich	166
Customs office Germersheim	101
Airport Düsseldorf	41
Airport Stuttgart	27
Customs office Giessen	23
Other customs offices	358

Number of specimens seized and confiscated by Federal Authorities in 2009 and 2010 / Federal States													
Federal States	Year	Living animals				Living plants				Dead specimens, parts and derivatives			
		Annex A		Annex B		Annex A		Annex B		Annex A		Annex B	
		1)	2)	1)	2)	1)	2)	1)	2)	1)	2)	1)	2)
Baden-Württemberg	2009	3)	3)	3)	3)	3)	3)	3)	3)	3)	3)	3)	3)
	2010	18	0	37	1	0	0	0	0	8	0	2	1
Bavaria	2009	39	52	33	54	0	0	0	0	44	0	33	1
	2010	50	132	136	191	0	0	0	0	2	1	3	1
Berlin	2009	23	22	44	153	0	0	0	0	31	2	475	106
	2010	16	24	69	175	0	0	0	0	122	104	132	104
Brandenburg	2009	11	2	3	1	0	0	0	0	93	53	1	7
	2010	8	15	12	13	0	0	0	0	5	0	1	8
Bremen	2009	1	1	3	3	0	0	0	0	0	0	0	0
	2010	2	0	35	30	0	0	0	0	0	0	2	2
Hamburg	2009	5	5	0	0	0	0	0	0	diverse	diverse	0	0
	2010	11	11	0	0	0	0	0	0	16	16	0	0
Hesse	2009	60	100	27	53	0	0	0	0	11	96	175	57
	2010	16	37	26	36	0	0	0	0	43	8	43	20
Mecklenburg-Western Pomerania	2009	4	0	38	0	0	0	0	0	0	0	0	0
	2010	0	0	4	0	0	0	0	0	0	0	0	0
Lower Saxony	2009	23	5	70	19	0	0	0	0	3	0	2	0
	2010	4	1	182	14	0	0	0	0	28	36	6	546
North-Rhine/Westphalia	2009	96	115	91	53	0	0	0	0	30	7	20	21
	2010	94	105	144	205	0	0	0	0	84	36	554	201
Rhineland-Palatinate	2009	72	9	7	4	0	0	0	0	50 kg	0	3)	0
	2010	26	18	3	3	0	0	0	0	46 kg	6	8)	0
Saarland	2009	3)	3)	3)	3)	3)	3)	3)	3)	3)	3)	3)	3)
	2010	0	11	0	14	0	0	0	0	0	4	2	0
Saxony	2009	46	19	30	16	0	0	0	0	13	2	3	0
	2010	54	43	23	37	0	0	0	0	3	1	0	0
Saxony-Anhalt	2009	11	11	14	11	0	0	0	0	0	0	1	1
	2010	2	1	19	17	0	0	0	0	0	0	0	0
Schleswig-Holstein	2009	0	19	2	8	0	0	0	0	0	0	0	0
	2010	4	4	0	0	0	0	0	0	20	20	4	4
Thuringia	2009	9	5	34	15	0	0	0	0	27	12	5	1
	2010	8	4	29	15	0	0	0	0	15	18	1	10

- 1) seized specimens
- 2) confiscated specimens
- 3) no data
- 4) additional 35,39 kg caviar
- 5) additional *Gonystylus* spp.: 180 products, 4 millions brushes, 7000m sawn wood, 1636 ledges
- 6) additional *Gonystylus* spp.: 4 millions brushes, 91 ledges
- 7) thereof 534 packages capsules with *Hoodia* spp.
- 8) additional 46,0 kg caviar

Review and effectiveness

Regarding a duty to review and evaluate performance, persons interviewed highlighted that this is not routine. That being said, the checks were newly evaluated and simplified a few years ago, aiming to answer the question of whether or not the reporting requirements were appropriate in terms of the time requirements entailed for the Bundesländer. The outcome was that they were found not to be appropriate, and thus simplifications were

undertaken. Amongst other consequences, this resulted in a reduction in the number of staff in the controlling institutions of the various Bundesländer.²¹⁰

Regarding coordination, the committee formed under LANA informally assumes this role to some degree. The interviewee explained that the BMU coordinates between the EC and the Länder authorities in this group. If complaints are filed to the EC by e.g. NGOs or other organizations, this information would be presented and discussed formally in the committee. The committee does not, however, have any surveillance function but rather provides a forum to present recommendations and make non-legally binding suggestions as to how given difficulties in the Länder could be addressed; indirect pressure for the Länder could also come from the EC via the committee formed under LANA.²¹¹

There was said to be existing evidence on a link between enforcement action and compliance: concretely, when inspections are effective, then compliance also improves automatically. This is due to the rapid spread of information and is also a question of society's consciousness. Increased acceptance was said to result in increased effectiveness and improved compliance.²¹²

The main party responsible for non-compliance was cited²¹³ as being **tourists** travelling to Germany, e.g. bringing a piece of ivory, a stuffed turtle, a schnapps bottle with a snake inside, etc. This group is said to represent a large problem which requires constant public awareness raising efforts. The currently available internet information is not believed to be sufficient for addressing this threat.

The other main problem was listed as **organized crime**. Here, fairs for the trading of large animals were mentioned²¹⁴ as needing increased efforts given that they are an ideal medium for distributing and selling illegally imported animals. These (international) forums are also used in targeted, conscious efforts not only by Germans, but also by Czech and Polish citizens, thus requiring very complex control mechanisms. Accordingly, the BfN tries to appear regularly in the form of customs agency and the responsible species protection agencies.

The motivations underlying these groups can be classified into more general categories, namely²¹⁵:

²¹⁰ Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

Interviewee from Referat für Landschaftsentwicklung und CITES, Abteilung für Ökologie, Naturschutz und Wasser, Landesamt für Umwelt, Gesundheit und Verbraucherschutz. Potsdam.

²¹² Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

²¹³ Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

²¹⁴ Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

²¹⁵ Interviewee from Referat für Landschaftsentwicklung und CITES, Abteilung für Ökologie, Naturschutz und Wasser, Landesamt für Umwelt, Gesundheit und Verbraucherschutz. Potsdam.

- private collectors wanting to have the full range of specimens of a given species, with rarer species being even more sought after (thus evoking illegal activities to acquire the specimens).
- financial incentives – criminal activities emerge due to the extremely high value of some of the species; the potential financial payoff exceeds the calculated risk; this includes also e.g. stealing rhino horns out of museums and selling them on the black market.

In conclusion, examples of good practice include:

- One interviewee²¹⁶ cited the development of a special national programme in the context of LANA as good practice. Within this programme, discussions and cooperative work on certain topics are to be strengthened across Bundesländer boundaries. This illustrates that a deficit existed (and to a certain extent still exists), but the success of this group and its implementation with regards to the optimization of enforcement serves as a best practice. This group selects focus areas ('Schwerpunkte') regarding enforcement and gathers statistics and information about the relevant species/issues/situations across the entire country. This in turn provides the individual states with a better overview and context of the current situation than that of a simpler state-wide analysis regarding those focus areas and increases the effectiveness of enforcement and inspection actions.
- the method of focusing inspection efforts on certain pre-identified, calculated areas (Schwerpunktkontrolle) because it makes the most of the available resources and personnel to carry out targeted, effective actions with large returns²¹⁷
- In researching the occurrences of internet crime related to trade in protected species in Germany, it was established that a large amount of activity took place over the major web auction site EBay. Officials have since reached an agreement with EBay to provide on-line information or links on CITES requirements and create filters which would prevent auctions of live animals from being posted. Non-living animals are also only able to be posted when the certificates and paperwork is referenced in the post, or included via a picture. While there are still some weaknesses, these developments represent a large success in terms of preventative action.²¹⁸

However, there are also shortcomings to the enforcement system for CITES in Germany and these include:

- The authorities were found by one interviewee²¹⁹ to not be up-to-date on the current state of affairs, particularly in the case of 'controlled deliveries'²²⁰. When these goods are smuggled, they can either be confiscated during the transfer in Europe, or a country can cooperate bilaterally with the destination country of the goods. This would entail informing

²¹⁶ Interviewee from Referat für Landschaftsentwicklung und CITES, Abteilung für Ökologie, Naturschutz und Wasser, Landesamt für Umwelt, Gesundheit und Verbraucherschutz. Potsdam.

²¹⁷ Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

²¹⁸ Interviewee from Referat für Landschaftsentwicklung und CITES, Abteilung für Ökologie, Naturschutz und Wasser, Landesamt für Umwelt, Gesundheit und Verbraucherschutz. Potsdam.

²¹⁹ Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

²²⁰ E.g. if ivory is smuggled from Africa to Asia via Europe, it necessitates a reloading of air cargo from one plane to another in Europe.

the destination country that the goods are being transferred there and allowing them to take over the action on that end, e.g. identifying what the market conditions/trade structures are, who is responsible, how the illegal networks function, etc, and resulting in a larger effect than just intercepting the ‘small players’ in Europe. This is already being done in England and Belgium, but not in Germany because it would require bilateral contracts with the destination countries and the Ministry of Justice (‘Justizministerium’), not with the BfN. In the view of BfN, this is a pressing need – and there are thus discussions being held between the BfN and Ministry of Justice to start exploring the development of such contracts.

- CITES and the importance of the enforcement actions is viewed as being generally underappreciated.²²¹ Since the criminal actions evoke relatively weak punishments, there are also limited deterrents for people to not participate in such illegal acts. This is seen to be the case in Germany and is a topic currently being discussed between BfN and the prosecutor offices and courts. It is viewed as a difficult situation given that the consequences of certain actions (e.g. running over someone with a car) do not result in prison sentences, making it difficult to then imprison someone for smuggling a live monkey. This is a difficult situation to change as it is seen as a matter of consciousness; ultimately, the courts are believed to only mirror the opinion/acceptance level of society.
- There are certain areas in which information is simply not known, e.g. where endangered tree species are used for years for the construction of instruments and sold by large companies without any regulations being enforced. According to one interviewee²²², this evokes the question of why the controls are not effective and requires the BfN to push forward in areas where the controls are ineffective or not taking place at all. One of the greatest challenges is thus to identify these areas on the basis of trade analyses (e.g. from World Conservation Monitoring Centre) and focus efforts on necessary areas.
- In Germany, some Bundesländer have CITES centrally organized in a small group (e.g. Brandenburg) and some Bundesländer have tasks divided amongst the administrative districts (‘Landkreise’). This has resulted in the existence of over 350 CITES authorities (Behörden) nationwide and in problems with communication and data exchange. Within the Bundesländer with fewer responsible authorities, information and data exchanges are seen to be more efficient and successful.²²³ One interviewee mentioned current discussions of whether a nationally active ‘Task Force’ would be helpful to assume responsibility for the communication and coordination between the Bundesländer (and their responsible authorities) and the national ministry (BfN) – but this would cost additional funds, in contrast to the working groups of LANA.

Future priorities

The goal is to improve the enforcement and implementation of CITES. The biggest weakness of CITES is that, in many areas, the enforcement is poor or very poor and has gone

²²¹ Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

²²² Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

²²³ Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

unchanged for years. This lies on Germany in part, but also in that the trade flows can simply not be effectively controlled.²²⁴ Priorities are:

- Internet crime.
- Customs controls, given an insufficient level of specialization in species protection measures of the individuals carrying out the controls²²⁵.
- The unknown and unidentified illegal activities that fall into the 'black hole' of inspection efforts²²⁶.

BfN is seen to be very dependent on the regular analyses from WCMC in Cambridge and the annual reports which are also country focused (financed by the EU), as they serve to establish a balanced picture of the situation.²²⁷

EU regulations are believed to be good and national regulations (sanction options) as sufficient.²²⁸ However, primarily problems with the legal considerations in Germany were raised by interviewees regarding penal action as a whole; existing structures present difficulties due to the generally low severity of sanctions and are not easy to change.

Administrative proceedings (Verwaltungsgerichtverfahren) are viewed as taking too long. When there is reasonable suspicion or evidence that someone is engaging in illegal activities, then the responsible Länder authorities file a criminal complaint to the responsible prosecutor, who then assumes the case. However, even when the ascertainment is successful, the criminal proceeding itself is often difficult and lengthy and results in minimal sanctions.²²⁹

²²⁴ Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

²²⁵ Interviewee from Referat für Landschaftsentwicklung und CITES, Abteilung für Ökologie, Naturschutz und Wasser, Landesamt für Umwelt, Gesundheit und Verbraucherschutz. Potsdam.

²²⁶ Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

²²⁷ Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

²²⁸ Interviewee from CITES Management Authority, Bundesamt für Naturschutz/Federal Agency for Nature Conservation, Bonn

²²⁹ Interviewee from Referat für Landschaftsentwicklung und CITES, Abteilung für Ökologie, Naturschutz und Wasser, Landesamt für Umwelt, Gesundheit und Verbraucherschutz. Potsdam.

8 POLAND

This case study addresses the following areas:

Water:

- Drinking water
- Urban waste water treatment

Nature:

- Species protection
- Habitats and protected areas

Trade in endangered species:

- CITES

Overview of inspection system in Poland

The environmental inspection system in Poland is a single system with the Chief Inspectorate for Environmental Protection setting out the direction of work for 16 voivodship inspectorates (regional inspectorates) for environmental protection included in the so-called joint-voivod administration.

Its responsibilities focus on inspection, with permitting limited to transfrontier movement of waste (exclusive competence of the chief inspector for environmental protection). The field of action of the inspectorate encompasses the whole of environment law including the rational use of natural resources, genetically-modified organisms, packaging, Seveso, etc.. The inspectorate is also responsible for state of environment monitoring and for reporting. The chief inspector hears appeals from the voivodship inspectorates' decisions and can also undertake all activities that are the competence of the voivodship inspectorates when considered justified with regard to the importance and complexity of those activities.

There are also other authorities responsible for undertaking inspections, such as: self-government bodies (on the level of voivod, powiat and gmina) which are competent to control compliance with the administrative decisions issued by them regarding environmental protection, State Sanitary Inspection (for drinking water and bathing water), Veterinary Inspection, State Labour Inspection, Trade Inspection, and Construction Supervision.²³⁰

²³⁰ OECD (2004) Assuring Environmental Compliance, www.oecd.org/environment/outreach/34499651.pdf

8.1 Poland: Drinking Water

Legislative framework

The competent authority for the monitoring and control of the water quality for drinking purposes lies with the **National Sanitary Inspection** (Panstwowa Inspekcja Sanitarna, hereinafter PIS, but commonly referred to as SANEPID). The national sanitary inspection is under auspices of the **Ministry of Health**, which is responsible for the quality of water intended for human consumption, whereas the PIS is responsible for monitoring and control. The activities of the PIS are mandated by the Act on National Sanitation Inspection from 14 March 1985 and amending Acts (Dz.U. 1985 Nr 12 poz. 49).

The PIS is responsible for the implementation of tasks in the sector of public health, especially through the oversight and control of several aspects such as Health and safety at work place, in recreational areas, sanitation standards in medical facilities, etc, but most importantly for environmental hygiene and healthy consumption. Within environmental hygiene, it is responsible to monitor compliance with rules especially concerning drinking water, the air in rooms designed to accommodate people, soil, water and other elements of the environment to the extent specified in separate regulations.²³¹

The system of checks and controls is however also partly integrated in the regulations of the **Ministry of Environment** and thus the Inspectorate for Environmental Protection. The bodies of the **Inspectorate for Environmental Protection** (Inspekcja Ochrony Srodowiska – IOS) also monitor the quality of water for consumption. The activities of the IOS follow the provisions under Art 24 of the Act of 20 July 1991 on the Inspection of Environmental Protection (Journal of Laws of 2007 No 44, item. 287, as amended). At the regional level, the provincial environmental inspector carries out the tasks associated with the Environmental Protection Inspection of the State.²³²

The National Environmental Monitoring tasks also involve other entities required to observe and implement the law such as government administration and local government, health, Transport, as well as research institutes carrying out tasks under agreements with IOS.

Strategic approach to Inspections

The Chief Inspector of Environmental Protection (GIOS) sets out the general direction of the Environmental Protection Inspections (IOS) (among other things by setting goals and test cycles for each year) and by publishing recommendations and guidelines defining the procedure for the statutory tasks of the IOS and controls the status of their implementation (Article 4a. 1 point. 1) of the Act on IOS.²³³

²³¹ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

²³² Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

²³³ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

Several acts and regulations guide the work of the relevant actors concerning drinking water. Relevant regulations include the Regulation of the Ministry of Health from 29 March 2007 on the quality of water intended for human consumption (ROZPORZĄDZENIE MINISTRA ZDROWIA z dnia 29 marca 2007 r. w sprawie jakości wody przeznaczonej do spożycia przez ludzi)²³⁴ and its amending regulation in 2010. The Act on National Sanitation Inspection from 14 March 1985 and amending Acts (Dz.U. 1985 Nr 12 poz. 49) set out the establishment of the National Sanitation Inspectorate, its objectives, implementation structure, consequences of non-compliance, etc.

Also, the National Environmental Monitoring Programme for the years 2013 – 2015, sets out the type of monitoring conducted, the bodies conducting the controls and the reporting flows. The monitoring consists of gathering information concerning the sources and quantity of pollution introduced into water or soil for environmental quality assessment. Necessary data collection is carried out in the areas of inland water quality, verification of the location of measuring points, etc. Several bodies are involved in the data collection process, including the National Programme for Municipal Wastewater Treatment, the national and regional water management organisations and the General Inspectorate for Environmental Protection.²³⁵

There is also regular interaction with the **National and regional Water Management Authorities**.

The legal provisions are not optimal and therefore Poland has suggested revisions. What is needed is for example:²³⁶

- introduction of controls for substances such as chlorine and ozone
- more flexible approach to the frequency and topic of the inspections
- Laboratory accreditation as a prerequisite for conducting the tests
- Better definition of the ranges of parameters, which define water quality
- Better definition of pesticides
- Further developing the information on different materials

Inspections

Art. 2 of the Act on National Sanitation Inspection²³⁷ specifies that the inspection and supervision of sanitation should be carried out in a preventive way and that it should conduct measures to prevent epidemics and infectious diseases and other diseases caused by environmental conditions, as well as conducting educational and health activities.

²³⁴ Regulation of the Ministry of Health from 29 March 2007 on the quality of water intended for human consumption

<http://www.mz.gov.pl/wwwmz/index?mr=m1&ms=904&ml=pl&mi=904&mx=0&mt=&my=9&ma=08195>

²³⁵ National Environmental Monitoring Program for the years 2013 – 2015, p. 53, <http://www.gios.gov.pl/artykuly/70/Aktualny-program-Panstwowego-Monitoringu-Srodowiska>

²³⁶ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

²³⁷ Ustawa z dnia 14 marca 1985 r. o Państwowej Inspekcji Sanitarnej (Dz.U. z 2011 r. Nr 212, poz. 1263), http://www.gis.gov.pl/ckfinder/userfiles/files/BW/PIS_nowy.pdf

According to the interviewees, the Inspectors are instructed to inform, educate and prevent future or further transgression of the law during their inspections. This is done through discussion with the inspected public water supplier and the protocol, which always also includes a section with recommendations. The Sanitary Inspectorate also offers trainings and courses.²³⁸

The National Environmental Monitoring Program for 2013-2015 specifies that the results and evaluation carried out on groundwater quality monitoring will be used to optimize the activities related to the protection and management of groundwater resources, with a view to maintaining and achieving good groundwater status and fulfil the obligations of the EU.²³⁹

The administrative arrangements and procedures concerning inspection activities are laid out every year in the Guidelines of the Chief Sanitary Inspector²⁴⁰ and generally follow the provision set out in the Regulation of the Ministry of Health from 29 March 2007 on the quality of water intended for human consumption.

Generally two types of inspections exist:

- Controls, which consist of analysing and controlling the data provided by the water supply utilities.
- Oversight / Audit: a more in-depth control of both data provided by the utility and other environmental data collected through physical inspection of the utilities and monitoring of the surrounding environment.

The local and regional inspection stations write protocols about the sanitary condition of the utility, which are mostly accessible to the public. These protocols concern the technical equipment, daily operation, etc. of the water supplier. These protocols are then handed to the Chief Sanitary Inspectorate and are sent to the General Statistical Office (GUS), which publishes the information publically in its yearly statistics.²⁴¹

The National Environmental Monitoring Programme of the IOS concerning groundwater, for 2013 – 2015, states that the monitoring of the chemical status of 161 groundwater bodies will be carried out through:²⁴²

- Surveillance monitoring, which includes all bodies of groundwater;
- Operational monitoring, which will look at uniform groundwater bodies having been identified as at risk of failing to meet their environmental objectives;
- In some cases, monitoring can be applied when a specific need for monitoring becomes clear. The scope and frequency of monitoring will be determined in each specific case according to the characteristics of the situation.

²³⁸ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

²³⁹ National Environmental Monitoring Program for the years 2013 – 2015, p. 53, <http://www.gios.gov.pl/artykuly/70/Aktualny-program-Panstwowego-Monitoringu-Srodowiska>

²⁴⁰ Guidelines of the Chief Sanitary Inspector for the year 2013, <http://www.gis.gov.pl/ckfinder/userfiles/files/Departament%20Nadzoru%20i%20Kontroli/Wytyczne%20GIS/Na%202013/Wytyczne%20GIS.pdf>

²⁴¹ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

²⁴² National Environmental Monitoring Program for the years 2013 – 2015, p. 53, <http://www.gios.gov.pl/artykuly/70/Aktualny-program-Panstwowego-Monitoringu-Srodowiska>

Monitoring studies will be conducted on the basis of the revised and expanded (to about 1,000 points) network of measuring points (drilled wells, piezometers) that meet the criteria in accordance with the requirements of the Water Framework Directive. The data points include: some points already existing in the monitoring, new points selected from existing boreholes (with particular emphasis on the active drinking water) and new measuring points. Each of the points will be assigned specific ranges which are fulfilling the requirements of EU directives.

The **IOS** is responsible for monitoring compliance with the provisions of environmental protection as well as conducting research and environmental assessments. The tasks of the IOS include the control of the users of the environment following the provisions set out in the Act of April 27, 2001 - Environmental Protection Law (Journal of Laws of 2008 No. 25, item. 150, Amended. - *Dz. U. z 2008 r. Nr 25, poz. 150, z późn. zm.*), amongst others in the following aspects:

- compliance with environmental regulations,
- compliance with the Decisions establishing the conditions for use of the environment and compliance with the scope, frequency and method of measurement of emissions and their impact on the environment

The Chief Sanitary Inspectorate conducts inspections at the administrative level and the water supply utilities, but also smaller water units where drinking water is supplied, such as schools or public buildings. Inspections concern topics such as the water quality, risk assessment, collection of data, solving of disputes, dealing with droughts and floods.²⁴³

The inspection activities usually undertaken by the General Inspectorate of Environmental Protection include:

- control of the compliance with the rules of environmental protection;
- monitoring of the state of environment;
- environmental information dissemination;
- prevention of Environmental Emergencies;
- control of transboundary movement of waste and market surveillance.²⁴⁴

The main objective of the audit is to assess the environmental impact of the installation or plant, the effectiveness of environmental protection solutions and operator accuracy. By using the SK and ISWK, the IOS carries out planned and unannounced inspections.

Planned inspections include:

- field visits with a particular objective, for example a previously identified problem or complex situation.
- Documentation (without field visit) based on research and the analysis of self-assessments by the controlled entity.

Unannounced inspections include:

²⁴³ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

²⁴⁴ http://epanet.ew.eea.europa.eu/european_epas/countries/pl/

- field visit with a fixed objective of a problematic or complex situation (intervention, investment, on request).
- Field visit without a fixed objective.
- Documentation (no field visit) based on research and analysis of self-assessments by the controlled entity.
- Documentation (no field visit) excluding analysis of self-assessments by the controlled entity.

The inspections closely follow the Annexes 1 and 2 of Directive 98/83/EC. A risk based approach is used by the regional inspectors based on their expertise. The inspections cover both the toxicological as well as microbiological aspects.²⁴⁵

Information about the environment is collected and presented and summarized in the state of the environment reports: The state of the environment reports are normally written by the Ministry of Environment, not the Chief Sanitary Inspectorate. Also, a statistical yearbook of environmental data is published yearly by the Chief Statistical Office (GUS). The Sanitary Inspectorate transmits the information from all protocols and inspections to the GUS.²⁴⁶

The frequency of inspections is determined in accordance with applicable environmental laws, guidelines of the Chief Inspector for Environmental Protection and the regional Governor. The frequency of scheduled inspection is also subject to the risk category to which the plant was classified:

- Category I - control every year,

This category marks high risk plants, which are at risk of an accident, stations for the dismantling of vehicles, plants dealing with treatment of electrical waste, plants processing waste imported from abroad, large-scale animal breeding units, etc.

- Category II - check every two years

This category refers to sites with a higher risk of accidents, large wastewater treatments plants, installations without the required permits, that have been identified as having significant effects on the environment and for which an environmental impact report would be necessary.

- Category III - check every three years,

Medium risk category, including potential perpetrators of accidents, smaller WWTP, landfills and waste incineration plants, companies that are defining new terms and conditions of use of the environment, including projects that have significant effects on the environment and for which an environmental impact assessment is needed, operators of waste recovery plants, etc.

- Category IV - check every four years.

²⁴⁵ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

²⁴⁶ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

This low risk category includes plants other than those in 1, 2 and 3, which call for regulation of the formal use of the environment, undertakings subject to the control of ozone-depleting substances, and the sulphur content of fuel, etc.

- Under Category V unplanned inspection can be carried out for entities in case of identified need.

Entities that do not require licenses for the use of the environment in the form of a decision.

- For companies with an environmental management system and in which the last scheduled inspection no significant breaches of environmental requirements were recorded, the frequency of controls may be reduced due to financial limitations.

The inspection also controls the analysis of the results of measurements of emissions and other conditions of environmental resource use, carried out by entities making use of these resources.²⁴⁷

The costs of inspections are carried by the water utilities, as they collect the relevant data regularly for the operation of the utility. Inspections are based on these data. If additional research is necessary, the costs of the research are not charged to the companies. Unfortunately quantitative data were not available.²⁴⁸

Follow-up

This procedure follows the Regulation of the Ministry of Health. On the basis of the results of the inspections, the provincial environmental inspector may:

- a. issue a decision suspending the activities carried out in violation of the requirements of environmental protection or violation of the conditions of the use of environmental resources;
- b. issue an administrative decision on the basis of other regulations;
- c. request a follow-up an inspection to the head of the organizational unit or individual;
- d. impose a fine by the mandate of the criminal proceedings or instruct a warning;
- e. initiate enforcement if the obligation arises from a legal provision or administrative decision;
- f. make a request to law enforcement agencies;
- g. make a request to initiate legal action in court;
- h. make a request in front of the local government;
- i. make a request in front of the government;
- j. issue an opinion, statement and information.

In addition, the Regional Environmental Inspector may authorize the inspector to issue a decision during the inspection in order to suspend / halt:

²⁴⁷ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

²⁴⁸ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

- a. activities causing the violation of the requirements of environmental protection, if there is an immediate danger to health or life of people or imminent threat of large environmental damage
- b. putting out of service of a building, a group of facilities or installations that do not comply with environmental requirements.²⁴⁹

Inspection capacity

Inspection capacity is difficult to judge, because the Chief Sanitary Inspectorate does not itself conduct the inspections on the ground but rather works with regional environmental inspectors and conducts controls based on their reporting and the data provided by the utilities themselves. However, the view of the interviewees, is that there is not enough financial capacity to conduct sufficient inspections.²⁵⁰

At the Chief Sanitary Inspectorate, there are 16 Sanitary inspectors. There are 18 inspectors at regional level and 10 inspectors in communities bordering other countries. The latter two send information to the Chief Sanitary Inspectorate.²⁵¹

The IOS employs approximately 2500 people (720 inspectors, 300 involved in monitoring, 840 laboratory staff, and 610 management and administration staff).²⁵²

IOS does not conduct inspections in the area of drinking water. The Sanitation Inspection conducts inspections concerning water in relation to abstracted water quality for water supply for people and bathing water.

Inspectors are chosen for their positions according to their qualifications, which are set out in the Act on Environmental Inspections. The employees of the Sanitary Inspectorate undergo specialized training also during their employment and their skill set is tested throughout their work in the form of quality assurance. Controls and inspections are only carried out by qualified inspectors.²⁵³

Inspectors conducting inspections have special competencies required for the position held and the topic area of their control activities. In addition to the specific qualifications required, general requirements for training in accordance with applicable regulations are set out in the orders of the General Inspectorate for Environmental Protection.

New employees in positions related to monitoring, undergo initial training and during a first period of their work, they carry out inspections under the supervision of experienced staff for the theoretical and practical training on how to carry out inspections. IOS employees continuously improve their skills through training. In the case, where carrying out inspections requires specialized knowledge or skills, the provincial environmental inspector

²⁴⁹ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

²⁵⁰ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

²⁵¹ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

²⁵² http://epanet.ew.eea.europa.eu/european_epas/countries/pl/

²⁵³ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

may authorize a person other than an inspector having the knowledge or the skills needed, to participate in the inspection.²⁵⁴

Inter-institutional arrangements

Interagency cooperation includes the cooperation with the Ministry of health, the Institute of public health (PZH), which supports the Sanitary Inspectorate with substantive information.²⁵⁵ There is no clear scheme for cooperation between other Ministries, but there is regular cooperation with the Ministry of Environment, as well as relevant stakeholders such as relevant Trade Unions (of Polish utilities), Associations, Chambers of Commerce and the Politechnic University of Warsaw.²⁵⁶

At the international level, there is cooperation with the WHO, the Sanitary Inspectorate participates in the European Network of Drinking Water Regulators ENDWARE through meetings and conferences aiming at the exchange of information.²⁵⁷

The main inspection authority and central co-ordination body for drinking water is the Chief Sanitary Inspectorate, which acts as contact point and coordinator for all regional and local inspectorates. There is regular communication between the Sanitary Inspectorate and the Chief Statistical Office, to whom relevant statistics are provided.²⁵⁸

Inspection review and reporting

There is a duty of the regional and local inspectorates and water supply companies / utilities to report on water quality to the Chief Sanitary Inspectorate. This information is generally compiled in statistical factsheets, reports and on-going monitoring briefs and is often published on the website of the local or regional body. However, no central place where all information is centralized and publically available exists.²⁵⁹

In accordance with the programme of public statistical surveys, the regional environmental inspectorates are required to provide reports on the carried out inspections twice per year to the Chief Inspectorate for Environmental Protection (GIOS). Then data is transferred / submitted for the entire reporting year:

- to the Central Statistical Office, concerning Control activities;
- to the Ministry of Finance and the National Fund for Environmental Protection and Water Management, concerning data on revenues and allocation of funds under the sanctions imposed.²⁶⁰

²⁵⁴ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

²⁵⁵ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

²⁵⁶ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

²⁵⁷ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

²⁵⁸ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

²⁵⁹ Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

²⁶⁰ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

Data transmitted to the Central Statistical Office are used in the Annual statistical reports and other publications.

On the website of Chief Inspectorate for Environmental Protection "information about the tasks Inspectorate for Environmental Protection" is publicly available. The material contains data for the previous year. The chapter "control activities" includes the cumulative data from all regional inspectorates, concerning inspection activities. The reports of the inspections are not publicly available, but it is possible to obtain the information contained therein upon request.²⁶¹

There is a number of activities to control the work of the Chief Sanitary Inspectorate, through:

- accreditation (by the Polish Centre of Accreditation).
- The National Union for Control (Najwyższa Izba Kontroli – NIK).
- The Ministry of Health (for complying with the guidelines and provisions of the Ministry).

Inspectors are controlled by the Chief Sanitary Inspectorate itself, i.e. the hierarchical structure of the Chief Sanitary Inspectorate allows for internal quality control of the work done by the inspectors.²⁶²

²⁶¹ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

²⁶² Interviewees from the Department of Water Health Safety, Chief Sanitary Inspectorate

8.2 Poland: Water: Waste water treatment

Legislative framework

The **Chief Inspector of Environmental Protection** sets out the general direction of the Environmental Protection Inspectorate (Inspektorat Ochrony Środowiska – IOS) by:

- setting goals and test cycles for each year.
- publishing recommendations and guidelines defining the procedure for the statutory tasks of the IOS.
- controlling the status of their implementation (Article 4a. 1 point. 1) of the Act on IOS.²⁶³

It is not part of the competencies given to the Environmental Protection Inspectorate through the Act on Inspections of Environmental Protection to conduct controls on discharges from individual sewage treatment systems.^{264,265} Individual waste-water treatment systems, are defined as:

- Domestic sewage treatment plants, where discharge is less than 5m³ water a day, which does not require a water permit, and
- Sealed septic tanks located on private property of individuals that are not engaged in business activities.

However, Directive 91/271/EEC concerns the collection, treatment and discharge of urban waste water and the treatment and disposal of sewage from certain industrial sectors and thus controls municipal wastewater treatment and industrial applications. In this regard, the Environmental Protection Inspectorate carries out the inspections. In order to implement the requirements of the Directive 91/271/EEC in Poland, the National Programme for Municipal Wastewater Treatment (Krajowy Program Oczyszczania Ścieków Komunalnych - KPOŚK) was established. The National Water Management Authority (Krajowy Zarząd Gospodarki Wodnej – KZGW) oversees the implementation of municipal wastewater treatment, however the Environmental Protection Inspectorate (IOS) participates in the evaluation of the Programme by conducting national control cycles of the tasks included in the National Programme for Municipal Wastewater Treatment KPOŚK.²⁶⁶

The **Ministry of Transport, Building and Maritime Law**, is partly responsible for the implementation of *the Law of 13 September 1996 on maintaining cleanliness and order in communities* (Journal of Laws of 20012, item 391 with amendments). This Law defines the roles and responsibilities of property owners, local self-government bodies (municipal

²⁶³ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

²⁶⁴ Interviewee from the Ministry of Transport, Building and Maritime Law

²⁶⁵ The opinions of the different Ministries on their responsibilities were partly contradictory. While the IOS stated they are not responsible for individual waste-water treatment systems, the interviewee from the Ministry of Transport, Building and Maritime Law referred to the IOS concerning the inspections of sealed septic tanks.

²⁶⁶ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

council or mayor) for maintaining cleanliness and order (in septic tanks, sewage treatment plants), and the terms and conditions of service providers in the field of emptying septic tanks and transport liquid waste. The mayor is also responsible for monitoring compliance and its application by the property owners and service providers, following the provisions in the act.

The **Ministry of Environment** is responsible for the implementation of Directive 91/271/EC.

To control compliance, Art. 379 and 380 of the *Act of April 27, 2001 concerning the Environmental Protection Law* (Journal of Laws of 2008 No. 25, item. 150, as amended) apply. Pursuant to Art.3 §3 of that Act, **the municipality** shall record:

- Septic tanks to control the frequency of emptying and to develop a plan for the development of the sewerage system;
- Sewage treatment plants to control the frequency and method of disposal of municipal sewage sludge and to develop a plan for the development of the sewerage system.²⁶⁷

Control of the quantity and quality of domestic wastewater discharge and industrial effluent, as well as monitor compliance with the conditions for discharging wastewater into the sewage system is the responsibility of **water and sewerage companies**. The water and wastewater utilities in Poland mainly belong to the municipality and their operations are thus controlled by state authorities. However, public-private partnerships as well as private companies have recently entered the market, where monitoring and audit might be done by an independent private entity, rather than the state. The water and sewage company is also required to take action if it is determined that the quality of water entering does not meet the requirements of the law.²⁶⁸

Strategic approach to Inspection

In order to implement the requirements of the Directive 91/271/EEC in Poland, the National Programme for Municipal Wastewater Treatment (Krajowy Program Oczyszczania Ścieków Komunalnych - KPOŚK) was established. The National Water Management Authority (Krajowy Zarząd Gospodarki Wodnej – KZGW) oversees the implementation of municipal wastewater treatment. The cooperation between KPOSK and KZGW with the IOS was established in the document entitled 'Ogólne kierunki działania organów Inspekcji Ochrony Środowiska w latach 2007 – 2013' (The broad lines of operation of the Environmental Protection Inspectorate in the period 2007 – 2013).²⁶⁹

The provisions concerning collective waste water treatment and sewage system is governed by the Law of 7 June 2001 on the public water supply and discharge of waste water (ustawa

²⁶⁷ Interviewee from the Ministry of Transport, Building and Maritime Law

²⁶⁸ Interviewee from the Department of International Cooperation, Inspection and Promotion, Chief Inspectorate for Environmental Protection

²⁶⁹ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

z dnia 7 czerwca 2001 r. o zbiorowym zaopatrzeniu w wodę i zbiorowym odprowadzaniu ścieków)

The IOS carries out inspections in a consistent way across the country developed on the basis of the rules of the Chief Inspectorate of Environmental Protection (Główny Inspektorat Ochrony Środowiska – GIOS). This includes the use of standard forms used for documenting inspections and follow-up, which take into account the recommendation of the European Parliament and of the Council of the European Union No. 2001/331/EC providing for minimum criteria for environmental inspections (RMCEI).

Until 2010, the "Manual for inspections and follow-up actions by the Environmental Protection Inspection Service" was mandated to be used. It consisted of two parts: Part I - indications on how to carry out the control and Part II - Templates of documents prepared by the inspector during the inspection. As part of the Project PL0100 to "Increase the effectiveness of the Environmental Protection Inspectorate, based on the Norwegian experience," which ran from 2007 to 2010 a new control system was developed and referred to as SK (System Kontroli – i.e. control system), which also takes into account the RMCEI.

The Control System is a set of rules of proceedings, procedures and guidelines that make up the inspection process including, among others annual and quarterly planning, determining the scope of the controls (preparation of the audit programme), carrying out controls, documenting actions taken during the inspection and presenting the findings concerning the status quo, performance measurements, preparation of the inspection report and follow-up activities. An integral part of SK is the Computer Aided Control System (Informatyczny System Wspomagania Kontroli – ISWK), in which data are recorded on water treatment plants and the findings of the inspections. ISWK is an essential tool for supporting the inspector in the implementation of control. ISWK can generate different types of reports, such as inspection reports, annotations, a report on compliance with EU directives, a report on the implementation of follow-up, etc.²⁷⁰

The role of the IOS is to carry out inspections to assess the compliance of controlled entities with the provisions in the field of environmental protection and administrative decisions and their execution concerning the use of environmental resources. The inspections carried out by the IOS can also contain instructions that are designed to prevent potential violations and raising awareness of the controlled entities.²⁷¹

The IOS is responsible for monitoring compliance with the provisions of environmental protection as well as conducting research and environmental assessments. The tasks of the IOS include the control of the users of the environment following the provisions set out in the Act of April 27, 2001 - Environmental Protection Law (Journal of Laws of 2008 No. 25, item. 150, Amended. - *Dz. U. z 2008 r. Nr 25, poz. 150, z późn. zm.*), amongst others in the following aspects:

²⁷⁰ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

²⁷¹ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

- compliance with environmental regulations,
- compliance with the Decisions establishing the conditions for use of the environment and compliance with the scope, frequency and method of measurement of emissions and their impact on the environment

In accordance with the programme of public statistical surveys, the regional environmental inspectorates are required to provide reports on the carried out inspections twice per year to the Chief Inspectorate for Environmental Protection (GIOS). Then data are transferred / submitted for the entire reporting year:

- to the Central Statistical Office, concerning Control activities
- to the Ministry of Finance and the National Fund for Environmental Protection and Water Management, concerning data on revenues and allocation of funds under the sanctions imposed.²⁷²

The entity conducting the emptying of septic tanks and transporting liquid waste is responsible for preparing and submitting quarterly reports to the mayor or the president of the community which include:

- information on the amount and type of liquid waste received from the area of the municipality;
- information about how liquid waste is disposed of, indicating the station to which the liquid waste was transferred
- the number of property owners from whom liquid waste was collected.

The above mentioned entities also have to attach evidence to the report showing with which property owners a new contract for emptying septic tanks and transporting liquid waste were concluded during the reporting period and with which property owners contracts have ended.

The mayor is obliged to draw up and transfer to the voivodship marshal of the province and environmental inspector's annual report on the implementation of the tasks of municipal waste containing such information about the amount and type of liquid waste received from the area of the municipality. The provincial environmental inspector is obliged to verify the information contained in the report. Then the provincial environmental inspector is required to prepare and submit the environment annual report on the implementation of the tasks in the field of municipal waste to the Minister responsible, with information about the number and the type of liquid waste received from the area of the province.

²⁷² Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

Inspections

The principal tasks of the Inspection of Environmental Protection are described above.²⁷³

The main objective of the audit is to assess the environmental impact of the installation or plant, the effectiveness of environmental protection solutions and operator accuracy. By using the SK and ISWK, the IOS carries out planned and unannounced inspections. These are detailed in the section on drinking water above.

A protocol of the field visit of inspection shall be drawn up, while in the case of inspections based on documentation only (no field visit) a summary of the control activities is prepared. The inspection and summary of the inspections are drawn on paper and electronically. The documents referred to are generated from ISWK.²⁷⁴

The frequency of inspections is determined in accordance with applicable environmental laws, guidelines of the Chief Inspector for Environmental Protection and the regional Governor. The frequency of scheduled inspection is also subject to the risk category to which the plant was classified (see above for further information):

- Category I - control every year,
- Category II - check every two years,
- Category III - check every three years,
- Category IV - check every four years.
- Under Category V unplanned inspection can be carried out for entities in case of identified need.
- For companies with an environmental management system and in which the last scheduled inspection no significant breaches of environmental requirements were recorded, it is recommended to reduce the frequency of controls in relation to the frequency resulting from the grade of the categories.

The inspection also controls the analysis of the results of measurements of emissions and other conditions of environmental resource use, carried out by entities making use of these resources.²⁷⁵

Follow-up

If the monitoring indicates a violation of environmental protection requirements, the costs for sampling, measurements and analysis have to be borne by the organizational units or individuals whose activities are a source of violation of these requirements. The costs shall be determined by decision of the authority of the Environmental Protection

²⁷³ http://epanet.ew.eea.europa.eu/european_epas/countries/pl/

²⁷⁴ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

²⁷⁵ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

Inspectorate which will evaluate the violation of the requirements of environmental protection.²⁷⁶

Please see section on drinking water for further detail.

Capacity

The General Inspectorate for Environmental Protections employs approximately 2500 people (720 inspectors, 300 involved in monitoring, 840 laboratory staff, and 610 management and administration staff).²⁷⁷

IOS does not conduct controls in the area of septic tanks. The Sanitation Inspection conducts inspections concerning water in relation to abstracted water quality for water supply for people and bathing water.

Concerning the discharge of liquid waste from individual septic tanks, it is the responsibility of the community to control and keep a record of:

- 1) septic tanks - controlling the frequency of their discharge and developing a plan for the development of the sewerage system;
- 2) sewage treatment plants of individual households - controlling the frequency and method of disposal of municipal sewage sludge and to develop a plan for the development of the sewerage system;²⁷⁸

Inspectors conducting inspections have special competencies required for the position held and the topic area of their control activities. In addition to the specific qualifications required, general requirements for training in accordance with applicable regulations are set out. See section on drinking water for information on training for inspectors.

Inter-institutional arrangements

Concerning intra-agency cooperation, the state, employers and employees (trade unions) together form the Tripartite Team for Construction and Utilities since 2012, with the purpose of conducting trilateral sectoral dialogue to reconcile interests and solve problems in the labour market in the construction industry, real estate, including land use issues, building materials and construction products and utilities.

The task of the team is to develop a common position on important issues including the point of view of the state and the interests of workers and employers. It functions as a platform of social dialogue, to exchange information and ideas, and thereby helps clarify misunderstandings and prevent possible conflicts. The Team includes representatives from the Ministries of Transport, Economy, Labour and Social Policy, Regional Development, Finance, Education and Environment. From the company side, there are trade unions for

²⁷⁶ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

²⁷⁷ http://epanet.ew.eea.europa.eu/european_epas/countries/pl/

²⁷⁸ Interviewee from the Department of Environmental Monitoring and Information at the Environmental Protection Inspectorate

construction, public utilities and land, as well as different associations and corporations of entrepreneurs, and business representatives.²⁷⁹

Concerning international cooperation, there is cooperation between Poland and the Czech Republic, Germany, Slovakia, Ukraine and Lithuania. However, only with the Czech Republic does the cooperation concern water supply and waste water treatment in particular. In the field of border control waterways, water supply and drainage border areas Poland and the Czech Republic discussed the scope and cost of the maintenance performed on the boundary waters, provided information about the positive results of controls implemented within the Turow Lignite Mine, spoke about the current state of cooperation with the Bilateral Intergovernmental Commission for the operation of coal mines in the region of a joint Polish-Czech border. Cooperation in the field of the protection of waters against pollution limits, Poland took note of the information on the investments made to improve the quality of boundary waters, accepted a proposal from the Cooperation Group on how to interpret the results and presented information bacteriological contamination of the White Głuchołaska.²⁸⁰

Although the Ministries (Environmental, Transport, IOS) are generally aware of each other's responsibilities and are in regular contact, the respective responsibilities in some areas do not seem to be clearly divided. No evidence for a central co-ordination body was found.

Effectiveness

The KPOSK (National Urban Wastewater Treatment Programme) is a good practice example of a body that effectively implements waste water treatment and that implements the Council Directive 91/271EEC. It was discussed in the pre-accession talks and established in 2003, with the aim of identifying the actual needs for sewage management and prioritizing the implementation in such a way as to meet the obligations under the Treaty.

However, difficulties also exist, as the KPOSK, which undergoes yearly evaluation, is not able to complete all of its tasks due to investment delays. Therefore delays of the establishment of additional wastewater treatment capacity or modernizations of existing plants have been delayed in 126 cities.²⁸¹

²⁷⁹ Tripartite Team for Construction and Utilities <http://www.transport.gov.pl/2-49cb8eaa55ef1.htm>

²⁸⁰ Cooperation with the Slovak Republic, <http://www.kzgw.gov.pl/pl/Wspolpraca-z-Republika-Slowacka.html>

²⁸¹ KPOSK, <http://www.kzgw.gov.pl/pl/Krajowy-program-oczyszczania-sciekow-komunalnych.html>

8.3 Poland: Nature Directives

Legislative framework

The Polish legal framework is the Environmental Protection Act of 16 April 2004 (Journal of Laws No. 151, item 1220, amended).²⁸²

The key actor responsible for the implementation and inspection of the implementation of Natura 2000 (including the Birds and Habitat Directive) is the General Directorate for Environmental Protection (Generalna Dyrekcja Ochrony Środowiska – GDOS). The GDOS is under the auspices of the Ministry of Environment. The activities of the GDOS are mainly set out by the following regulations:

- The Act of 3 October 2008 on sharing information about the environment and its protection, public participation in environmental protection and environmental impact assessment (Journal of Laws No. 199, item 1227, as amended).
- Orders to the Act of 3 October 2008 on sharing information about the environment and its protection, public participation in environmental protection and environmental impact assessment (Journal of Laws No. 199, item 1227, as amended)²⁸³.
- The Act of 27 April 2001. Environmental Law (Journal of Laws No. 25, item 150, as amended).
- The Environmental Protection Act of 16 April 2004 (Journal of Laws No. 151, item 1220, as amended) and related orders to the Environmental Protection Act.
- The Act of 13 April 2007 on preventing the damages to nature and their compensation (Journal of Laws No. 75, item 493, as amended)²⁸⁴.

The work of the GDOS concerning Natura 2000 is often dependent on the planning in other Departments and Ministries (that will be listed below), however the responsibility for the implementation of the Birds and Habitats Directives lies with the GDOS.

At the regional level (Voivodships), the Regional Directorates of Environmental Protection (Regionalna Dyrekcja Ochrony Środowiska RDOS) are responsible for the implementation of the provisions of these acts. Conservation and protection measures (provisions) for Natura 2000 sites are identified in the plans for conservation measures (Plany Zadan Ochronnych, PZO), the Protection management plans (Plany ochronne - PO), and can be specified in the forest management plans (Plany urządzania lasu - PUL) where they relate to the conservation objectives of the Natura 2000 sites. Natura 2000 areas in marine conservation

²⁸² http://www.gdos.gov.pl/Articles/view/2888/History_of_establishing

²⁸³ The Orders of 3 October 2008 include: Council of Ministers' Order of 9 November 2010 on projects with substantial environmental impact (Journal of Laws No. 213, item 1397) ; Minister of Environment's Order of 22 September 2010 on the model, content and design of the publicly available list of the documents on environment and environmental protection (Journal of Laws No. 186, item 1249); Minister of Environment's Order of 23 November 2010 on the manner and frequency of updating information about the environment (Journal of Laws No. 227, item 1485); Minister of Environment's Order of 17 April 2012 on the detailed scope of information about conducted environmental impact assessments and strategic environmental impact assessments (Journal of Laws of 2012, item. 529)

²⁸⁴ General Directorate for Environmental Protection, http://www.gdos.gov.pl/Categories/view/202/Natura_2000

measures are identified in conservation plans (PO) developed by the Maritime Offices (Urzedzy Morskie).

The implementation of Natura 2000 is based on agreements with landowners, which lay out the necessary steps, methods and deadlines for the implementation of the directives' provisions, as well as the compensation for loss of income as a result of the restrictions placed on them. The mechanism of individual contracts between the Regional Directorates for Environmental Protection (RDOS) and the public (citizens) concern specific cases and situations where the economic activity, agriculture, forestry, hunting and fishing require adjustment for the protection of the environment in the area, and where the citizen suffers losses and may not be eligible for any aid programme. The basic tools for the implementation of the Directives relating to the Natura 2000 network are the PZO and POs.

The supervision of individual Natura 2000 sites has been allocated to different bodies, depending on the ownership of the land, the conservation status of the area etc. These bodies can include local authorities, administrations of forests, bodies responsible for water management, etc. The supervision is carried out by directors of national parks in the area of the Natura 2000 sites, which overlap with national park borders.

The implementation of the policies as well as monitoring the conservation status of habitats and species, as well as reporting back, is part of the bodies' responsibilities (every six years for the habitats and every three years for the Bird areas). There is no common approach for organising and carrying out inspections. The General Directorate for Environmental Protection sets out guidelines for how to conduct environmental impact assessments when a new structure is being built in a Natura 2000 site, or when changes are made to the site. For the overall monitoring of environmental status at Natura 2000 sites, data are collected through observations and field visits conducted by the Regional Directorates for Environmental Protection and the national park directors and other persons involved. A breakdown of the responsibilities is outlined below:

- Overall state Environmental Monitoring is conducted by the Central Inspectorate for Environmental Protection (GIOS) and the GIOS also produced the information on the status of species and habitats (as regulated by the Nature Conservation Act).
- With regard to the cross-compliance rules - institutions controlling the implementation of Natura 2000 provisions are the Agency for Restructuring and Modernisation of Agriculture (ARIMR) and the Ministry of Agriculture and Rural Development.
- With regard to the protection of game species, the responsible institution is the Ministry of Environment, through the Law on hunting.

Other key actors involved are:

- Mayors of cities and villages, which take decisions on investments and implementation.
- ARIMR - Agency for Restructuring and Modernisation of Agriculture.
- Regional Directorates of Environmental Protection.
- Ministry of Agriculture and Rural Development.

Strategic approach to inspections

So far, no enforcement policy has been developed, according to the knowledge of the GDOS.²⁸⁵ Inspections are carried out by many different bodies and no single implementation policy is in place. However, there are:

- Guidelines for regional directors for environmental protection on issuing certificates by the authority responsible for Natura 2000 sites monitoring²⁸⁶.
- Guidelines from the General Director for Environmental Protection on regional directors for environmental protections' opinions on the lack of contradictions between the planned afforestation and protection or protection schemes plans for a given Natura 2000 site²⁸⁷.
- Administrational proceedings in the cases concerning environmental impact assessments - GDOŚ Methodological Notebooks No. 1 - document on procedures for conducting environmental impact assessments with application form specimens²⁸⁸.

The draft regional inspection plan is drawn up by the site supervisor (usually the Regional Director for Environmental Protection). During the preparation of a plan it is necessary to encourage participation of entities and subjects who run business activities on the territory of natural habitats and species for which Natura 2000 site was designated as well as to enable public consultations.²⁸⁹ Between 2010 and 2013, it is estimated that 1100 local workshops with 9000 participants were held.²⁹⁰

Inspections

The Nature Conservation Act of 16 April 2004 (Journal of Laws of 2009 No. 151, item 1220) refers the monitoring of Natura 2000 sites to the General Inspectorate of Environmental Protection, which is thus conducted together with the overall environmental monitoring. According to the Act, environmental monitoring is concerned with observation and the assessment of the status and changes occurring in the elements of biological and landscape diversity on particular areas as well as the assessment of effectiveness of undertaken environmental protection methods, including observation of natural habitats and plant and animal species. The body responsible for nature monitoring of biological and landscape diversity within the national environmental monitoring programme is the Chief Inspector for Environmental Protection.²⁹¹

In relation to Natura 2000 sites²⁹²:

²⁸⁵ Interviewee from the Ministry of Transport, Building and Maritime Law

²⁸⁶ http://www.gdos.gov.pl/files/prawo_zal/zalacznik-lb.pdf

²⁸⁷ http://www.gdos.gov.pl/files/prawo_zal/Wytyczne_GDOS_do_zalesien.pdf

²⁸⁸

http://www.gdos.gov.pl/files/prawo_zal/Zeszyty_metodyczne_GDOS_Nr_1_postepowanie_administracyjne_OS.pdf

²⁸⁹ http://www.gdos.gov.pl/Articles/view/2893/Conservation_measures_plans

²⁹⁰ Pawlaczyk (2010). Natura 2000 in Poland - Last Progress. Powerpoint presentation.

²⁹¹ http://www.gdos.gov.pl/Articles/view/2873/Monitoring_and_environmental_data

²⁹² Interviewee from the Ministry of Transport, Building and Maritime Law

- Monitoring the conservation status of habitats and species in the Natura 2000 areas is carried out by the unit supervising the areas (Regional Directorates for Environmental Protection, Marine Offices). Instructions for how to monitor are specified in the plans for conservation measures (Plany Zadan Ochronnych, PZO) and the Protection management plans (Plany ochronne - PO).
- Monitoring / inspecting the implementation of protective measures will be undertaken by the institution supervising the area. Instructions for how to monitor this are specified in the plans for conservation measures (Plany Zadan Ochronnych, PZO) and the Protection management plans (Plany ochronne - PO).
- Reporting shall be in accordance with Article. 31 of the Act on the Protection of Nature.
- The Regional Directorates for Environmental Protection (RDOS) are controlled by the Director General for Environmental Protection (GDOS). Inspections are conducted in accordance with the established inspection plans of the Regional Directorates (RDOS).
- Inspection measures concerning national parks are conducted by the MoE.
- Inspection measures concerning the Maritime Offices are conducted by the Ministry of Transport, Construction and Maritime Economy

Given that the plans for conservation measures (Plany Zadan Ochronnych, PZO) and the Protection management plans (Plany ochronne - PO) have only recently been designed, monitoring and inspection measures were so far carried out to a limited extent. RDOS inspection activities were conducted mainly in relation to activities that may have significant effects on the Natura 2000 (in accordance with Article 37 of the Act of Environmental Protection), if there was a hint that these activities were done without authorization or decision.²⁹³ In the investigations carried out by the RDOS and GDOS, no fees are charged for inspections carried out in relation to Natura 2000 sites.²⁹⁴

Capacity

Although, the recently gained experiences have revealed many advantages of delegating some environmental protection responsibilities to local governments, officials have insufficient skills and limited budgets.²⁹⁵ Fixed costs per one year in the years 2006-2013 was around 1.29 million euro for biodiversity monitoring.²⁹⁶ Regarding skills, in relation to Natura 2000 sites it is difficult to determine this because the implementation of management tools is at an early stage.²⁹⁷

Inter-institutional arrangements

There are also no office to coordinate cross-cutting issues or arrangements with other institutions.²⁹⁸

²⁹³ Interviewee from the Ministry of Transport, Building and Maritime Law

²⁹⁴ Interviewee from the Ministry of Transport, Building and Maritime Law

²⁹⁵ Grodzińska-Jurczak et al. (2012). Chapter 9: Effectiveness of Nature Conservation – A Case of Natura 2000 Sites in Poland.

²⁹⁶ Stocki, JS (2013). "Programme of NATURA 2000 in Poland".

²⁹⁷ Interviewee from the Ministry of Transport, Building and Maritime Law

²⁹⁸ Interviewee from the Ministry of Transport, Building and Maritime Law

Inspection review

As few inspections have been carried out, an inspection review has not taken place.

Effectiveness

Short-comings: The Act on Nature Conservation has introduced an unclear system of responsibility concerning Natura 2000 sites. For example, it recognises four different levels of responsibility: supervising the functioning of the Natura 2000 sites, coordinating the functioning of Natura 2000 sites, carrying out supervision over a Natura 2000 site and fulfilling tasks concerning nature protection within a Natura 2000 site. It is not clear which level of responsibility concerns the execution of management measures, which one concerns the monitoring of a Natura 2000 site and which one concerns providing the funding. The mutual relations between the levels of responsibility have not been clearly defined.²⁹⁹

The relevant EU and national legal provisions are not optimal to ensure an effectively functioning compliance assurance system. Concerning Habitats Directive Art. 6 (2), there is the obligation for the Nature Authority to stop illegal activities, but there are no obligations to avoid the effects of legal but destructive effects of natural processes and the responsibility is unclear. Art 6(1) has also only been transposed partly. Preparation of management plans is obligatory, but there is no obligation to implement them into practice. Article 36 of Polish NPA is contradictory to the Directive and ECJ ruling on the possibility to limit forestry, farming, fishery, etc only if significant negative impacts on Natura 2000 sites are not doubted).³⁰⁰

Transparency

Currently, Poland is in the second phase of the Natura 2000 Network - characterized by development of management plans for designated protected sites. These plans seem to be especially controversial as they have direct effect on the local economies. Due to a top-down approach the interests of the population to collaborate in the development of Natura 2000 sites and area management plans were very low. Active protection on private lands is impossible without prior agreement and support of landowners.³⁰¹ The public participation process that Natura 2000 aims at was not sufficiently developed in Poland and landowners were not made aware about the Natura 2000 Network and its implementation process. This has led to hostility from stakeholders, as monitoring activities are considered as an intrusion on private land and a violation of property rights.³⁰²

²⁹⁹ Pawlaczyk et al (2004). Natura 2000 Shadow List in Poland.

³⁰⁰ Pawlaczyk (2010). Natura 2000 in Poland - Last Progress. Powerpoint presentation http://www.kp.org.pl/pdf/poradniki/jak_sie_troszczyc_o_obszar_n2000-pzo20100626.pdf.

³⁰¹ Grodzińska-Jurczak et al. (2012). Chapter 9: Effectiveness of Nature Conservation – A Case of Natura 2000 Sites in Poland, p.9.

³⁰² Grodzińska-Jurczak et al. (2012). Chapter 9: Effectiveness of Nature Conservation – A Case of Natura 2000 Sites in Poland, p. 9.

8.4 Poland: CITES

Legislative framework

The legislative framework for CITES in Poland is defined by the Nature Conservation Act (April 2004)³⁰³. Owners of animal species covered by CITES must submit a declaration of possession to the appropriate district authority. This obligation to register does not apply to zoological gardens, persons involved in animal trade (economic activity involving the use of animals) and persons taking care (not permanently) of CITES animals for medical/rehabilitation reasons. However, those concerned must possess documents with legal information in the case of trade (to be passed on to the buyer). Prohibitions apply to all native protected species (including CITES species). Exemptions/Permissions can be obtained from the General Directorate for Environmental Protection. The key institutions are:

- Management Authority (MA): The MA of Poland for CITES is represented by the Ministry of the Environment and the Director responsible of the Department of Nature Conservation.
- Scientific Authority (SA): The National Council for Nature Conservation holds this position. It is independent from the MA. The CITES SA of Poland is represented by the CITES Commission within the State Council for Nature Conservation (body providing independent opinion and counselling for the Minister of the Environment). The CITES Commission consists of 5 persons working on a voluntary basis (skills include: Botany, Ecology, Welfare, Zoology). In 2010, requests for opinions occurred 170 times.
- Enforcement authority (EA): A specialized unit for CITES related enforcement has been established in Poland. It is composed of CITES coordinators that have been designated within the Police forces (General and Regional), the Ministry of Finance, Regional customs Chambers and the General Veterinary Inspectorate. Their role is to coordinate CITES related efforts and monitor activities of local and regional units concerning crimes against wildlife.

The General Veterinary Inspectorate³⁰⁴ is the central competent authority for overall implementation of the regulations including training, awareness of the passengers and the effectiveness of the official controls.

The CITES Management Authority of Poland runs the Internet Website devoted to CITES issues, which includes list of CITES species, information on existing CITES and related EU provisions, additional information materials and explanations. The Customs Service regularly informs the public on the issue of illegal trade in wild fauna and flora through awareness building projects. Polish NGOs, such as WWF Poland, Polish Society for Nature Conservation "Salamandra" and Regional Environmental Centre (REC) also provide important information on CITES matters and current projects concerning the Washington Convention, as well as

³⁰³ Journal of Laws (2004), Nature Conservation Act, www.eu-wildlifetrade.org/pdf/natleg/NatureConservationAct2004en.pdf

³⁰⁴ European Commission, (2012), Final Report of an Audit carried out in Poland from 21 to 25 may 2012, http://ec.europa.eu/food/fvo/act_getPDF.cfm?PDF_ID=9856

booklets, guides and manuals for identification.³⁰⁵ This work includes information campaigns, specific actions that can be taken, workshops, brochures, posters, and exhibitions. Some examples of such awareness raising campaigns include:

- Project on “Support for Restoration and Protection of Baltic Mammals” the WWF Poland and the Marine Station IOUG have been patrolling the whole Polish Baltic coast on a temporary basis and gathering the reports, since 2010.
- Project on conservation of big predators in Poland (Lynx lynx, Canis lupus and Ursus arctos) is run by WWF Poland.
- A number of projects on protection and monitoring of marine mammals, including porpoises.
- Polish-German project on the restoration of Baltic Sturgeon in Odra river.
- Conservation, national strategies and management plans for Lynx lynx, Canis lupus and Ursus arctos.
- Re-introduction of select native birds of prey (e.g. Falco peregrinus, Falco tinnunculus).

Inspection planning and process

As mentioned, the General Veterinary Inspectorate is the central authority responsible for implementing CITES and other related national measures. It also works with other organisations (these are more often NGOs such as WWF Poland, Salamandra which is the Polish Society for Nature Conservation) to plan out the inspection process.

The General Veterinary Inspectorate issues specific instructions for environmental inspections for CITES (i.e. on the non-commercial movements of pet animal). This information is available on its website as well as on the Polish Customs intranet. However, concerning controls of compliant pet animals, there is no requirement for these controls to be recorded.

Customs carry out the inspections on wildlife trade. They coordinate and monitor sub-units in the field of wildlife crimes; cooperate with field government and non-government organizations and organize specialist training for lower level police officers. The central unit responsible for CITES issues and coordination in this field within the customs administration is the Non-Tariff Measures and Restrictions Unit in the Customs Policy Department (part of the Ministry of Finance). Information is relayed from the Ministry of Environment to the Ministry of Finance, thence to the coordinators and the customs chambers. Within each of the customs chambers, there are customs offices. There are 46 customs offices in Poland³⁰⁶. Assessment and compilation of CITES seizures is prepared by the Customs Service and Police. Aforementioned compilations are forwarded to the CITES MA on a regular basis.

Customs can only make seizures because confiscations require a court decision. The identification of live specimens is sometimes a problem, especially as the decision has to be made within two hours of detection. The Veterinary Inspectorate must decide whether there is time to call an expert for identification. Identification of species is carried out with

³⁰⁵ CITES (2009) Poland Biennial Report

2007 – 2008, www.cites.org/common/resources/reports/pab/07-08Poland.pdf

³⁰⁶ TRAFFIC for Defra (2005) Enforcement of wildlife trade controls in EU Member States: Country Profiles, www.traffic.org/enforcement-reports/traffic_pub_enforce1.pdf

the help of research institute experts. It is up to the co-ordinator to develop co-operation with research institutes or experts. Training modules that can be used for identification are accessible at border-crossing points 24 hours a day. The co-ordinator can also be called 24 hours a day (Traffic, 2005).

CITES specimens seized by customs services constitute evidence in criminal proceedings until the court takes a decision regarding forfeiture of goods. In case of any doubt on the compliance during controls, the Customs officials are obliged to contact the Poviats Veterinary Inspectorate to take the final decision. At some border points, a high share of arriving cargo, vehicles and persons are checked. The enforcement authorities (i.e. the Polish Customs that carries out the controls on pet animals movement from one country to Poland) monitor and control wildlife trade on international markets by carrying out inspections of pet-shops, animal fairs, monitoring of sales of CITES specimens in the internet)³⁰⁷

In terms of internal control of CITES, the Society of Animal Welfare and Veterinary Inspection is a government agency authorised to inspect conditions for the keeping of live animals. Local administrations also may check pet shops, for example, and such checks may also be undertaken by Customs officers from Mobile Groups. Concerning confiscated specimens, during inspections, live CITES specimens are directed to public zoological or botanical gardens while dead ones are distributed for training purposes to Customs, Police and for educational purposes (schools, universities, museums). Another CITES enforcement agency is the State Plant Health and Seed Inspection Service.³⁰⁸

Table 18 below provides some indication on trends in inspections by the Inspectorate for environmental protection. These inspections cover all environmental sectors that require controls, therefore is not specific to CITES only. According to the trends, in the late 1990s, about 16,000 inspections per year were carried out and the probability of being inspected is therefore one every three or four years, though some activities are inspected once or more a year.

Table 18: Trends in Inspections by the Inspectorate for Environmental Protection³⁰⁹

	1998	1999	1 st half of 2000
Total number of inspections	16 617	15 976	8 583
Number of intervention inspections	3 284	2 994	1 681
Number of inspected entities	13 219	13 452	7 502
Total value of fines imposed (million PLN)	311.3	191.0	143.5

Compliance and enforcement

Within the Police forces (General and Provincial Headquarters), Ministry of Finance, Provincial Customs Chambers and General Veterinary Inspectorate, CITES coordinators have been designated. Their main role is to coordinate CITES related efforts and monitor activities

³⁰⁷ TRAFFIC Europe (2012), Compilation of EU Member State CITES Biennial Reports 2009-2010, ec.europa.eu/environment/cites/pdf/compilation_2009-2010.pdf

³⁰⁸ TRAFFIC for Defra (2005) Enforcement of wildlife trade controls in EU Member States: Country Profiles, www.traffic.org/enforcement-reports/traffic_pub_enforce1.pdf

³⁰⁹ OECD (2003), OECD Environmental Performance Reviews: Poland, p. 61.

of local and regional units concerning crimes against wildlife. These enforcement authorities monitor and control wildlife trade in internal markets (e.g. by carrying out inspections of pet-shops, animal fairs, monitoring of sales of CITES specimens in the Internet). Among enforcement authorities there is no leading and superior institution.

Articles 127–131 of the Nature Conservation Act concern penalties with respect to penal provisions for violation of CITES and EU regulations regarding the protection of species of wild fauna and flora. Persons who transport plants or animals covered by the above-mentioned provisions and crosses the border without necessary permits or with a false declaration or without a phytosanitary certificate are subject to imprisonment from 3 months to 5 years; persons carrying out economic activities in animal trade or who does not have or does not present proper documentation stating the legal origin of the animal are subject to punishment of imprisonment or fine.³¹⁰ The highest possible penalty was not imposed during the 2007-2008 reporting period. In the majority of cases courts apply financial sanctions and forfeiture. There have been instances where cases were discontinued due to insufficient evidence or low social noxiousness.

In the period 2007-2008, Police observed a considerable increase in the number of CITES cases referring to the Internet “trade”. According to the General Headquarters of Police, among the reported 564 cases in 2007, 285 were Internet related. In 2008, 281 cases of the total 502 were associated with the Internet.³¹¹

The most frequent crime against endangered species of fauna and flora is border-crossing without necessary permits and offering for sale without sufficient documents stating their legal origin. Sentences in the majority of court cases imposed fines and forfeitures of seized specimens. There were also cases where courts also imposed on the convicts the obligation to work for public purposes. Furthermore, people who were convicted for the infringement of provisions regarding wildlife trade can be refused by CITES Management Authority to obtain a CITES permit within the period of 3 years from the date of conviction (art. 61 p. 7 of Nature Conservation Act of 16 April 2004).³¹² Table 19 below lists some of the interesting seizures of 2008.

Table 19: Interesting seizures of 2008³¹³

Seizure type	Number of confiscated specimens	Origin
1. Jewellery made of ivory	6 no.	Import - Zambia
2. Live parrots:		Internal market control
-Cyanoramphus novaezelandiae	48 no.	
-Psittacus erithacus	9 no.	
-Neophema bourkii	4 no.	

³¹⁰ TRAFFIC for Defra (2005) Enforcement of wildlife trade controls in EU Member States: Country Profiles, www.traffic.org/enforcement-reports/traffic_pub_enforce1.pdf

³¹¹ <http://www.cites.org/common/resources/reports/pab/07-08Poland.pdf>

³¹² Poland Biennial report 2009-2010, www.cites.org/common/resources/reports/pab/07-08Poland.pdf

³¹³ Poland Biennial Report, www.cites.org/common/resources/reports/pab/07-08Poland.pdf

-Aprosmitus erythropterus	1 no.	
-Polytelis alexandrae	1 no.	
3. Furs with elements of skins from:		Import – Russian Federation
-Lynx canadensis	34 no.	
-Lynx rufus	22 no.	
4. Vertebras of Cetaceans	12 no.	import - Iceland
5. Live Rhacodactylus ciliatus	11 no.	import - USA
6. TCM – derivatives of Hippocampus spp.	200 000 containers	Import - Indonesia
7. Live tortoises – Testudo horsfieldii	30 no.	import - Ukraine

Inspection capacity

Poland designated one CITES Management Authority based on the CITES team which consists of three fulltime employees. CITES MA is represented by the Minister of the Environment and the Director appropriate for the nature conservation issues. The State Nature Conservation Council is the designated CITES Scientific Authority. It has 30 members and is an advisory body of independent experts. The CITES Commission (which is part of the Scientific Authority) consists of 5 persons working on a voluntary basis. Their skills include expertise in Botany, Ecology, Welfare and Zoology. In 2010, requests for opinions and expertise occurred 170 times.

As has already been mentioned, Customs officers carry out the official inspections at borders of wildlife trade. There are 17 Police Coordinators in each Regional/Voivodship/Metropolitan Police Headquarters designated to environmental-CITES problems. In 2004, there were a total of 13 655 Customs Officers. Approximately 5-10 % of these officers were trained in CITES/wildlife controls³¹⁴. There is a two-year preparatory training to undergo before becoming a customs officer. Officers can apply for specific training on their own initiative or their superior can order it if necessary. Several training sessions are organised at central and local level³¹⁵. All customs officers receive some training on CITES as all custom agents are likely to perform CITES related controls. In 2008, WWF Poland provided specialized equipment for handling, keeping and transporting seized animals to the most important Customs border points, however needs still far exceed the resources available. In the same year, Customs organised 3 central trainings for Customs officers including a seminar on identification of CITES aquatic species and safety procedures while dealing with live seized animals (mammals, birds and reptiles). Further, in close cooperation with Police and WWF Poland, Customs co-organised two CITES related workshops on identification of tropical timber and Traditional Asian Medicine³¹⁶.

³¹⁴ Traffic (2004) Expanding Borders : New Challenges for Wildlife Trade Controls in the European Union www.traffic.org/general-reports/traffic_pub_trade1.pdf

³¹⁵ European Commission, (2012), Final Report of an Audit carried out in Poland from 21 to 25 may 2012, http://ec.europa.eu/food/fvo/act_getPDF.cfm?PDF_ID=9856

³¹⁶ Poland CITES Biennale Report (2007-2008), www.cites.org/common/resources/reports/pab/07-08Poland.pdf

Inter-institutional arrangements

In Poland, laboratories used for activities related to environmental protection have existed since the 1960s. Since 1991, the laboratories were integrated into Voivodship Inspections for Environmental Protection. Laboratories which served as Centres of Research and Environmental Control were attached to their respective local departments of the State Inspection for Environmental Protection.

Since 2003, a good co-operative relationship has been established between the MA and the Police. According to the Police Act of 6 April 1990 and the Code of Penal Procedure Act of 6 June 1997, the Police are empowered to perform operational-intelligence activities and to conduct investigations in preparatory proceedings in all wildlife crime cases, particularly described in the Nature Conservation Act of 16 April 2004. Poland is also involved in cooperative enforcement activities with the National Police. Together, they took part in the international operation RAMP, which focused on illegal trade in endangered reptiles³¹⁷. Also, in 2003, the Ministry of Environment organized a three-day training³¹⁸ seminar for 40 officers of Customs, police, veterinary involved in the enforcement of CITES. Nevertheless, Poland has no sufficient capacity to provide assistance to other Member States with re-homing of seized or confiscated live specimen.

The Environmental Crime Unit was established on 20 October 2004 within the Combating Crime Tactic's Bureau of the General Headquarters of Police and is mandated to deal with endangered species of wild fauna and flora. The Unit's main role is to coordinate and monitor field Police units' activities in the area of environmental-wildlife crimes³¹⁹. Additionally, the Unit cooperates with national and international government and non-government organizations and organizes specialist training for Police officers (primary regional coordinators) engaged in combating above mentioned criminal activities. The Polish national CITES Working Group consists of representatives of the MA, SA, Ministry of Finance, Customs, Police, Veterinary Inspection, NGOs (WWF Poland, "Salamandra", Polish Society for the Protection of Animals (TOZ)) and Zoological Gardens. Closer co-operation with the representatives from judiciary and prosecutors has been initiated³²⁰.

In 2011, representatives from nine Central and Eastern European countries, plus several non-governmental organizations (NGOs) including TRAFFIC met in Poznań, Poland, to examine ways of improving wildlife trade regulations in the region. The workshop was organized by the Polish Society for Nature Conservation "Salamandra" and supported financially by the EU and the network of nature conservation NGOs, the CEEweb for Biodiversity. Central and Eastern Europe share similar problems related to effective enforcement of CITES regulations. Further, due to their geographic position, many bear a special responsibility for controlling the importation of protected animals and plants and their products from Asia. Issues that were examined ranged from ownership, registration and commercial trading of protected wildlife to ways of tackling the growing web-organized

³¹⁷ TRAFFIC Europe (2012) Compilation of EU Member State CITES Biennial Reports 2009-2010, ec.europa.eu/environment/cites/pdf/compilation_2009-2010.pdf

³¹⁸ Dr. Margarita and Dr. Giuseppe Frenguelli (2004), Convention on International Trade in Endangered Species of Wild Fauna and Flora, www.cites.org/common/com/pc/14/X-PC14-23-04-01.pdf

³¹⁹ TRAFFIC for Defra (2005) Enforcement of wildlife trade controls in EU Member States: Country Profiles, www.traffic.org/enforcement-reports/traffic_pub_enforce1.pdf

³²⁰ European Commission, (2012), Final Report of an Audit carried out in Poland from 21 to 25 May 2012, http://ec.europa.eu/food/fvo/act_getPDF.cfm?PDF_ID=9856

trafficking of protected species. Rising numbers of reptiles for the pet trade and the fashion industry are being smuggled from South-East Asia into the EU and beyond. Illegal trade undermines efforts to attain sustainable harvest and trade levels and the intentions of the CITES Convention itself.³²¹

Inspection review and reporting

The Customs Chambers is in charge of carrying out “institutional supervision” covering compliance of the subordinated Customs units with general requirements and a follow-up of the previous controls. Risk and intelligence assessments are used systematically to target key areas of priority for systematic or on-the-spot inspections. An internal and external audit is also organised by the Customs³²². Enforcement Authorities monitor and control wildlife trade on internal markets (e.g. by carrying out inspections of pet-shops, animal fairs, monitoring of sales of CITES specimens in the Internet). Customs officers who carry out control activities must contact the Poviats Veterinary Inspectorate for final decisions. However, due to lack of sufficient resources, inspections are often based on the complaints received rather than Authorities seeking them out.

Assessment of CITES seizures is carried out by the Customs Service and Police. Summary of inspection results are forwarded to the CITES Management Authority on a regular basis. In 2008 the Customs Service carried out 183 seizures consisting of 200 889 specimens. In terms of reporting, specific reports on inspection results are not available/made public. However, there is an annual report released by the Ministry of Finance each year.

In 2008, the Polish CITES MA commissioned two assessments: “Analysis of the internet trade in Poland in specimens of fauna and flora listed in the CITES appendices” and “Proposals on practical implementation of the EU wildlife trade legislation concerning marking of animals of the endangered species”, which raised issues of capacity of the current national legislation in respect of implementation and control of the CITES related provisions. The first report evaluated the scale of the commercial activities involving CITES specimen, which take place in the internet in Poland and presented possible solutions of limiting the problem and enhancing control measures. The second report indicated possible ways of marking certain groups of CITES animals for the purposes of trade control enhancement and unification of marking methods.³²³

Effectiveness of the inspection system

Communication between the General Veterinary Inspectorate and Customs is effective, which allows for the avoidance of gaps and overlaps. Designation of roles and competencies between the authorities has also contributed to effective functioning of the official controls. The agents in charge of the controls are more likely to be well experienced and trained since they receive specific training as required and since they are informed of the requirements.

³²¹ <http://www.traffic.org/home/2011/12/15/poland-hosts-collaboration-meeting-on-implementation-of-wild.html>

³²² European Commission, (2012), Final Report of an Audit carried out in Poland from 21 to 25 may 2012, http://ec.europa.eu/food/fvo/act_getPDF.cfm?PDF_ID=9856

³²³ <http://www.cites.org/common/resources/reports/pab/07-08Poland.pdf>

Thus, the inspection process is taking advantage of the good repartition of work. Regarding Poland's general inspection system, follow-up by prosecutors could be strengthened.

Poland, because of its central geographic position, bears a special responsibility for controlling the importation of protected animals, plants and their products from Asia. Poland is among the world's top ten exporters of medicinal and aromatic plants and plant parts, an increasing number of which are on endangered species lists. In 2000, Poland began co-operation with France to increase public awareness of CITES issues in Poland to improve Polish inspectors' understanding of EU CITES regulations³²⁴. In particular "Internet trade" has become a concern in Poland. In the reporting period 2007-2008, police observed a considerable increase in number of CITES cases referring to the Internet trade. According to the General Headquarters of Police, of the 564 cases that occurred in 2007, 285 were Internet related.³²⁵ In 2008, 281 cases of the total 502 were associated with the Internet. The highest penalty which may be imposed for infringements, regarded as crimes, against EU provisions concerning CITES, is imprisonment from 3 months up to 5 years (acc. to the art. 128 of the Nature Conservation Act of 16 April 2004).³²⁶

Three good practices which can be transferable across the EU include:

- There exists a good and effective coordination between the three authorities (MA, SA and the Enforcement Authority).
- There exists an effective on-going CITES specific training programs. Trainings and workshops for enforcement authorities are carried out. Employees of local authorities responsible for registration of CITES animals took part in special trainings on the registration procedures organized by the Polish NGOs "Salamandra". (It has to be generalized and maybe included into the formation of customs officer)³²⁷.
- Moreover, public was the recipient of awareness campaigns and lectures.

CITES information (legislation, conservation status) is easily accessible on internet. The CITES MA runs a website devoted to CITES issues. Moreover, on the websites of Customs chambers and Police units, one can find basic information on CITES.³²⁸

Market surveys conducted in Poland between 2001 and 2003 indicated that around 12% of the CITES-listed species in pet shops in Warsaw were offered without the necessary CITES documents. CITES-listed reptiles are the most numerous group of exotic animals offered in the Polish market and the range of species has been increasing in recent years. It is thought that these specimens had been smuggled into Poland from the Czech Republic³²⁹. Therefore,

³²⁴ OECD (2003) OECD Environmental Performance Reviews: Poland 2003

³²⁵ Poland Biennial report 2009-2010, www.cites.org/common/resources/reports/pab/09-10Poland.pdf

³²⁶ Poland Biennial report 2007-2008, www.cites.org/common/resources/reports/pab/07-08Poland.pdf

³²⁷ TRAFFIC Europe (2012), Compilation of EU Member State CITES Biennial Reports 2009-2010, ec.europa.eu/environment/cites/pdf/compilation_2009-2010.pdf

³²⁸ TRAFFIC Europe (2012), Compilation of EU Member State CITES Biennial Reports 2009-2010, ec.europa.eu/environment/cites/pdf/compilation_2009-2010.pdf

³²⁹ Traffic (2004), Expanding borders: New challenges for wildlife trade controls in the European Union, www.traffic.org/general-reports/traffic_pub_trade1.pdf

these are CITES specimens that need particular focus in Poland. Traditional Asian Medicine derivatives are another area which needs increased attention.³³⁰

Finally, in their most recent CITES biennale report, Poland indicated that an increased budget for activities and the hiring of more staff were high areas of priority to enhance the effectiveness of CITES implementation at the national level.

Costs of inspections

The impacts of illegal trade can disrupt whole economies and ecosystems, undermining environmentally sustainable activities and reducing future options for the use of resources. There is a lack of standardized way of proving origins of captive bred specimens. This is due to the fact that across EU MS the requirements for certificates could be different. By its nature, the size of illegal trade is difficult to quantify.

A concrete example is seen in a study which compared Polish import and export figures for cod products with reported landing and national consumption figures. It showed a discrepancy equivalent to 49 000 tonnes (over three times the national annual landing). Three-quarters of the cod consumed and exported by Poland was being illegally caught or otherwise unreported.³³¹

The Polish government covers the costs for seizure and destruction of the confiscated or abandoned products of animal origin for personal consumption³³². In terms of fees for permit issuance, in 2008, the fee for the issuance of the CITES import, (re-)export permit was: 107 PLN (25 EUR). Money obtained from the above mentioned fees is not directed for the CITES implementation purposes.

Conclusions on Poland baseline related to CITES

There are several good practices seen in the way inspections are carried out in Poland under CITES. Firstly, the legislative framework for CITES is well defined by the Nature Conservation Act. The effective repartition of work at the administrative level is a good practice which should be emphasized. The areas of action are clearly drawn between the three national authorities responsible for the implementation of CITES in Poland – the Management Authority (MA), the Scientific Authority (SA) and the Enforcement Authority (EA). This minimises the possibilities of overlaps and increases the efficiency of the inspections process. For instance, CITES coordinators of the EA administrate and monitor CITES related efforts of local and regional units. Also, interaction between inspection authorities and other enforcement authorities exists and is made concrete by meetings once or twice a year through the CITES Working Group. The Polish system leads to an effective cooperation which could be taken as an example that could be applicable across the EU.

Moreover, the inspection process is well established and is taking advantage, as stated before, of the effective repartition of work. The General Veterinary Inspectorate is the competent authority responsible for the overall effectiveness of the official controls. The

³³⁰ <http://www.cites.org/common/resources/reports/pab/07-08Poland.pdf>

³³¹ OECD (2012), Joint Working Party on Trade and Environment

³³² European Commission, (2012), Final Report of an Audit carried out in Poland from 21 to 25 may 2012, http://ec.europa.eu/food/fvo/act_getPDF.cfm?PDF_ID=9856

Customs carry out the actual controls and must, in case of any doubt, contact the Poviats Veterinary Inspectorate to make any final decisions. To better target and improve inspection activities, risk and intelligence assessments are systematically used. CITES-specific training programs are also well established. Workshops for enforcement authorities are carried out and employees of local authorities can take part in trainings, which are regularly updated based on feedback from officers.

Furthermore, real efforts are made to inform the society on the CITES issue. NGOs such as WWF or Salamandra directly participate in awareness raising campaigns. General and more specific information is easily accessible on the internet through official websites. For example, assessments of CITES seizures are carried out on a regular basis and the Ministry of Finance provides a release of Customs' seizures every year.

Nevertheless, illegal trade in wildlife is still a significant issue in Poland and is run by sophisticated criminal networks for economic purposes mainly. The impacts of illegal trade are huge and can disrupt whole economies and ecosystems. Weaknesses of the inspection system are of different orders and follow-up by prosecutors could be strengthened.

Poland also faces a budget limitation problem. There is a need for more capacity building for the enforcement authorities. For example, within the Scientific Authority, the CITES Commission consists of a small number of staff, five persons, who work on a voluntary basis. Moreover, there is a lack of rescue centres fully devoted for CITES animals. Poland also cannot provide assistance to other MS today with confiscated live specimen.

Another key problem for Poland is the fact that there is lack of standardized approach for proving legal origin of captive bred specimens originating from breeding operations across EU. In the context of legal documents, it should be a sufficient proof of compliance with the CITES legislation. According to the Nature Conservation Act, owners of animal species covered by CITES must submit a declaration of possession. However, the legislation does not apply systematically when it is coming to proving origins of captive bred specimens. It could be advisable to create, at the EU level, a standardized approach for this specific issue. For instance, the introduction of document that would be a proof of legal origin of specimens within all EU MS.

In the majority of cases, courts impose financial sanctions and forfeiture of confiscate specimen. However, for many cases, prosecutors discontinue cases due to insufficient evidence. The non-effectiveness of sanctions, the lack of appropriations sanctions or the divergence across the EU can indicate that illegal wildlife trade is not a priority for the national enforcement.

9 SPAIN

The Spain case studies address the following areas:

Water:

- Drinking water
- Abstraction of water
- Urban Waste Water Treatment

Nature:

- Habitats (protected sites)
- Species

Trade in endangered species:

- CITES

The organisation of the inspection system is decentralised in Spain, which is similar to the model in Germany. Spain's administrative structure consists of four main levels: the central government, the autonomous communities (AC), the provinces and the municipalities. There is no overall national inspecting body and the inspection system is organised within the individual states at a regional level (ACs are different from regions).

The municipalities of Spain are the basic level of local government. Each forms part of a province which in turn forms part or the whole of an autonomous community. There are a total of 17 autonomous communities and 8,112 municipalities in Spain, including the autonomous cities of Ceuta and Melilla. The average population of a municipality is about 5,300. The 17 Autonomous Communities and the two autonomous cities of Ceuta and Melilla have prime responsibility for inspection through their environment ministries.

Each of Spain's 17 Autonomous Communities has its own parliament, president, government, administration and Supreme Court. The Autonomous Communities have full responsibility for monitoring compliance with their own regulations implementing the national laws, however monetary sanctions set for non-compliance must conform to national provisions, which define the lower and upper limits for administrative penalties for specific types of infringements³³³. Each autonomous community is divided into a number of provinces. Each province has its own administration that is responsible for a range of services. Municipalities can set and enforce more stringent requirements than those stipulated by the Autonomous Community (regional) regulations (although they rarely do so)³³⁴. A delegate is appointed by the Central Government for every Autonomous Community. The Autonomous Community receives funding from various sources including taxation, fees, public charges (e.g. for discharges to water), and the central government.

The central administration holds exclusive competences on basic environmental legislation, while the Autonomous Communities are responsible for developing legislation regarding

³³³ Article 148 of the Spanish Constitution sets out the competencies of the autonomous communities.

³³⁴ IMPEL (2003), IRI, Phase 3: Testing of the Review Scheme, 6th Review: Autonomous Community http://impel.eu/wp-content/uploads/2012/10/item10_irispain.pdf

management and protection of the environment. In addition, municipalities also have competencies in many environmental issues such as urbanism, spatial planning, waste management, conservation, and parks. They are also responsible for the establishment and regulation of industrial activities. The responsibilities are therefore shared but implementation and monitoring of environmental policy-making and programmes by either Autonomous Communities or central government are highly dependent on the willingness and capability of local politicians.

Inspections which are carried out preventively, i.e. not in response to a complaint or high risk situation, can be initiated by internal inspections plans, regulatory requirements, etc. Reactive inspections on the other hand are triggered mainly by malfunctions, accidents or complaints. The average frequency of preventive on-site inspections for all environmental related inspections³³⁵ is once per year per company as indicated by a relative majority (6) of autonomous communities. In the other regions, the average frequency ranges from once per month per company to once every four years per company. The predominant frequency of on-site inspections (once per year) was also confirmed by a regional ministry³³⁶.

To apply the European policies of sustainable development, integrate the environment into the different sector-specific policies and coordinate the central government with the Autonomous Communities, a number of institutions have been created. These include general collegiate bodies such as an Environmental Advisory Council or the sector-specific Environmental Conference, the National Water Council, the National Climate Council, and the Environmental Authorities Network, etc., and supra-national organizations (EEA, UNEP, IUCN, WWF, etc.).

At the national level, the Network of Environmental Inspection (REDIA) was created in 2008 to monitor environmental inspections. The coordinating body aims at facilitating participation and exchange of knowledge and experience in environmental inspection as well as the implementation of projects of common interest. Its main objectives are³³⁷:

- To promote the collaboration (exchange of information and experience) between the environmental authorities of the Autonomous Communities.
- To develop joint projects on environmental inspection. Among the projects envisaged by REDIA are the elaboration of manuals for the conduct of environmental inspections and the introduction of national indicators measuring the effectiveness of the inspection system.
- To harmonise the actions undertaken for greater consistency and coherence in all territories.
- To provide guidance documents to best practices.
- To facilitate training of inspectors and enforcement officials.
- To provide technical support to the Spanish Ministry of Environment on environmental inspection.

³³⁵ This is general information for all types of inspections including, for instance, water inspections but also waste sector inspections.

³³⁶ Eberhard Bohne (2006) *The Quest for Environmental Regulatory Integration in the European Union*, p. 335.

³³⁷ <http://www.magrama.gob.es/en/calidad-y-evaluacion-ambiental/temas/medio-ambiente-industrial/inspeccion-ambiental/redia/default.aspx>

9.1 Spain: Drinking water

Legislative framework

The Drinking Water Directive was transposed into Spanish regulation through the Royal Decree 1138/1990. It defines companies that supply and provide drinking water for public consumption as “those persons, natural or bodies corporate public or private, who are active in all or some of the phases of collecting, treating, transposing and distributing drinking water for public consumption”.

The Drinking Water regulation includes objectives such as protecting human health, protecting consumers and users and governing the structure, obligations and responsibilities of administrative bodies.

In Spain, there are approximately 1,500 water supply zones, of which the majority are sourced from surface water (78%)³³⁸. Drinking water supply is the responsibility of the municipalities (about 8,000 in Spain) and of some large companies that are controlled by Regional Governments. The Royal Decree specifies that local governments are responsible for the collection and treatment of wastewater and the supply of drinking water. They can offer these services either themselves or through licensed public or private enterprises.

Furthermore, water suppliers must communicate to the competent health and municipal authority any “loss of potability”³³⁹. If necessary, these contacted authorities will then order any relevant corrective actions.

The public distribution of drinking water in Spain is organised in different ways and can take the form of:

- Direct management by the municipalities. Groups of municipalities can sign an agreement to carry out a joint service.
- Municipal companies financed directly by the administration.
- Mixed companies where most of the capital is public (held by the municipalities) with a minority holding of private capital.
- Private companies with private capital contracted by the administration.

Institutional framework and inter-institutional arrangements

In Spain, the Regional Health Authority (i.e. the State Public Health Office that is part of the Ministry of Health and Consumption) is responsible for supervision of enforcement and compliance. The water supplier takes the initial decision concerning necessary action to be undertaken for repeat sampling and analysis. The authorities are notified when the water supplier identifies a risk. The water supplier, Regional and municipal authorities work

³³⁸Watercycle Research Institute (2011), The quality of drinking water in the European Union, 2005-2007, p. 188, <https://circabc.europa.eu/sd/d/b580866d-8eb7-4937-9a97-d3d3485d046e/2005-2007%20SynthesisReport.pdf>

³³⁹ According to the Royal Decree, “loss of potability” is defined as non-compliance with the standards set out in the Annexes of the Decree.

together to decide whether or not to implement any necessary steps where a risk is perceived.

The Regional Health Authority in Spain gives advice and monitors progress towards more efficient systems. The Regional Health Authorities are allowed to issue derogations for water suppliers. However there is no evidence suggesting the existence of legally binding contracts between water suppliers and enforcement authorities.

There exist close links between the municipal water companies and officials from the local and regional authorities. Regional Authorities monitor progress and give advice on actions to be taken to the municipal water companies. This is especially true in cases of non-compliance.

Following environmental inspections, if a water supply does not meet quality standards, the responsible health authority is allowed to take any actions in order to meet the required limit values, such as preventing the distribution of unpotable water until standards have been met.

Inspection planning and process

Although each autonomous region can establish additional values and parameters³⁴⁰, basic water quality data are collected according to the existing legislation. The State Public Health Office (Ministry of Health and Consumption of Spain) coordinates control activities. More specifically, drinking water quality in Spain is controlled through analysis and sanitary surveillance.

As stated above, no specific inspection planning or process are properly defined in Spain. However, compliance is monitored through different approaches³⁴¹:

- Regional Health Administrations are responsible for sanitary surveillance, which consists in monitoring of analyses carried out by water suppliers and undertaking their own determinations when considered necessary. The Health Administration is responsible for deciding when the infringement of quality standards entails an unacceptable risk to health.
- Water suppliers are obliged to control water quality through self-monitoring, by undertaking the analysis and control of water, verifying that it meets required standards. Analyses of their water supplies must be carried out either ex treatment works and/or immediately prior to distribution, and at several points in the distribution system.

Box: Example of Galicia

In the specific case of Galicia, the Inspectorate develops a work plan to enhance the

³⁴⁰ National legislation specifies minimum requirements to be reached by all actors involved in the system in place.

³⁴¹ WRC and IEEP (1998) Investigation of Drinking Water Quality Enforcement Procedures in Member States of the European Union, <http://dwi.defra.gov.uk/research/completed-research/reports/dwi0800.pdf> p.179

quality of inspections which includes the water installations to be inspected each year – usually installations are visited at least once every two years. In setting priorities for inspections, political priorities are one of the factors taken into account. The time needed for each inspection is shown in a table classifying different types of inspections. This Document must be approved by the General Director and is made available on the Galician Ministry of Environment website³⁴².

Enforcement and monitoring

The Regional Health Administration is responsible for the supervision of compliance and enforcement. As mentioned earlier, water suppliers are responsible for analyzing their own water samples. The results are then sent to Regional Health Administrations, which verify compliance. Water suppliers must notify the competent municipal and health authorities if there is ever any reduction in water quality rendering it ‘unpotable’ for any reason. Should the loss of potability imply an immediate risk to the health of the population supplied, it should be communicated immediately to the competent municipal and health authorities, which should order the adoption of the appropriate measures. In other words, water suppliers take the initial decision concerning necessary remedial action or repeat sampling and analysis. In this regard, water suppliers hold significant responsibility in ensuring that the water supply meets the minimum drinking water standards. If the water supplier perceives a risk, the authorities must be notified and the water supplier, municipal and regional authorities work together to decide and implement any necessary steps. The Regional Health Authority provides advice and monitors progress. There appears to be no set procedure for further action, improvement plans seem to be informal agreements and there is no evidence of any legal actions to enforce standards, although municipal and health authorities have powers to order any necessary actions or suspend a supply in case of a health risk³⁴³.

Compliance monitoring is carried out in a variety of ways ranging from self-monitoring (by water suppliers) to analyses carried out directly by the authorities of the Regional Health Administrations, which are responsible for enforcement or laboratories appointed by these authorities. Results are reported to the Regional Health Administration.

The Royal Decree includes derogations for limit values. These derogations are based on meteorological, geological causes and emergency causes.³⁴⁴ The term “emergency” was used previously to describe these kinds of situations and was recently replaced by the term “Critical Accidental Circumstances”. The Regional Health Authorities are allowed to issue derogations on application from municipalities. However, toxic or microbiological parameters do not lead to the issue of derogations. They must be reported to the Ministry of Health either immediately in emergency cases, within seven days for meteorological cases and within 45 days for geological type derogations. The reasons, the limit values and a

³⁴² IMPEL (2003), IRI, Phase 3: Testing of the Review Scheme, 6th Review: Autonomous Community, pg. 10, http://impel.eu/wp-content/uploads/2012/10/item10_irispain.pdf

³⁴³ WRC and IEEP (1998) Investigation of Drinking Water Quality Enforcement Procedures in Member States of the European Union, <http://dwi.defra.gov.uk/research/completed-research/reports/dwi0800.pdf> p.42

³⁴⁴ The same mechanism exists in the articles 9 and 10 respectively of the Drinking Directive.

time limit must be specified in derogations related to “Critical Accidental Circumstances”. Derogations, issued by Regional Health Authority, are considered to be exceptions to the rule and do not fall into the definition of non-compliance.

For non-compliance cases, the regional or municipal authorities may merely recommend improvement measures. Concerning the water suppliers, they work out measures and improvement plans directly with Regional Health Authorities. In practice, improvement plans are informal agreements. No legal actions to enforce standards seem to be in place even if municipal and health authorities can order actions in case of a health risk.

When a water supply does not meet quality standards, the competent municipal and health authority has the power to order any actions required to meet limit values. If water ceases to be ‘potable’ and there is perceived to be a risk to human health suppliers can suspend completely or partially the supply³⁴⁵. The Spanish penal code also includes offences against public health. It targets specifically risk of public health and polluted drinking water.³⁴⁶

Inspection capacity

Very little information on the inspection capacity in the autonomous regions of Spain was identified in the literature reviewed and stakeholders interviewed. Nonetheless, information gathered for Galicia provides some indication of the resources allocated to environmental inspections in the region. The Inspectorate of the Galician Ministry of Environment inspects a wide range of permitted activities. Regulation of installations subject to the IPPC Directive represents a third of their work. Other responsibilities of the Inspectorate include issuance of permits water extraction and for Liquid Effluent Disposal and permits for the management of Waste³⁴⁷.

Box: Example of the Galician Central Inspection Service

In Galicia, the structure of the environmental inspection is top-down.³⁴⁸ It is composed of an Inspectorate Service and of four Provincial Departments of Environmental Assessment and Quality (one in each province of Galicia). In accordance with civil service status, a Head of Service manages each Department. A Head of the Inspection Area is appointed and is responsible for the overall organisation.

Environmental control activities are carried out by inspectors that are civil servants of the General Direction of Environmental Assessment and Quality within the Ministry of the Environment.

The Galician Inspection Service comprises a Head of Service, Head of Section, 1

³⁴⁵ WRC and IEEP. (1998) Investigation of Drinking Water Quality Enforcement Procedures in Member States of the European Union, <http://dwi.defra.gov.uk/research/completed-research/reports/dwi0800.pdf> p.184

³⁴⁶ Articles 363 and 365 respectively of the Spanish penal code

³⁴⁷ IMPEL (2003), IRI, Phase 3: Testing of the Review Scheme, 6th Review: Autonomous Community, pg. 10, http://impel.eu/wp-content/uploads/2012/10/item10_irispain.pdf

³⁴⁸ IMPEL (2003) Best Practices concerning Training and Qualification for Environmental Inspectors <http://impel.eu/wp-content/uploads/2012/07/TQreportfinalafterathens.pdf>

Inspector and a technical person to deal with EMAS, environmental agreements and other subjects, and one administrative staff. The Environmental Laboratory of Galicia has a Head of Service and 21 other staff comprising of 12 technical Staff and 9 administrative staff. The laboratory is accredited under the National Accreditation System for both emission and ambient air measurement. In addition, the laboratory also samples and analyses waste and soils together with wastewater discharges and river water for toxicity, as well as the usual parameters of BOD, Dissolved Oxygen etc. Inspectors are required by statute to be permanent Civil Servants with a minimum Qualification of a Degree in specified subjects that include Engineering, Biology, Chemistry and Veterinary.

Inspection review and reporting

Water supply companies are required to keep records of analysis and of incidents. They must be made available to the Administration for a period of five years. This allows the Health Administration to track progress and measures taken for any incidences reported. The information on the record includes dates, times, the place where the samples were taken, zones of the supply system targeted, analytical techniques employed, the results and the laboratories that carried out the analysis, records of incidents in the supply system, according to year and the measures adopted.

Following the implementation of the Royal Decree 1138/1990, a “National Water Consumption Information System” (SINAC) was created. It aims at identifying the sanitary quality of the drinking water supply system in Spain. Results are either directly undertaken by the Regional Health Administration or, if they are carried out elsewhere, they have to be reported to the Regional Health Administration. However, there is no annual publication of a national report.³⁴⁹ The information collected is usually divided into three main categories:

- Supply system characteristics
- Quality of water consumed
- Records on derogations that has been authorized

Under the Drinking Water Directive, drinking water quality has to be reported to the EC every three years. Reporting obligations cover all drinking water supplies serving more than 5,000 citizens or supplying more than 1,000 m³ a day. The EC assesses the results of water quality monitoring against the standards in the Directive. After each reporting cycle the EC produces a synthesis report, which summarises the quality of drinking water and its improvement at European level³⁵⁰.

Effectiveness of the inspection system

According to the most recent synthesis report (2005-2007) published in 2008³⁵¹ on the implementation of the Drinking Water Directive in the EU, there was evidence of non-

³⁴⁹ National database is being compiled

³⁵⁰ EC website on the Drinking Water Directive, http://ec.europa.eu/environment/water/water-drink/reporting_en.html

³⁵¹ European Commission (2008) The quality of Drinking Water in the European Union http://ec.europa.eu/environment/water/water-drink/pdf/dwq_report1999-2001.pdf

compliance in the monitoring frequency for many parameters in Spain. The microbiological parameters had more than 99% compliance in Spain. The chemical parameter nitrite caused non-compliance in more than 1% of samples in each of the reporting years. Many of the parameters that caused non-compliance in water supply zones (WSZs) in Spain had a significantly higher failure rate in 2006 compared to the other reporting years 2005 and 2007. Further, the number of non-compliant WSZs seemed to have increased, but there was much fluctuation in the number of WSZs in Spain. Spain reported one parameter that caused non-compliance in more than 10% of samples, sulphate in 2005 and in 2006 and the same parameter caused non-compliance in more than 5%, but less than 10%, of the samples in 2007³⁵².

As far as the quality of inspections is concerned, the lack of trained personnel was seen as severely hampering the inspection activities of the national Water Basin Authorities. The distribution of inspection competencies varies from region to region. Only five regional environment ministries report that inspectors have the competence to control all environmental media³⁵³. In most Autonomous Communities there are sectoral restrictions on inspection competencies, meaning inspection procedures and competencies are not always harmonised between two overlapping sectors (such as waste and water sectors). Coordination mechanisms are insufficient, as only two ministries mention that sectoral inspections are subject to coordination.³⁵⁴

Box: Example of the Region of Madrid

Madrid can be considered as a typical example of how the inspection system is working and of the Regional Health Administration. The region is divided into 11 Health Areas. The formal monitoring body, the Health Authority, undertakes water quality determination at either the Regional or municipal level. The controls target the activities of water suppliers and municipalities. In the region of Madrid, on average, 4% of all samples analysed failed to comply. No annual report is published, however meetings take place every six months between the Health Authority and the water suppliers to discuss issues such as the reported incidences and the progress made on measures put into place to address them.

³⁵² Water Cycle Research Institute (2011), The quality of drinking water in the European Union 2005-2007 <https://circabc.europa.eu/sd/d/b580866d-8eb7-4937-9a97-d3d3485d046e/2005-2007%20SynthesisReport.pdf>

³⁵³ Eberhard Bohne (2006). The Quest for Environmental Regulatory Integration in the European Union, p. 335.

³⁵⁴ Eberhard Bohne (2006). The Quest for Environmental Regulatory Integration in the European Union, p. 346.

9.2 Spain: Abstraction of water

Spain is a country with a large hydro-geological potential and is one of the few high-income OECD countries where water abstractions continued to increase through the 1990s³⁵⁵. In Spain, as in other semi-arid Mediterranean countries of South Europe, about 80% of water is used for irrigation and intensive use of groundwater is a common practice.

Box: Groundwater use in Spain³⁵⁶

In 2000, official papers (e.g. the White book of water in Spain – Spanish Ministry of Environment (2000))³⁵⁷ estimate that trends in groundwater use increased from 2,000 Mm/year in 1960 to more than 6,500 Mm/year in 2006. It is worth noting that the ratios of groundwater use can be very different depending on the regions. Groundwater becomes the main source available in the islands (Balears and Canary islands), in the south Mediterranean part (Jucar and Segura basins) and in some continental areas such as La Mancha.

Legislative framework

In Spain, groundwater was declared a public domain resource in 1985 with the implementation of the Water Act. However, the concrete implementation of such a declaration encountered great difficulties in practice. Because groundwater was a private property before the 1985 Water Act, the management of groundwater had not been considered a task in Spain for public water management authorities or agencies.

The WFD has been transposed into Spanish law and the first legal reform to be effective was implemented in 2003 through the Law 62/2003 of December 30th. It introduced most of the key concepts and language of the WFD into the Spanish legislation. Public participatory activities and technical work (e.g. management of aquifers, drafting of management plans, management of the water use rights and emission rights system, monitoring and control of water quality and water resources (surface and groundwater, etc.) was also carried out by all the water basin agencies, water research institutions and water management institutions under the supervision of the Spanish Ministry of the Environment.

The legislation in place is a novelty because it allows the possibility to officially declare an aquifer to be overexploited, which was not possible before the reform³⁵⁸. It established a legal framework for overexploitation and defined specific competencies for River Basin Agencies in order to tackle this issue. Such a legal overexploitation can be determined based on both quantitative and qualitative indicators. There are currently 16 aquifers officially

³⁵⁵ OECD, Economics Department (2011), Policies towards a Sustainable Use of Water in Spain, p. 5.

³⁵⁶ J. Molinero, E. Custodio, A. Sahuquillo and M.R. Llamas (2011) Groundwater in Spain: Overview and management Practices p.2

³⁵⁷ Ministerio de Medio Ambiente (MMA)

³⁵⁸ J. Molinero, E. Custodio, A. Sahuquillo and M.R. Llamas (2011) Groundwater in Spain: Overview and management Practices, p. 4. <http://www.rac.es/ficheros/doc/00842.pdf>

declared as overexploited.³⁵⁹ The Spanish law gives River Basin Agencies broad powers for the management of aquifers declared to be overexploited. Basin Agencies are responsible for developing management plans and determining annual pumping regimes. All users in the aquifer are required to organize themselves into Groundwater User Associations. Associations can work with Basin Agencies in the design and implementation of management plans to ensure that their interests are represented. However, the practical implementation of Groundwater User Associations has not always been easy. Associations have only been created in 5 of the 16 aquifers declared as overexploited, and management plans have only been drawn up in 3 of them. Further, the technical reasons for some of the aquifers that have been officially declared to be overexploited are not clear and have been questioned. There are also other aquifers not declared as overexploited which have serious problems, both in terms of both quantity and quality. For example, in the region of central Spain, in La Mancha, serious environmental impacts on wetlands and in the Jucar River flow have arisen due to an over-development of pumping in this region.

Institutional framework and partnership/inter-institutional arrangements

In Spain, river basin management has been present in various forms, for over 100 years. River Basin Authorities were created from 1926 (with the predecessors being the River Basin Technical Offices created in 1903). Today there are 9 River Basin Authorities for the main interregional basins; 3 intra-regional water authorities for small rivers in Catalonia, Basque Country and Galicia; and 2 Island Water Authorities in the Balearic and the Canary Islands.³⁶⁰ River Basin Agencies were established with the aim of rendering the water management system easier to control and manage at the national and Autonomous Community levels. River basin authorities include a water commissioner, a technical directorate, and a secretary general planning office, and a representation of users.

The Spanish legislation differentiates the management of basins according to their geographic localisation. In practice, if a hydrological basin is interregional (overlaps 2 or more regions), water management is carried out by the Spanish Ministry of the Environment. When the hydrological basin is entirely located in an Autonomous Community then the water management is under full responsibility of the Regional Autonomous Government. Andalusia, the Basque Country and the Balearic and Canary islands are examples of Regional Autonomous Governments where hydrologic basins are managed directly by regional governments. Historically, only one State Government existed when they were created and thus facilitated at first the implementation of the system. However the 1978 constitution divided the whole country into Autonomous Communities, with their own Government and exclusive competences in many territorial affairs, especially for abstraction related issues. This modified the character of the River Basin Agencies or Water Authorities.

³⁵⁹ J. Molinero, E. Custodio, A. Sahuquillo and M.R. Llamas (2011) Groundwater in Spain: Overview and management Practices, p. 5.

³⁶⁰ University of Alcalá de Henares (2003) Public Participation in River Basin Management in Spain p. 8, <http://www.harmonicop.uni-osnabrueck.de/files/download/Spain.pdf>

Box: Example of environmental impacts of water exploitation in Spain: Júcar River Basin³⁶¹

The Júcar River Basin District, located in eastern Spain, is characterized by droughts and floods, resulting in a very fragile balance between water supply and demand. Agricultural accounts for nearly 80% of water demand. The district suffers from dry periods lasting up to 10 years, alternating with relatively wet periods. Therefore, water scarcity during dry periods is a significant challenge for water managers. This situation has triggered an increased use of non-conventional resources in recent years, such as reuse of wastewater or desalination of seawater.

The vulnerability to droughts has been an objective of planning activities and infrastructure development; however past drought episodes have been managed mostly in a reactive manner. In the 1990-1995 drought, emergency measures were decided very late, therefore infrastructures were not available until the drought episode had nearly ended. Since 2000, Spanish water law requires the basin agencies to develop Special Drought Plans (SDP) in order to move from a reactive crisis management approach to a proactive approach. The SDP for the Júcar River Basin Authority includes operative drought monitoring indices for early drought detection, definitions of the stages of drought, and the measures to be applied in each of the stages.

Inspection planning and process

The responsibilities of the River Basin Authorities include water resources planning, water resources development and the management of water use rights and the emission rights system, including the monitoring and control of water quality and water resources (surface and groundwater). River Basin Authorities also monitor water resource conditions. They are responsible for monitoring river flows to anticipate and identify flooding or insufficiency, and for monitoring water quality throughout the river basin. Monitoring is performed by River Basin Authority staff.

In particular, River Basin Authorities are responsible for developing river basin plans (established under the 1985 Water Law) and for other planning activities such as collection and analysis of data about physical conditions of the basin and water uses, designation of sub-basin management units, and conformity of basin plans to national and EU guidelines. The River Basin plans are characterised by two phases: a first phase for establishing guidelines and a second phase of plan preparation. The guidelines must include description and evaluation of the situation and the main water (hydrological) problems. The Basin plans must specify for 10-year and 20-year planning horizons the expected water demands and a programme of action for meeting them. Demands and resources are to be allocated for each relevant use sector (urban, environment, irrigation, industry, hydropower, fisheries and navigation). The basin plans must also establish surface water quality objectives for each water body in a basin. Plans are required to take into account other relevant policies and plans, such as those for land use, nature conservation, and agriculture (for instance, the

³⁶¹ Institute of Water and Environmental Engineering (2009). Júcar River Basin District, Spain Operative Droughts in Water Resource Systems. P10.

EU Common Agricultural Policy). The most recent basin plans were submitted to the national government in 1995 for approval, were approved in 1998, and were integrated into the 2001 national water plan³⁶².

Finally, as discussed in the box above on the effects of water exploitation in the Júcar River Basin, Special Drought Plans have also been established for several River Basin Authorities in Spain. The main objectives of Special Drought Plans is the specification of measures of control, risk assessment, organization of decision making and implementation of mitigation measures which are required to minimize the frequency and intensity of water shortage conditions, and to reduce the environmental and socioeconomic effects of these extreme situations.

Enforcement and the use of sanctions

Enforcement of Spanish and EU water regulations is the responsibility of River Basin Authorities. Within their sphere of competence, the decisions of Basin Authorities are final. Challenges to a Basin Authority's decision would have to be taken to court, with the challenge based on a claim that the Basin Authority exceeded its legal authority. Basin Authorities also have the authority to enforce their decisions through the imposition of sanctions such as fines.

The Autonomous Communities also have an important role to play in enforcement and ensuring compliance. Since they have jurisdiction over territorial planning, the Autonomous Communities control land use (including, for example, the illicit transformation of protected land with the purpose of irrigating with illegally abstracted water) and are responsible for the removal of incentives for illegal water use³⁶³.

River Basin Authorities face difficulties in stopping the continuous increase in illegal water use. This is due to a lack of sufficient instruments for water management and law enforcement. A lack of political willingness to ensure the strict application of the law, and discourage the ever-increasing illegal use is also a problem. One of the main reasons underlying the illegal abstraction of water in Spain is the huge profits that are derived from its use (irrigation farming, urban development, tourism).

Monitoring of abstractions is also weak. Registration of groundwater abstraction rights established before 1985 is incomplete, undermining the enforcement of measures to prevent overexploitation. Several programmes were launched to remedy the situation, however illegal wells and abstractions continue to persist. Since the 1985 Water Law, which made groundwater a public domain (groundwater was previously treated as private property), users must register with authorities. Having done so, the total permitted abstraction was found to considerably exceed available renewable resources. As a result, in risk aquifers Abstraction Plans were developed which set maximum annual abstractions and

³⁶² World Bank Policy Research Working Paper 3526, (2005). Institutional and Policy Analysis of River Basin Management, The Guadalquivir River Basin, Spain, p. 15, www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2005/03/06/000090341_20050306125008/Rendere d/PDF/wps3526.pdf

³⁶³ Fuentes, A. (2011). Policies Towards a Sustainable Use of Water in Spain", OECD Economics Department Working Papers, <http://dx.doi.org/10.1787/5kgj3l0ggczt-en>

banned drilling of new bore holes. However, there was serious resistance to the new controls by farmers and many continued to exceed abstraction limits and drill new illegal wells. As a result in 1992, an Income Compensation Plan was adopted, one of the first agri-environment programmes under the CAP. This provided compensation to farmers for income losses from restriction of abstraction. In 2000, a plan for reconstruction of vineyards was introduced under the CAP encouraging movement away from water intensive crops to vineyards. Water intensive crops had expanded significantly after Spain joined the EU and agricultural support was available. The 2000 plan resulted in major changes from water intensive crops using around 8,000 m³/ha of water to vineyards using around 1,300 m³/ha.³⁶⁴

In terms of improved enforcement, according to an OECD survey³⁶⁵, possible actions include a wider participatory approach with more users (i.e. users representing the leisure and environmental areas) as well as better information easily accessible to users about requirements of sustainable use and a less confrontational regulatory style. Also, in the 1980s, remote sensing was adopted to monitor abstraction. This was one of the first occasions for such use for compliance assessment in Europe and the measure is now included in the 2012 EC Blueprint to Safeguard Europe's Water Resources. This compliance surveillance mechanism allowed control of a very large area – around 5,000 km². It was accompanied by installation of metering and a sanction system. Remote sensing is used in enforcement measures in the Guadiana River Basin Authority, which is described below.

Box: Abstraction enforcement in the Upper Guadiana, Southern Spain³⁶⁶

The following figure (source: Cabellos, 2013) shows the changing level of an example groundwater and shows that it has largely returned to levels seen in the early 1990s. Thus the overall approach has had significant environmental benefits in terms of groundwater levels. It also shows that enforcement action may have greater impacts if combined with incentives for those who act in a compliant manner.

In 2008, the Upper Guadiana Special Plan was adopted. This took further the transformation of water rights and its focus was on achieving good status of water bodies as required by the Water Framework Directive. It also included enhanced use of remote sensing controls, metering and application of sanctions. These measures have been resisted by farmers. However, sanctions are applied to a significant extent. Thus several thousand fines are issued each year. It is important to note the twin-track approach in the Upper Guadiana – applying incentives through agri-environment and control and sanctions for non-compliance. It is, therefore, difficult to determine the specific impact of the application of sanctions within this twin-track approach³⁶⁷.

Figure 5: Cabellos (2013) Changing level of an example groundwater between 1979 and

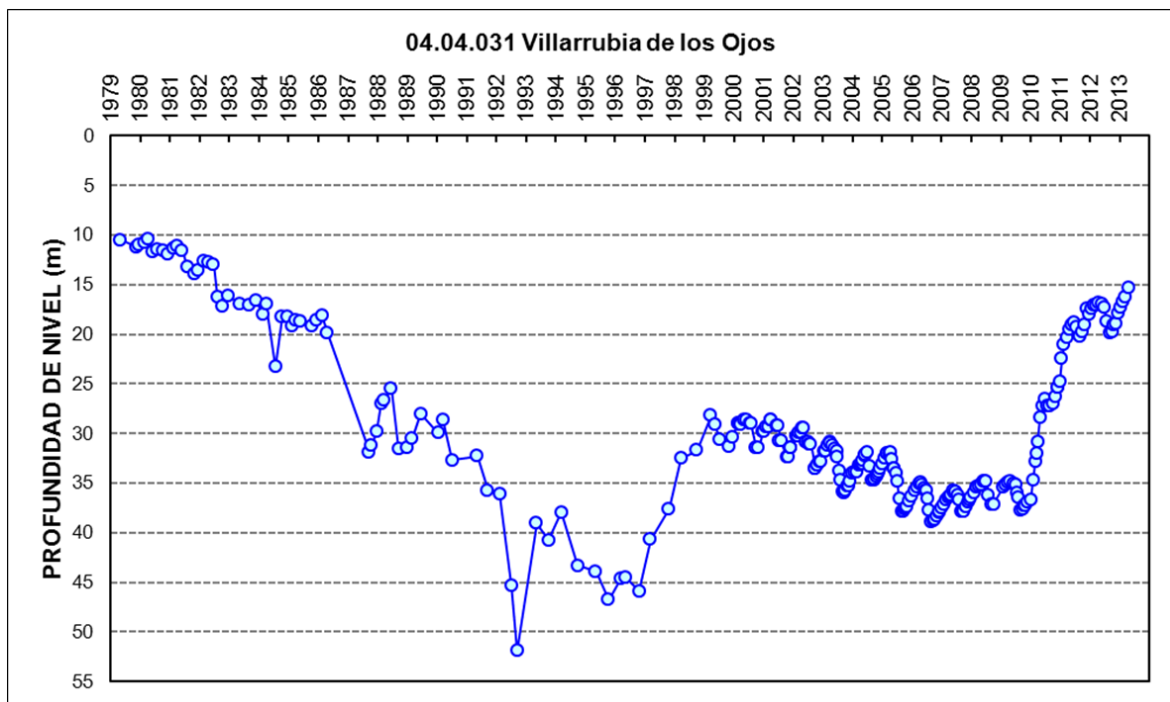
³⁶⁴ Cabellos, J.A.R. (2013). The Upper Guadiana Case. Presentation to European Commission Workshop on Linking Water Management and WFD Objectives. Brussels. 2013.

³⁶⁵ OECD, Economics Department (2011), Policies towards a Sustainable Use of Water in Spain, p. 5.

³⁶⁶ This case draws on: Cabellos, J.A.R. (2013). The Upper Guadiana Case. Presentation to European Commission Workshop on Linking Water Management and WFD Objectives. Brussels. 2013.

³⁶⁷ This case draws on: Cabellos, J.A.R. (2013). The Upper Guadiana Case. Presentation to European Commission Workshop on Linking Water Management and WFD Objectives. Brussels. 2013.

2013 in Villarrubia de los Ojos (municipality in Ciudad Real, Castile-La Mancha).



Inspection capacity

Basin Agencies lack experience in groundwater management. They have consistently lacked sufficient human and financial resources to deal with their newly acquired responsibilities under the 1985 Water Law. They have also had difficulty shifting their focus from their traditional water infrastructure development and management responsibilities to their new broader water management goals (e.g. water licensing, demand management, etc.). In the Guadalquivir River Basin Authority, 50 people are employed (of which their salaries are paid by the Central Government) to help implement and enforce national water law and regulations.³⁶⁸ Staff at Basin Agencies has been historically dominated by civil engineers, and they have lacked expertise in other areas (economics, ecology, hydrogeology, geography, education, etc.) that would have been necessary to address their new responsibilities.

User participation in water management has been traditionally understood in Spain as the right of irrigators to organize self-governing institutions for the management of surface water irrigation systems. However, the 1985 Act and subsequent reforms expanded the concept of users to groundwater users and representatives of other interests and uses beyond irrigators. It established user participation quotas in the different participatory boards of the Basin Agencies: Governing Board, User Assembly, Public Works Board, Aquifer Management Boards, and Dam Management Boards. Stakeholders are also represented in

³⁶⁸ World Bank Policy Research Working Paper 3526, (2005) Institutional and Policy Analysis of River Basin Management, The Guadalquivir River Basin, Spain, p. 15, www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2005/03/06/000090341_20050306125008/Rendere d/PDF/wps3526.pdf

the basins' planning body, known as the Water Council. There exist some examples of groundwater user associations that have been successful in reducing abstraction and effective cooperation between users and water authorities, but they are still few examples.

Irrigation communities³⁶⁹ are a key stakeholder group in each River Basin Authority and play an important role in inspection capacity as well as in river basin water management and a means of user participation. Irrigation communities are supposed to manage and maintain the irrigation infrastructure that is shared by their members. The water management methods vary substantially across irrigation communities. Some are quite modern, with pressure and drip irrigation systems and electronic metering of use down to the individual farm level. Others operate aging gravity-flow systems and still allocate water based on the area under cultivation, providing little incentive for farmers to conserve water or upgrade technology³⁷⁰. Irrigation communities collect fees from members, regulate water use, and implement and enforce their own rules. Each community settles many of the problems regarding water resource management within its own domain. Irrigation communities have a "water police," and an irrigation court composed of the president of the community plus other members chosen by the general assembly. The ability of the community's members to monitor one another's behaviour, enforce their own rules, and settle their own disputes has allowed the communities to persist across the decades.³⁷⁰

Box: The example of the Water Users Association of the Llobregat Delta³⁷¹

The Water Users Association of the Llobregat Delta is a good example of success in participatory management in Spain. This Water Association was created in 1975, well before the Water Act, and involves irrigators, industries, water supply companies, water management. It has its own technical department which promotes monitoring and control in the aquifer. IT also has active technical measures for aquifer protection and management such as artificial recharge. This technology allows for the storage of excess water for later use and, at the same time, to improve water quality by recharging the aquifer with better quality water.

This successful example contrasts with several unsuccessful attempts that have failed after official declaration of aquifer overexploitation (as required by the Water Act).

Transparency and reporting

An important difficulty in Spain is the absence of updated groundwater rights records. It has now been more than 28 years since the Water Act was implemented into Spanish Law in 1985 and both the Registry of Public Waters and the Catalogue of Private Waters are still either not up-to-date or just incomplete. There are no reliable records of existing

³⁶⁹ Irrigation communities are groups of irrigators who 1) have a single water license and then apportion the licensed amount of water among themselves, 2) divert surface water by means of a single shared canal or intake and then distribute the water to individual irrigators' farms, or (3) both.

³⁷⁰ World Bank Policy Research Working Paper 3526, (2005) Institutional and Policy Analysis of River Basin Management, The Guadalquivir River Basin, Spain

³⁷¹ The Llobregat Delta is located near the city of Barcelona, Catalonia, north-eastern Spain.

groundwater uses and total extraction volumes, which makes effective management difficult.

Following the implementation of the WFD in Spain, a report with the most important results and first trends of the “Initial Characterization Stage”³⁷² was published. It was submitted to the EC by the Spanish Water Authorities in 2007³⁷³. It is the first report that examined the implementation and the effectiveness of the WFD in Spain.

According to the report “Initial Characterization Stage” (MMA 2006), 699 groundwater bodies have been officially identified in Spain. Among those, 259 (37%) were classified at risk for the environmental objectives of the WFD by 2015; 184 (26%) have been classified as having no risk; and for the remaining 256 groundwater bodies (37% of the total) not enough information is available, so they have been classified as being at risk under evaluation. The most frequent causes of being at risk are due to diffuse or non-point source pollution (167 groundwater bodies or 24% of those characterized) and quantitative risks (164 or 23%). In terms of saltwater intrusion, the risk results from a degradation of water quality resulting from inadequate pumping patterns. These figures will most probably increase in the near future when the results of the additional assessment were published. Indeed, fewer groundwater bodies have been classified at risk due to point pollution by chemicals, but these figures could also increase in the future with additional assessments. Apart from this report submitted to the EU, there exists no regular reporting on abstraction in Spain.

The WFD also requires MS to provide information on the hydrogeological and hydrogeochemical aspects and to evaluate the impact of human activities on the state of groundwater resources. The Spanish Ministry of the Environment (MMA) and the Geological Survey of Spain (IGME) developed a methodological guide to support and standardise the characterization work that must be carried out by River Basin Authorities. The guide includes a groundwater bodies (GWB) characterization form that compiles all the information required by the WFD. However, so far only preliminary work on the additional characterization has been carried out, of which some is available in the websites of River Basin Authorities³⁷⁴.

Costs of inspections

Specific information or statistics on the cost of inspections for groundwater abstraction was difficult to identify. However, information is available on the financing of operations needed to implement the Water Framework Directive.

³⁷² J. Molinero, E. Custodio, A. Sahuquillo and M.R. Llamas (2011) Groundwater in Spain: Legal framework and management issues

³⁷³ MMA (2006) Síntesis de la información remitida por España para dar cumplimiento a los artículos 5 y 6 de la Directiva marco del Agua, en materia de aguas subterráneas [Summary of the information submitted by Spain to comply with articles 5 and 6 of the WFD concerning groundwaters], [www.aguasgrancanaria.com/ciagcweb/directivamarco.nsf/021822bc1de2066200256a0f0060b51a/487a10e5583d593c802572c70049b9ba/\\$FILE/MEMORIA.pdf](http://www.aguasgrancanaria.com/ciagcweb/directivamarco.nsf/021822bc1de2066200256a0f0060b51a/487a10e5583d593c802572c70049b9ba/$FILE/MEMORIA.pdf)

³⁷⁴ EASAC (2010), Groundwater in the Southern Member States of the European Union: an assessment of current knowledge and future prospects, Country report for Spain p. 25, www.easac.eu/fileadmin/PDF_s/reports_statements/Spain_Groundwater_country_report.pdf

River basin authorities partly finance themselves through the revenues from water service fees and charges³⁷⁵. The government has also subsidised the use of more efficient irrigation technology at considerable budgetary cost, which has contributed to a modest reduction of water use in irrigation in recent years. Funds provided to River Basin Authorities are funded mainly by the Directorate of Waterworks and Water Quality in the Ministry of Environment. Since 1994 Cohesion funding has also been a main source of financing of the investments of Basin Authorities.³⁷⁶ By law, River Basin Authorities must cover their own expenditures. In 2001, the River Basin Authority of Guadalquivir reported an annual budget of 87,275,796 Euro, with 35% coming from the central government, 30% from water basin users, and 35% from other sources. An important income source is tariffs and taxes on water users and residents within the basin³⁷⁷, taxes on basin residents for benefits of River Basin Authority services (e.g., flood control, water storage), fees on dischargers of treated water into the river and a tax on hydroelectric power generated in the basin. The Guadalquivir River Basin Authority retains 100% of these locally-generated revenues for use in the basin; therefore no revenues are distributed back to the central government. The rationale for central government funding is that the River Basin Authorities incur costs from implementing and enforcing national law and regulations.³⁷⁸

Effectiveness of the inspection system

Currently, the legal tools to stop excessive abstractions are not sufficiently effective. Since the 1985 Water Law declared all groundwater to be in the public domain, subsequent established extractions required a concession from the relevant River Basin Authority. In principal, this would allow the River Basin Authorities to prevent excessive extractions through quantity rationing. However, owners of wells established before 1985 were given the right either to retain the private property right indefinitely, in which case the extraction characteristics (such as volume or depth of the drilling) could not be modified, or to retain the property right for 50 years, after which the right would be converted into a public concession.³⁷⁹ Furthermore, according to the Water Act, new groundwater exploitations requested after 1986, and changes in the old ones, must be approved by the corresponding River Basin Authority and also inscribed in the Registry of Public Waters. However, the Catalogue and the Register are far from complete. Hundreds of thousands of new wells and boreholes have been constructed since the Water Act of 1985, many of them without submitting any application for approval from the River Basin Authority. The result is that the actual number of groundwater exploitations in Spain is not known. Reliable records of existing groundwater uses and total extraction volumes are therefore not available, which makes effective water management difficult. Furthermore, since a significant amount of

³⁷⁵ Fuentes, A. (2011), Policies Towards a Sustainable Use of Water in Spain”, OECD Economics Department Working Papers, <http://dx.doi.org/10.1787/5kgj3l0ggczt-en>

³⁷⁶ University of Alcalá de Henares (2003) Public Participation in River Basin Management in Spain p. 9, www.harmonicop.uni-osnabrueck.de/files/download/Spain.pdf

³⁷⁷ This charge on the volume of water used is approved each year by the president after a review and comment period, and is intended to represent operation and maintenance expenses associated with hydraulic works in the basin, plus amortization of capital investments in those facilities, plus indirect costs

³⁷⁸ World Bank Policy Research Working Paper 3526, (2005) Institutional and Policy Analysis of River Basin Management, The Guadalquivir River Basin, Spain, p. 15, www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2005/03/06/000090341_20050306125008/Rendere d/PDF/wps3526.pdf

³⁷⁹ OECD Economics Department (2011) Policies towards a Sustainable Use of Water in Spain, p. 24

groundwater is used in agriculture, abstractions occur in a highly decentralised fashion, making their monitoring particularly difficult.

According to officials of the Guadalquivir River Basin, several reservoirs need significant maintenance or refurbishment to address loss of capacity due to siltation³⁸⁰ and age. Furthermore, many irrigation canals and distribution systems are aging and in need of maintenance or replacement as are the distribution networks of several municipal supply systems. This could also be the case for other River Basin Authorities. Also, in some river basins, new water supply availability (through the creation of new reservoirs) appears to have generated more water demand rather than satisfying the quantity demanded previously. This is because irrigated land surface has increased (some without authorized water use), cities have expanded, and industries have grown faster than supply-augmentation projects could generate additional and reliable water supply.³⁷⁸

Conclusions

By making groundwater part of the public domain, the 1985 Water Act gave River Basin Authorities the power to limit access to and the use of the resource. Under the Act, groundwater user associations were also formalized, giving them a prominent role in the management of groundwater resources. The regulatory measures contained in the 1985 Act and subsequent reforms have so far proved to be insufficient to solve the problems resulting from intensive groundwater use. While progress has been made in improving control of excessive groundwater abstractions, for example by requiring that they are approved and registered with River Basin Authorities, it has not been sufficiently effective to prevent overexploitation and the illegal abstraction of groundwater. Limited human and financial resources from the government prevent stronger efforts to improved monitoring and enforcement³⁸¹.

As mentioned earlier, user associations, particularly irrigation communities play a key role in monitoring and maintaining irrigation infrastructure. As a result of their monitoring and maintenance activities, those associations might have more accurate information concerning water use than the information collected by the administrative authorities. Awareness and promotion for the rational and sustainable use of water could also be increased by encouraging users to participate in the water management process. Incentives of associations to cooperate and enforce sustainable groundwater resource use internally could be strengthened by introducing a charge on groundwater abstractions to users in those associations where abstractions are persistently above a sustainable level. As a result, members of such associations would have an incentive to set up effective enforcement mechanisms within their associations and to reveal information concerning illegal and unregistered water abstractions so as to avoid the introduction of such a charge³⁸². This would also ensure that water prices reflect service provision costs as well as the scarcity and

³⁸⁰ Siltation is the pollution of water by fine particulate terrestrial material, with a particle size dominated by silt or clay.

³⁸¹ Fuentes, A. (2011), Policies Towards a Sustainable Use of Water in Spain", OECD Economics Department Working Papers, <http://dx.doi.org/10.1787/5kgj3l0ggczt-en>

³⁸² Fuentes, A. (2011), Policies Towards a Sustainable Use of Water in Spain", OECD Economics Department Working Papers, <http://dx.doi.org/10.1787/5kgj3l0ggczt-en>

environmental costs of water abstractions. Benchmark regulation of water utilities would also contribute to more efficient water supply and treatment services.³⁸³ Efforts are being made to collaborate with use associations. For example, the different water users associations created the National Association of Groundwater Users (AEUAS), which the government is currently working with to promote collective management and sharing reliable data on the water use and abstraction from river basins. A representative of the association also participates in the National Water Council. The National Water Council is a consultative body on water policy, which brings together representatives of the central, regional, and local administrations.³⁸¹

³⁸³ Fuentes, A. (2011), Policies Towards a Sustainable Use of Water in Spain”, OECD Economics Department Working Papers, <http://dx.doi.org/10.1787/5kgj3l0ggczt-en>

9.3 Spain: UWWT

Legislative framework

The EU Directive 91/271/EC was implemented into Spanish law through two Royal Decrees - the Royal Decree Law 11/1995 of 28 December 1995 and the Royal Decree 509/1996 of 15 March 1996. The main aspects of the Royal Decrees are the following³⁸⁴:

- The Autonomous Communities must identify the agglomerations areas within their territories.
- The terms and conditions that the different agglomerations must meet depending on the treatment used (primary, secondary or more stringent).
- The Autonomous Communities must draw up a programme that will be reported to the Central Government in a second step.
- All areas defined as “sensitive areas” must be reviewed every four years. Quality specifications must be met within 7 years.

The Water Act is also relevant for Urban Waste Water Treatment (UWWTD) in Spain. It contains tools to improve sustainability of water management (i.e. the principle of cost recovery), provision for water trading, the requirement that water used in irrigation be metered and the creation of ecological reserve flows in rivers.

Regarding the UWWTD, the National Sewage and Waste Water Treatment Plan (1995-2005) was established to facilitate implementation of the Directive within the established deadlines through planning and providing financial assistance to regional governments for building new sewerage and treatment capacity³⁸⁵. Since 2010, a new plan has been launched by the Spanish government. Its objective is to triple the volume of wastewater reuse by the end of 2015. According to the national authority estimation, up to 1.5km³ of wastewater could be saved and reused yearly.³⁸⁶ Both the national and regional authorities are in charge of developing the necessary infrastructure and adopting financial measures to meet EU standards, and of ensuring that all waters under their jurisdictions comply with the environmental pollution thresholds of the UWWTD.

However, they operate in geographically different areas. The national government oversees the 9 long, interregional rivers, whereas the 17 regional governments cover the rivers that flow within their regional territory and coastal areas. Local authorities (around 8,100 for the whole of Spain) are responsible for the day-to-day management of water treatment. Local authorities' activities are monitored and subject to control activities to insure the compliance of the actors with the system in place by regional and national bodies

³⁸⁴ Ministerio de Medio Ambiente de España (2009) National Water Quality and Sanitation Plan.

³⁸⁵ OECD (2011) Environmental Enforcement in Decentralised Governance Systems: Toward a Nationwide Level Playing Field, p. 12. <http://www.oecd-ilibrary.org/docserver/download/5kgb1m60qtq6.pdf?expires=1381499739&id=id&accname=guest&checksum=24D234CD812BAB8B716E500519FC168E>

³⁸⁶ OECD (2009) Alternative Ways of Providing Water <http://www.oecd.org/env/resources/42349741.pdf> p.14

depending on where they take place: by the national government in interregional rivers and by regional authorities in intraregional and coastal waters.

Institutional framework and partnership/inter-institutional arrangements

Bilateral and multilateral collaboration agreements are concluded between the Ministry for the Environment, Rural and Marine Affairs and regional environmental authorities on issues touching upon national-level competencies, such as river basin management. These agreements concern mainly topics such as:

- Remaining actions from the previous period.
- Projects in agglomerations in non-sensitive and new sensitive areas.
- Actions to ensure compliance with the environmental objectives of the directive.

A Water Sector Conference was established in 2009, in part to address the problems in collaboration between the eight river basin authorities (Water Confederations) operating under the General State Administration and governments of the Autonomous Communities.

The Autonomous Communities initiated in 2008 the establishment of a State Environmental Inspection Network (REDIA). Regional Environmental Enforcement Authorities, with the participation of the national environment ministry, exchange best practices through projects (development of guidance documents, organisation of technical workshops) of common interest.

The Albufeira Convention³⁸⁷ is a good example of bilateral cooperation in the management of shared river basins. This convention between Spain and Portugal was signed in 1998 and seeks to balance environmental protection with sustainable use of the water resources within the framework of International and EU Law, whilst at the same time respecting the provisions of previous water treaties.

Box: Example of Galicia

In Galicia, the Inspection Service works in close co-operation with the Environmental Laboratory of Galicia. There is also regular direct contact between Galicia and the Northern Region of Portugal as a result of a Protocol that was established in 1991. A further treaty was drawn up in 2002 which was ratified by the Spanish and Portuguese Parliaments. Galicia has also contact with Portugal through the Committee of the Regions and other organisations including Arco Atlántico.

Enforcement and monitoring of non-compliance

Concerning the UWWTD in particular, the distribution of responsibilities across the territory renders the national and the regional authorities sovereign over their jurisdictions. No external administrative controls exist to monitor or penalise national or regional authorities

³⁸⁷ International Network of Basin Organisations (2012) Portuguese Cooperation with Spain on Transboundary Water Management

that fail to implement measures necessary to comply with the UWWTD. This includes requirements related to the building of infrastructures and the funding of water treatment services³⁸⁸. Court procedures can however be initiated if public authorities fail to act in agreement with two main principles: legality and guarantee of protection of citizens' rights and interests.

The analysis of the monitoring and penalising actions carried out in Spain from 1995 to 2005 shows that actors targeted by the UWWTD were scarcely monitored and disciplined if they failed to implement the Directive's requirements (SEPRONA, 2010). Amongst the regions, the degree of monitoring provided by regional governments varied enormously, but averaged at only 3 times/year even in the regions with a more vigorous environmental policy, such as Catalonia and Andalusia. National enforcement related to the UWWTD is therefore not comprehensive as monitoring and enforcement actions target only local authorities' activities. Further, there are limited mechanisms to monitor the activities of regional and national administrations. Penalties related to the implementation of the UWWTD can only be issued by courts (SEPRONA, 2010).

Table 20: Conformity in load in January 2009³⁸⁹

Load	Number	Percentage
Compliant	56,599,394	82%
Non-compliant	9,288,641	14%
Under Construction	2,552,337	4%
Total	68,772,103	100%

Table 21: Conformity in number of agglomeration in January 2009

Agglomerations	Number	Percentage
Compliant	1,253	54%
Non-compliant	888	38%
Under Construction	184	8%
Total	2,320	100%

Where a pollution incident or other anomaly is identified, national Inspectorates can initiate an investigation to clarify the nature of the incident and its causes. Such incidents are classified as Minor, Less severe, Severe and Very severe, depending on the environmental damage caused, the public health hazard created and the degree of maliciousness of the polluter.³⁹⁰ For Minor and Less severe damages, Inspectorates can ask for a preventive and temporal halt of all operations causing pollution. Where this is not possible, a financial charge could then be imposed on the local authority to help remedy the damage caused by pollution, or a fine for infringing its pollution authorisation. Amounts can vary from over €6,000 for minor infringements to over €600 000 for very severe infringements. In cases

³⁸⁸ SEPRONA (2010) International Conference for European Enforcement Authorities.

³⁸⁹ Degree of conformity distribution in January 2009 for agglomerations > 2,000 population equivalent (p-e)

³⁹⁰ Dr Monica Garcia Quesada (2012). The EU as an "Enforcement Patchwork": The Impact of National Enforcement in the Adoption of EU Water Law in Spain and Britain, p. 14.

where incidents are classified as Severe and Very Severe, they are referred to the Ministry of Environment to determine what particular action to take. Actions could include revoking licences and to order that installations are (temporarily) closed down.

The same enforcement rules are applied and site visits are carried out. The major difference between national and regional inspections is that, in coastal areas, pollution is considered a lesser environmental and public policy hazard. The most severe infractions can receive a fine of up to €300 500 (which is about half of the highest fine that can be imposed in river areas).

Box: Example of Galicia

Galicia, one of Spain's 17 Autonomous Communities, can be used as an example to illustrate implementation of environmental inspection procedures concerning measures on water in Spain. In terms of enforcement, The Galician Inspectorate's role is to identify non-compliance and determine whether the incident should be brought to the attention of the identified permitting and enforcement authorities, which can be at the regional, local or central level. Two types of sanctions exist – administrative sanctions which can result in an administrative fine and/or the closure or partial closure of the controlled installation and Prosecution through the Criminal Courts. The central government can exceptionally take specific action, where justified by the general interest due to several Autonomous Communities being affected. This is the case, for example, with environmental impact assessments for national public infrastructure projects or the management of the eight river basin authorities (Water Confederations), which cover several Autonomous Communities. The Water Confederations can issue water abstraction and wastewater discharge permits and has a right to inspect and impose sanctions in accordance with the Water Law.

Inspection capacity

The Spanish Water and Wastewater Association³⁹¹ (Asociación Española de Abastecimientos de Agua y Saneamiento AEAS) was founded in 1973. It aims to promote and develop all aspects of the urban water supply and sanitation, including service efficiency, end user satisfaction, and water resources protection. The association's members include 120 collective utilities (public or private) serving more than 32 million people in Spain, 114 Individuals interested in the water sector, 95 collaborators (consultants, suppliers, manufacturers, etc.) and 23 "protectors" representing central and regional administrations.

The national Association of Urban Water Utilities (Asociación Española de Empresas Gestoras de los Servicios de Agua a Poblaciones, AGA) was founded in 1995 and has 62 members. AGA is a member of the Confederation of employers and industries of Spain (Confederación Española de Organizaciones Empresariales, CEOE), the major institution representing the Spanish business.

³⁹¹EUREAU (2008) Statistics Overview on Water and Wastewater in Europe 2008, <http://www.riool.net/riool/binary/retrieveFile?itemid=4814&style=default>

Moreover, SEPRONA, the Spanish Environmental Protection Service, consists of about 1,700 police officers dealing with about 150,000 activities every year, mostly administrative infringements (145,000), but as a result of the rest of the 5,000 criminal infringements more than 1,000 people are arrested every year³⁹²

Costs of inspection

The Inspection Service of Galicia does not recover its costs from activities it regulates, but is funded through general taxation. Charges are made for permits, but any funds received are collected directly by the local Exchequer. It is still not clear how the principles of cost recovery will be finally applied, but will probably involve increasing water tariffs. The WFD, if fully implemented to enforce cost-recovery targets, can have strong socio-economic and environmental effects in the Spanish agricultural sector.³⁹³

Effectiveness of the inspection system

Transposition of the WFD in Spain contains several shortcomings, especially regarding River Basin Management Plans. Under Spain's legislation, a number of the obligations contained in these plans only apply to rivers that flow between different regions, and not to rivers that are completely within the territory of one region. The obligations in question cover matters like the conditions for granting exceptions, waters used for the abstraction of drinking water, and the monitoring of the ecological and chemical status of surface waters. Additional legislation will therefore be needed to ensure that Spanish legislation fully complies with the Directive.³⁹⁴

However, improvements have occurred in the quality of rivers and streams during the last decade. In 1995, 52% of the total length of Spanish rivers was considered as at good water quality. In 2004, the number increased to 62%.³⁹⁵ Spain has also a good record concerning bathing waters. Progress has been made in treating point sources of pollution. In 2002 61% of the volume of urban waste water was treated in accordance with the UWWTD. The compliance in 1994 was only 41%.

Most of the investment effort on infrastructure or water related is largely supported by EU financing. Spain is also a leading country in Europe for the reuse of treated waste water.

Box: Example of EC legal action against Spain over breaches of Environmental Law

In 2008, the EC pursued legal action against Spain involving three breaches of EU environmental law. In two parallel cases concerning the UWWTD, the EC sent final warnings to Spain. 343 Spanish towns and cities were considered to be discharging urban wastewater into already designated sensitive or potentially sensitive areas without appropriate treatment. An EC assessment also confirmed that six potentially sensitive areas remain to be

³⁹² SEPRONA (2010) International Conference for European Enforcement Authorities

³⁹³ Consuelo Varela-Ortega (2008) The Water Policies in Spain: Balancing water for food and water for nature

³⁹⁴ European Commission (2011) Environment: Commission urges Spain to complete legislation for river basin management plans

³⁹⁵ OECD (2004) OECD Environmental Performance Reviews Spain

designated and an area designated as less sensitive in the Cantabria region does not meet the Directive's requirements. The EC sent Spain a final warning letter over the case. In 2010, the EC took Spain to the European Court of Justice.

Conclusions

One report cites that at the end of the implementation period of the UWWTD, the national government acknowledged that a significant number of infrastructure plans were necessary to comply with the UWWTD, including the building of water treatment plants and collectors in agglomerations in 14 of the 17 regions. The works were estimated to cost over €1,197 million³⁹².

Despite the progress concerning UWWT effectiveness underlined previously, water management in Spain is far from sustainable. Even if actions are being taken, the protection of coastal ecosystems is still limited overall. These sensitive waters need to be delineated under the UWWTD. Much remains to be done to further extend municipal waste water treatment. For instance, an important share of municipal discharges still does not have a definitive pollution licence.

9.4 Spain: Habitats and Species

This case examines the inspection and enforcement of the Habitats and Species Directive in Spain.

Legislative framework

The Spanish regulation framework regarding nature conservation acts on four different scales – the local level, the autonomic regional level, the national level and the international level.³⁹⁶ The implementation of the Natura 2000 Directives is deferred to the Autonomous Communities, since the SCIs (sites of community importance under the Habitats Directive) and the SPAs (special protection areas under the Birds Directive) are designated by the Autonomous Governments. Overall, 1,276 special areas of conservations were identified under the Natura 2000 legislation in Spain in 2003. It represented about 118,500 km² or 23.5% of the Spanish territory (i.e. terrestrial and marine territories).³⁹⁷ The Autonomous Governments propose the lists of sites to be compiled and coordinated by the State Government (represented by the Ministry of the Environment), and those lists are then transmitted to the EC. In the sphere of environmental issues, State and Autonomous Communities share jurisdiction with regard to nature conservation and forestry, whereas Autonomous Communities have sole jurisdiction over land-use planning and agriculture. This means the State is empowered to enact environmental basic laws (thus establishing a framework that has to be respected by all Autonomous Communities), whereas Autonomous Communities are empowered to enact environmental laws and regulations within the broad State framework, to lay down higher standards of protection (whether by law or administrative regulation) and to implement and execute said legislation.

The formal transposition of the Natura 2000 Directives in Spain is laid down by the Royal Decree 1997/1995, of 7th December, on the conservation of natural habitats and of wild fauna and flora (Royal Decree 1997/1995 hereinafter). The objective of the Natura 2000 Directive is to protect about 22% of the Spanish territory in the long term. In that purpose, the budget in 2003 attributed for biodiversity conservation by the state was € 15.9 million out of which € 4.4 million were intended for Natura 2000 only (Payen and Burdeau, 2004). The Law 43/2003, of 21st November, introduced a new Chapter, including five new provisions to ensure that the annexes (lists of habitats and species) of the LEN are fully consistent with the Directives'. The Royal Legislative Decree 1302/1986, of 28th June contains the consolidated text of the Environmental Impact Assessment Law, and also applies to the protection of habitats and ecosystems. This legal framework applies to the sites designated as natural protected areas.

Box: Example of awareness raising activities

A new LIFE project is being launched to raise the awareness of Spanish citizens on the importance of biodiversity, including Spain's Natura 2000 sites for environment. Work will

³⁹⁶ Ecologistas en acción (2008) Evaluation of the state of nature conservation in Spain www.governat.eu/files/files/pb_ecologistas_nature_conservation_spain.pdf

³⁹⁷ D. Payen and M. Burdeau (2004) Rapport Europe et Nature, p. 52.

include a network of national and international events, specially-commissioned television and radio programmes and a range of periodicals aimed at different target audiences. The project was launched earlier this year (January 2013). The initiative, will receive €1.075 million of co-funding from LIFE, out of a total budget of €2.15 million, and will run a number of awareness-raising activities until March 2017.³⁹⁸

Institutional framework and partnership/inter-institutional arrangements

The Spanish framework for environmental management has led to increasing regionalization of environmental management, which clashes with the indispensable global approach of nature conservation, especially for the reason of political differences between regions and political parties and since the lack of effective instruments of institutional character prevents an effective coordination of activities.

On the level of administrative organization, the regional competencies on conservation can equally relapse into a Council, a Headquarter, a Service or a Section, which makes the relations and coordination between Autonomous Communities enormously difficult.

It should be considered that it is the self-governing regions that are responsible, not central government, since powers in this field have been transferred to them. This poses a problem, because generally speaking there has been a lack of coordination between the regions when it came to implementing the process, only loosely defined in the Habitats Directive³⁹⁹, which goes little beyond the determination of habitats and species to be protected.

Inspection planning and process

Neither the Birds directive nor the Habitats directive contains detailed inspection provisions. However, surveillance is provided for in Article 11 of the Habitats directive and monitoring in Article 12. The provision on the monitoring of the conservation status of the natural habitats and Natura 2000 species (contained in the art. 11 of the Habitats Directive) is not transposed into the Spanish regulation. Article 8 of the Royal Decree 1997/1995 specifies only that the “National Commission for the Protection of the Nature” has the duty of encouraging “the co-operation between the public authorities in adopting surveillance measures of the conservation status of the natural habitats and species, with particular regard to priority natural habitat types and priority species”⁴⁰⁰.

The Royal Decree 1997/1995 includes article 6.1 of the Habitats Directive, however does not develop specific guidance or provisions about the management regime. For a more effective transposition of the Directives, further information is needed to assist AC on setting up the “management plans”.

³⁹⁸ Welcome Europe website (2013) Europe’s Natura 2000 network in Spain www.welcomeurope.com/news-europe/europe-s-natura-2000-network-spain-15703+15603.html

³⁹⁹ European Journal of Geography (2011) The Natura 2000 Network in Spain and its Lack of Protection.

⁴⁰⁰ Birdlife International (2009) Through the Green Smokescreen – How is CAP cross compliance is delivering bio diversity?

Each region has gone its own way concerning the planning and management of the Natura 2000 Network. As a concrete illustration of this issue, only five self-governing regions include a specific figure of protection for Natura 2000 sites in their environmental legislation: Andalusia, Cantabria, Extremadura, La Rioja and Galicia³⁹⁹.

Inspection capacity

There exists a lack of resources in some countries including Spain.⁴⁰¹ For example, wetland management is affected by a chronic lack of financial and human resources to ensure the implementation of existing conservation objectives. Moreover, since funds are often provided on a project-basis (e.g. for the restoration of a specific wetland area and for a limited time frame), there is no continuity in the program funding, and thus project maintenance and follow up is poor.

Box: Example of local volunteers undertaking inspections

The 'Proyecto Ríos' initiative³⁹⁹, backed by ADEGA and launched in 2004, has as its declared aim the "awareness-raising, education and public participation in defense of our rivers. This will be done by carrying out inspections of the condition of Galician rivers **by local volunteers**, whether individuals or groups, with the final purpose of their assuming responsibility for monitoring (adopting) the river that runs through their town, village or municipality"

Inspection costs

Spain receives funding for operating the Natura 2000 network through a system of co-financing (LIFE, FEAGA). Some reports indicate that current funding is insufficient especially when taking into consideration the large dimensions of the Natura 2000 network in Spain and the budget shortcomings in several of the regions⁴⁰². The current financial crisis is worsening the financing situation. Law 42/2007 envisages, in Article 74, the creation of a Fund for the Natural Heritage and Biodiversity, which amongst other actions would be responsible for funding the Natura 2000 management plans and instruments. However, this action has not yet been implemented. The table below includes some costs information on SAC management costs in the Canaries.

Each regional administration is free to determine checks' nature and frequency. It is a regional governments' competence to perform checks on operators so as to determine if they are in compliance with the law. Otherwise, these infringements can be prosecuted according to the penalty regime set out in the law. Each regional administration also set up their appropriate bodies comprised of enforcement officials. There is no national rule in

⁴⁰¹ WWF (2003) WWF's Water and Wetland Index

⁴⁰² Terra Environmental Policy Centre (2000) Estimation of costs of the Natura 2000, Natura 2000 Network in the Macaronesian Region [www.terracentro.org/Publicaciones/Serietecnica/Serie%20tecnica2%20\(en\).pdf](http://www.terracentro.org/Publicaciones/Serietecnica/Serie%20tecnica2%20(en).pdf)

how and when to perform these inspections, so it is difficult to get reliable and accurate information at the national level.⁴⁰³

Table 22: SAC management costs in the Canaries⁴⁰²

	Total cost of SAC management (euro/year)		Total cost of just habitats from Annex I within the SAC (euro/year)	
	Horizon 1	Horizon 2	Horizon 1	Horizon 2
Habitat conservation	22 291 000	11 986 889	7 899 240	2 010 587
Surveillance (only terrestrial)	2 820 941	2 820 241	947 203	947 203
Damage prevention	5 252 982	5 252 982	5 252 982	5 252 982
Monitoring	263 122	250 501	263 122	250 501
Total	30 628 045	20 311 307	14 362 547	8 461 273

Inspection review and reporting

At the national level, there exist no detailed methods for evaluation of objectives of habitats and species preservation beyond the framework proposed by the EU. However, for a few Autonomous Regions (such as the Basque and the Valencia), strategies exist and propose the creation of Observatories of Sustainability⁴⁰⁴ that are entitled to perform audits of the programs in place and of the environmental inspections process.

A “culture of continuous evaluation” is proposed as a national strategy. It is supposed to be based on the work undertaken so far at the European level. No further specifications are provided.

No reporting activity was identified. According to a study carried out by the European Association of Geographers⁴⁰⁵, the protection enjoyed by Natura 2000 areas is not effective in Spain and does not go further than a declaration. Indeed, there exist no management or planning whatsoever. Moreover, recurrent lack of personnel, infrastructures or basic services makes the system of environmental inspections for habitats or species not effective. In 2010, there was no approved Conservation Plan effective in Spain.

⁴⁰³ Interviewee from the Spanish Ministry of Agriculture, Food and Environment

⁴⁰⁴ Interdisciplinary Centre for Comparative Research in the Social Sciences (2006) National Report on Regional Sustainable Development Spain

⁴⁰⁵ European Journal of Geography (2011) The Natura 2000 Network in Spain and its Lack of Protection, pp 1-11.

http://webcache.googleusercontent.com/search?q=cache:Rbs_fSmMv0IJ:www.eurogeographyjournal.eu/index.php%3Ffunc%3Dpast_issues%26issue_id%3D13+&cd=2&hl=en&ct=clnk&gl=uk

Enforcement

Each regional administration is free to determine the nature and frequency of checks. It is the regional governments' competence to perform checks on operators to determine if they are in compliance with the law. Otherwise, these infringements can be prosecuted according to the penalty regime set out in the law. Each regional administration also set up their appropriate bodies comprised of enforcement officials. There is no national rule in how and when to perform these inspections, so it is difficult to get reliable and accurate information at the national level.⁴⁰⁶

Effectiveness of the inspection system

Currently, there are 562 SPAs and 1 434 SCIs in Spain. The surfaces of SPAs and SCIs correspond to 9.5 million and 12.3 million hectares respectively (28% of the Spanish territory). Both surfaces have a tendency to overlap, meaning that some of the Natura 2000 Network sites are denominated as both a SPA and SCI. The delay in the designation of SCIs, the absence of preventive protection measures and the lack of management plans in the SCIs have resulted in a degradation in the state of conservation of a large part of SCIs in recent years. Therefore, many SCIs will predictably be in a worst state of conservation than at the time when they were declared SCIs under Natura 2000.

In the last decades, Spain has dealt with a growing problem of illegal colonisation of sensitive forest areas⁴⁰⁷. Without authorisations, many camps appeared and then became permanent. The legislation does not authorize the authorities to remove the habitations and at the same time nothing had been planned, no specific and more appropriate area had been dedicated to solve this issue.

Conclusions

The implementation of Natura 2000 network was considered to have positive impacts on GDP in Spain⁴⁰⁸, with an estimated increase in GDP between 0.1 - 0.26 per cent at national level. In general, it was estimated that the network would generate an additional 12,792 jobs to the country. At the regional level, Andalucía, Aragón and the Canarias islands were supposed to benefit the most from Natura 2000 with a 0.26 - 0.44 per cent increase in their GDP and between 1346 - 5957 additional jobs created.

For protected habitats and species, Spain is facing an increase in the total amount of protected areas due to the growing transfer of responsibility to the Autonomous Regions.

⁴⁰⁶ Interviewee from the Spanish Ministry of Agriculture, Food and Environment.

⁴⁰⁷ Interviewee from the Centre National de la Recherche Scientifique.

⁴⁰⁸ Natura 2000 (2010) Financing Natura 2000, www.ecologic-events.de/natura2000/documents/FinancingNatura2000ConferenceBackgroundPaper_FINAL.pdf

Moreover, discontinuities in the protected areas exist because of lack of coordination between authorities in the different Autonomous Regions.

The effectiveness of the system is also very different according to the regions. According to an OECD study, 14.6% of EU Member States' territories are protected while it is less than 10% of Spain's territory⁴⁰⁹. The preservation of ecological corridors does not seem to be a priority and not much has been done for their restoration.

⁴⁰⁹ OECD (2004) OECD Environmental Performance Reviews Spain, pp 35.

9.5 Spain: CITES

This case examines the inspection and enforcement of the CITES Regulation in Spain.

Legislative framework

Spain acceded to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) on May 16, 1986. It was transposed into national law by Royal Decree 1739/97 of 20 November 1997 on measures to implement the Convention in International Trade in Endangered Species of the Fauna and Flora (CITES) and Regulation (EC) No. 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade.

In Spain, the Ministry of Commerce acts as the primary management authority (MA) in accordance with CITES. The Ministry acts as the official representative of Spain to other countries and party before the Convention Secretariat. It also processes and authorizes, where appropriate, applications for import, export to the Inspection Services (SOIVRE of the Territorial and Provincial Foreign Trade). Resolution of 5 May 1998 under Spain's Directorate General of Foreign Trade designated the Centres and Units Technical Assistance and Inspection of Foreign Trade (SOIVRE) as the authority responsible for issuing permits and certificates in related to CITES requirements.

Spain has a second Management Authority for CITES, which is represented by the Department of Customs and Excise of the State Agency for Tax Administration (AEAT). In particular, it oversees documentation required for import or (re) export pre-clearance of goods. In certain cases where appropriate, the authority can also carry out physical inspections according to the recommendations from the risk analysis (including control over parcels and travellers). When a violation is detected, it may also initiate administrative proceedings for alleged infringements.

Spain's Scientific Authority (SA) under CITES is run by the Directorate General of the Environment and Forestry Policy, under the Ministry of Environment and Rural and Marine Affairs. Their main role is to issue opinions/expertise at the request of the CITES Management Authority.

The government runs public awareness activities such as press releases, conferences, newspaper articles, radio/TV appearances, presentations and information at border crossing points.

Institutional framework and partnership/inter-institutional arrangements

As has been described, in Spain the Ministry of Commerce acts as the primary management authority in accordance with CITES. Spain has a second Management Authority (Department of Customs and Excise of the State Agency for Tax Administration). Spain's Scientific

Authority (SA) under CITES is run by the Directorate General of the Environment and Forestry Policy, under the Ministry of Environment and Rural and Marine Affairs. Finally, SOIVRE Inspection services are the regional authorities responsible for carrying out inspections and checking documentation at border points. According to Spain's most recent CITES implementation report; information is regularly exchanged between all of the different governmental departments. In addition to the above listed government bodies, other authorities are also responsible for ensuring compliance with CITES regulations, including:

- Service Nature Protection Civil Guard (SEPRONA).
- Customs Surveillance Service.
- Customs Service.
- Courts.
- Other local and regional authorities.

There is also European level coordination. In October 2010, Spain held a workshop on CITES with the Republican National Gendarmerie of Portugal.⁴¹⁰

Inspection planning and process

According to the CITES 2009–2010 Biennial Reports, Spain reported running four major inspection operations during the reporting period. The compliance and monitoring operations undertaken include inspections of traders, producers, markets, border controls and review of reports provided by traders/producers⁴¹⁰. The Management Authority (MA) is located in the Ministry of Industry, Tourism and Trade (primary MA) and in the Ministry of Economy and Finance (secondary MA).

The functions corresponding to the CITES Management Authority are performed by the Central Services and peripheral network consisting of 33 Regional Divisions and Provincial Foreign Trade, in particular through SOIVRE Inspection Services (The Ministry of Industry's Service for Inspection Surveillance and Exports). They all depend on the Ministry of Commerce through its Directorate General for Trade and Investment within the Ministry of Economy and Competitiveness (Madrid). Twelve of these SOIVRE Inspection Services are authorized to the EU as control points for imports and (re) export of CITES specimens through which such goods are dispatched. All units are coordinated by the Central Services of the Directorate General of Inspection, Certification and Trade Technical Assistance, part of the said Ministry of Commerce. SOIVRE has offices at border points: they can issue CITES permits and provide expert assistance for enforcement. At each border point designated for

⁴¹⁰ European Commission (2010) CITES Biennial reports 2009-2010
www.cites.org/common/resources/reports/pab/09-10Spain.pdf

CITES shipments, a SOIVRE technical office is on hand to assist with checking these shipments⁴¹¹.

The Penal Procedure Act gives power to the Judicial Police to conduct seizures. All Police Corps are authorised to arrest people or to start an administrative procedure for committing crimes. They are also authorised to carry out seizures or confiscations. Nevertheless, the SEPRONA is the unit with specific and specialized competences in environmental crimes and CITES. The SEPRONA is devoted to environment and is deployed throughout the country; its competencies are complemented and supported by other units such as Customs⁴¹².

Concerning the process on captive breeding and artificial propagation of specimens of species listed in the Annexes to Regulation (EC) No 338/97, applicants must submit an official request to one of the SOIVRE Inspection Services of the Territorial and Provincial Foreign Trade. Along with the application, the following documents and information must be provided:

- List of specimens present in their facilities.
- Proof of purchase
- Description of facilities, systems or artificial propagation and breeding methods of marking, if any.⁴¹³

SOIVRE inspection services must then ensure the validity and conformity of the documents submitted. If approved, the specimens will be assigned an identification number and registered with the Inspection services. Further, in the case of captive breeding, breeders must provide notification of all eggs laid and hatched/birth as soon as they take place and, in any event, no later than seven calendar days. Breeders and breeding should facilitate access to appropriate facilities, as well as samples and controls necessary to perform the inspections in accordance with Article 55 of Regulation (EC) 865/2006. Inspections are regulars for breeders and nurseries. Controls in pet stores and other commercial sectors are random or can be the result of targeted research. According to the CITES Biennial report 2009-2010 on Spain, risk analysis is systematically considered for borders inspections. However, in the interior of the country, no such risk analysis is being used but only experience-based recommendations.

Enforcement and use of sanctions

A few MS have developed national policies and strategies for CITES enforcement based on assessments of illegal wildlife trade in the country. This is the case for Spain, where CITES crime is included in a national crime analysis prepared every six months. The national crime

⁴¹¹ Milieu (2006) Study on the Enforcement of the EU Wildlife Trade Regulations in the EU-25

⁴¹² TRAFFIC for Defra (2005) Enforcement of wildlife trade controls in EU Member States: Country Profiles, www.traffic.org/enforcement-reports/traffic_pub_enforce1.pdf

⁴¹³ Spanish Ministry of Commerce website (2006) Cría en cautividad y reproducción artificial <http://www.cites.es/en/actividades/Pages/cria-en-cautividad-y-reproduccion-artificial.aspx>

analysis indicates enforcement priorities, and the MAs are consulted on illegal wildlife trade priorities⁴¹⁴.

Services other than Customs play an important role at border points. The Ministry of Industry's Service for Inspection Surveillance and Exports Regulation (SOIVRE) also has offices at border points and controls documentation. A national police service provides frontline enforcement at border points (Guardia Civil and Guardia Civil, respectively also referred to as SEPRONA). The Penal Procedure Act gives power to the Judicial Police to conduct seizures. All Police Corps are authorised to arrest people or to start an administrative procedure for committing crimes. They are also authorised to carry out seizures or confiscations. Nevertheless, the SEPRONA is the unit with specific and specialized competences in environmental crimes and CITES. The SEPRONA is devoted to environment and is deployed throughout the country; its competencies are complemented and supported by other units such as Customs.⁴¹⁵ Spain also participated with Portugal in the Iberian Seminar on CITES enforcement issues in October 2010. Spain also runs a Masters programme dedicated to the Management, Conservation and Control of Species in International Trade. Spain doesn't have a national action plan for co-ordination of enforcement and explained that it is not necessary due to the administrative and enforcement authorities being in constant communication with each other.

There exist two possibilities for considering non-compliance with the system in place for CITES in Spain:⁴¹⁶

- The first one is included in Articles 332 and 334 of the Criminal Code. According to these two articles, sentences vary from six months to two years of imprisonment or a daily fine from eight to twenty-four months (leading to a possible maximum fine of €41,265 or to a day fine that can reach €300)
- The second one is included in the "Organic Law 12/1995 of 12 December 1995, to Deter Smuggling".⁴¹⁷ The Article 3 of the Organic Law defines fines that may reach four times the value of the goods involved. In addition, Article 5 states that administrative infringements will be sanctioned with a fine up to three times the value of the smuggled goods.

There have been several penalties related to CITES infringements. This relates mainly to administrative violations and smuggling of protected species. There were 252 prosecutions for smuggling infringements in 2009 and 262 in 2010. Of these cases, 142 cases in 2009 and 136 in 2010, proper CITES documentation was not provided. The rest were prosecutions for breaches observed in domestic trade, such as the disposal of specimens without accurate proof of legal origin. There have been numerous seizures of turtles (*Testudo graeca*)

⁴¹⁵ TRAFFIC for Defra (2005) Enforcement of wildlife trade controls in EU Member States: Country Profiles, www.traffic.org/enforcement-reports/traffic_pub_enforce1.pdf

⁴¹⁶ Defra (2005) Enforcement of wildlife trade controls in EU Member States

⁴¹⁷ Ley Orgánica 12/1995 de Diciembre, de represión del Contrabando

originating from North Africa. There have been a total of 20 lawsuits, some for alleged violation of the Code Criminal and other for alleged smuggling (CITES Biennial Report).

Box: Overview of SEPRONA's activities in the Autonomous Regions for 2006

In 2006, SEPRONA carried out 153,852 actions, issued a total of 150,151 complaints of violations related to the environment (both criminal and administrative violations) and arrested 930 people. A majority of the complaints were studied for violating laws regulating fishing, hunting and possession of protected species (35,584), violations of municipal waste, hazardous or radioactive devices (33,072), violations of animal health laws, and vegetable and food quality (25,381). These violations accounted for about 65% of total offences.

Inspection capacity

Regarding the EU Wildlife Trade Regulation, Spain has specialised environmental prosecutors based in Madrid and Barcelona, and the position of environmental prosecutor for the Supreme Court has recently been created with a staff of more than 200 investigators (CITES Biennial Report). Spain has a management authority staff of 24 people and a scientific authority staff of 4. There are also 17 staff members working in satellite offices (other competent authorities to issue permits) (CITES Biennial Report).

Spain's Management Authority staff predominantly exhibits skills and expertise in economics/trade, law/policy, biology, administration and agriculture while Scientific Authority staff has skills and expertise in botany, ecology, forestry and zoology. The MA has undertaken or supported research activities in relation to CITES species or technical issues for different species of raptors and fish species.

Inspection review and reporting

A Statistics and reporting on trade seizure and confiscations are registered by the Police in a national centralised system that is located at the Headquarters of the SEPRONA. Reports include mainly seizures, confiscations, crimes, minor offences.

The Spain MA publishes annual reports that include information on aspects such as incidents and information on mortality in transport in trade with third countries, as well as the quantities actually sold. The Ministry of Commerce also prepares an annual report and a biennial report that collects data on foreign trade in specimens of species listed in the Annexes to Regulation (EC) 338/97. In a broader context, Spain carries out a national crime analysis every six months in which CITES crime is included. To do so, the MAs are consulted on illegal wildlife trade priorities as well as on enforcement priorities.

Cost of inspections

In Spain, the Management Authority charges fees for permit issuance, registration and activities related to CITES. Fees include 20 € for permits to import, export for up to 4 species contain up to 4. For each additional species, 5 Euros is charged. A 20 € fee is charged for community use certificates. A 30 € fee is charged for an ownership certificate for 4 species, with a € 5 increase for each additional species. Finally, a 10 € fee is charged for an exhibition certificate (CITES Biennial Report).

Between 1994 and 2004, Spain dedicated about €10 million to species protection (60% or €6 million) and to habitat conservation (40% or €4 million). Over 50% of these costs were covered by the EU. The different projects launched through this financing focus on the Posidonia grasslands, wetlands, coastal and island ecosystems, several species of flora and 16 animals including the Iberian lynx, the Spanish imperial eagle and the Pyrenean brown bear.

Effectiveness of the inspection system

A number of Member States noted that although facilities for the temporary keeping of seized or confiscated live specimens are available, these are often insufficient and can only cater to certain animals in small quantities (ES, SE). Further, there are no official mechanisms in place for the long-term relocation of these specimens. In October 2010, a French national, who attempted to sell four elephant tusks in Spain in 2006, was sentenced to one year and nine months in prison and fined EUR 45,000.

More generally, there is an issue concerning the superposition of laws⁴¹⁸ at the national and regional level. This problem often leads to a non-application of the rules and consequently to the ineffectiveness of the overall system.

Table 23. Import of CITES specimens in Spain (in units)⁴¹⁹

Purpose	2004	2005	2006	2007	2008	2009
Commercial	794,676	669,120	744,593	619,246	548,940	356,590
Home trophies	899	1,188	1,702	1,740	1,398	1,608
Other	5,459	8,319	6,000	5,141	4,096	4,077
Total	801,034	678,627	752,295	626,127	554,434	362,275
Total (Kg)	796,701	1,301,339	613,415	56,177	211,173	102,847

⁴¹⁸ Interviewee from the Centre National de la Recherche Scientifique

⁴¹⁹ Spain Ministry of Commerce website (2006) Cria en cautividad y reproduccion artificial

Conclusions

Spain acceded to the Convention on CITES more than twenty years ago, in 1986. The transposition into national law became effective only ten years later. Different Management Authorities exist but the Ministry of Commerce acts as the primary MA in accordance with CITES.

The communication between the different bodies involved in the CITES system is good considering all the actors involved: the Ministry of Commerce (that acts as the primary Management Authority), the Department of Customs and Excise of the State Agency for Tax Administration (second Management Authority), the Directorate General of the Environment and Forestry Policy (Scientific Authority), SEPRONA and the Customs.

Overall, and despite the highly decentralised system in Spain and the large number of authorities, the environmental inspections for CITES is effective. Frequent analyses of the controls undertaken in Spain are realised.

However, insufficient facilities are available for seized species. This issue is a recurrent one at the European level for most of the Member State. Indeed, there exists no long-term relocation system for confiscated species. A better harmonisation at the European level could be profitable for the effectiveness of the CITES environmental inspections system.

9.6 Conclusions on Spain baseline

The decentralized nature of the administrative system in Spain makes it difficult to have a unified and coherent inspection system. While the system usually permits a more “hands-on” approach regarding the implementation of environmental policies at regional and local levels, the lack of coordination between fragmented and competent environmental authorities is the main weakness hampering the inspection activities and does not help to ensure consistency. According to one report, “...both fragmentation of responsibilities and insufficient coordination are the main causes of Spain’s failure to meet the Union’s environmental policy targets.”⁴²⁰ There is a need for intra-agency and trans-boundary cooperation as well as improved liaison between permitting and enforcement authorities. Further, there is a need to increase human resources and economic support in the regional Administrations as well as subject monitoring to intra-agency and trans-boundary cooperation.

Regarding Water Measures, there are competing priorities between regional and local Environmental Authorities in terms of enforcement policy. In addition, very few regional environment ministries have the competence to control all environment media. Indeed, only five regional ministries report that inspectors have the competence to control all environmental media. Moreover, the Autonomous Communities (AC) have sectoral restrictions on inspection competencies. As stated above, coordination mechanisms are insufficient since only two ministries mention that sectoral inspections are subject to coordination. Further, effective enforcement of water measures, especially concerning illegal groundwater abstract needs significant improvement. Sources indicate that illegal wells and abstractions continue to be a problem in Spain, mainly due to the large profits generated from these illicit activities. Recommendations have also been made to increase water prices to reflect the service provisions involved in order to promote more sustainable use of this resource. There is a lack of a solid and established follow-up system in Spain for practical reasons because of lack of resources.⁴²¹ Hence, reviews and reporting seem to be a low priority of for the central government and regional authorities.

The fact that there is no national inspecting body in place or a centralized inspection service for all the AC seems therefore to constitute a weakness. Many towns and cities are still discharging urban waste water into environmentally sensitive areas or do not have adequate collection treatment systems placing Spain in breach of EU environmental law.

Another problem is the lack of communication and constructive feedback between the central government and inspections carried out by the ACs. Moreover, the lack of trained personnel (e.g. River Basin Authorities) hampers the inspection activities even if certain AC could be cited for good practices such as Galicia. Moreover, concerning the UWWTD in particular, enforcement of national actions is lacking as those accused rarely received a

⁴²⁰ Autonomous University of Barcelona (2005) National Report on Regional Sustainable Development, www.iccr-international.org/regionet/docs/nr-spain.pdf

⁴²¹ Interviewee from the Centre National de la Recherche Scientifique

sanction.⁴²² The records of one of the most active national inspectorates - River Duero – indicate that only 376 administrative sanctions were issued against local authorities in the period 1995 to 2005, out of a total amount of 4300 urban waste water discharges authorised in that period. Nonetheless, both the national and the regional governments introduced measures to monitor pollution levels in the rivers and coastal areas under their jurisdiction as a result of the application of the UWWTD. New sampling water devices were installed that picked up signals regarding water quality in real time. This meant that environmental inspectorates could thus identify exactly when pollution exceeded a maximum level, improving the regularity and the precision in the collection of water pollution data and provided more exhaustive information to control the water quality.⁴²³

Regarding the Nature Protection Measures, there are overlapping issues between SPAs and SCIs' surfaces resulting in Natura 2000 Network sites having both denominations. The Natura 2000 Network also overlaps with the ENP-Networks (Red Estatal de Espacios Naturales Protegidos, ENP) in communities who kept differentiated networks. This has created some inefficiencies (tendency to overlap, delay in the designation of SPAs and SCIs, absence of preventive protection measures, lack of management plans in the SCIs and recent degradation in the state of conservation of a large part of SCIs) regarding the monitoring and inspection procedures. Therefore, many SCIs will predictably be in a worst state of conservation than at the time when they were declared SCIs under Natura 2000.

Overall, Spain faces an insufficient fulfillment of the European laws of nature conservation. The delay and deficient designation of the zones for the Natura 2000 Network in certain AC, the absence of preventive protection, SPA and SCI management plans still not completed in certain AC, result in the state of conservation that is quite concerning. Furthermore, there is a lack of unified models of action among the 17 AC and 2 Autonomous Cities into which relapses full responsibility of environmental management of the Natura 2000 sites.⁴²⁴ The norm and criteria disparities are threatening the efficient and coherent setting of strategies and plans related to conservation and sometimes impeding the correct application of penalties regulations in the Penal Code for crimes against nature conservation.

Finally, regarding the Trade in Environmentally Sensitive Goods Measures, the inefficiency of CITES implementation lies in the lack of budget allocated to CITES activities including a need for technical equipment for monitoring and enforcement. Another issue is the fact that there are no official mechanisms in place for the long-term re-location of the species seized or confiscated. The involvement of animal welfare official expertise is also lacking in the process of confiscation, disposal and control of rescue centers.

⁴²² 4th Conference ECPR Standing Group 27-29 June 2012: "The EU as an Enforcement Patchwork – the Impact of National Enforcement in the Adoption of EU Water Law, <http://regulation.upf.edu/exeter-12-papers/Paper%20207%20-%20Quesada%202012%20-%20EU%20as%20an%20Enforcement%20Patchwork.pdf>

⁴²³ 4th Conference ECPR Standing Group 27-29 June 2012: "The EU as an Enforcement Patchwork – the Impact of National Enforcement in the Adoption of EU Water Law, <http://regulation.upf.edu/exeter-12-papers/Paper%20207%20-%20Quesada%202012%20-%20EU%20as%20an%20Enforcement%20Patchwork.pdf>

⁴²⁴ Report of Ecologistas en Acción (2008) Evaluation of the state of nature conservation in Spain www.governat.eu/files/files/pb_ecologistas_nature_conservation_spain.pdf

10 SWEDEN

Introduction and Overview

The Swedish Case Study addresses the following cases:

- Non-IED emissions
- Urban Waste Water Treatment
- Farm infrastructure
- CITES
- Nature (species protection and protected areas)

As defined in the Swedish Environmental Code, environmental surveillance is defined as the control of the measures listed in the Environmental Code (which covers all major environmental legislation) and any activities that will address any identified problems. The surveillance definition covers also guidance and capacity building. As defined in the Ordinance on Environmental Supervision (2011:13), the operative surveillance covers surveillance that is taken directly towards someone who undertakes activities covered by the Environmental Code. In general the broader term environmental surveillance is commonly used in Swedish reports together with the operative surveillance term, describing the more active, inspection focused approaches. Consequently, inspections are only rarely specifically mentioned and the descriptions of approaches are mostly described under the umbrella term environmental surveillance.

Miljösamverkan Sverige (“Environmental Co-operation Sweden”) is an institute for the improvement of co-operation of inspections between the County Administrative Boards, Swedish Environmental Protection Agency, The National Board of Health and Welfare, the Swedish Board of Agriculture and the Swedish Agency for Marine and Water Management within the sectors covered by the Environmental Code. In 2011 the Environmental Co-operation Sweden published a guide for the County Administrative Boards on optimal environmental surveillance.⁴²⁵

This study points out that the Swedish Environmental Protection Agency has identified the following deficiencies in surveillance planning:

- Many of the County Administrative Boards do not have a compiled surveillance plan in which all the surveillance areas are included.
- The quality of the surveillance plan is low as a consequence of the limited contents of the plan.
- Lack of time to conduct inspections and monitoring, this is a consequence of the surveillance plan not recognising the need to allocate resources/time for this.
- Deviations from the surveillance plan are comprehensive due to internal factors, such as changes in personnel.

⁴²⁵ Environmental Co-operation Sweden (2011), Optimal Tillsynsplan, Slutrapport, June 2011, <http://www.miljosamverkansverige.se/projekt/Rapport%20Optimal%20tillsynsplan/Optimal%20tillsynsplan%20-%20slutrapport.pdf>

In the Ordinance on Environmental Supervision (2011:13) it is stated that each authority that has a surveillance responsibility is required to provide a surveillance plan that covers its responsibilities. Therefore the County Administrative Boards are required to describe how they have distributed the different financial resources and how these have been adapted to the existing surveillance needs. The plan has to also explain how the operative responsibilities regarding surveillance responsibilities have been potentially shared.⁴²⁶ Each year the Swedish Environment Protection Agency will provide a statement to the Government on how the surveillance could be improved.⁴²⁷

Based on the plans provided by the County Administrative Boards, the Swedish Environmental Protection Agency has provided an evaluation of the situation in selected counties. Even if not all linked to the sectors to be covered by this study in more detail, it is useful as an overview of the general approach to surveillance within the Environmental Code. All these examples are from 2011 and they do tell of a considerable lack of resources within the County Administrative Boards to undertake environmental surveillance in general and environmental inspections specifically.

Blekinge County

Table 24 shows the estimation of anticipated and planned surveillance for Blekinge

Table 24. Difference between need and planned surveillance and guidance

Activity	Need (days)	Planned surveillance (days)	Difference (days)	Met surveillance need, %	Unmet surveillance need, %
Surveillance of Environmental Code	3 211.5	980	2 231.5	31 %	69 %
Guidance	241	168	73	70 %	30 %

In order to cope with the lack in surveillance capacity, the county has employed external consultants. The county is extremely vulnerable to staff movements, due to the small size of the county.

Kalmar County

Because of low resources the county has only undertaken reactive environmental inspections. In addition the county has promoted self-surveillance. The county has also downgraded the importance of surveillance in the water sector.

Södermanland County

The environmental surveillance has been reduced to reactive surveillance because of lack in resources. These reactive approaches have led to ten cases being taken to the prosecutor.

⁴²⁶ Environmental Co-operation Sweden (2011), Optimal Tillsynsplan, Slutrapport, June 2011, <http://www.miljosamverkansverige.se/projekt/Rapport%20Optimal%20tillsynsplan/Optimal%20tillsynsplan%20-%20slutrappport.pdf>

⁴²⁷ Ordinance on Environmental Supervision (2011:13), 20.1.2011, <http://www.notisum.se/rnp/sls/lag/20110013.htm>

Skåne County

The surveillance of water activities is mostly reactive (triggered by incidents) and therefore the county is unable to prioritise the development of environmental surveillance or to improve surveillance based on own initiatives.

Uppsala County

The operative environmental surveillance is mostly reactive based on environmental reports and complaints. As a consequence of limited resources the county is prioritising self-surveillance in relation to environmentally hazardous activities, contaminated land and Seveso installations. The main problem area is within the water sector, where it is estimated that the lack in surveillance resources is such that it is difficult to fulfil the need to achieve good ecological status of waters by 2021.

Stockholm County

The surveillance of environmentally harmful activities has been mostly reactive and based on the assessment of environmental reporting and responses to complaints. In relation to the surveillance of the water sector, the county had increasing difficulties to deal with all complaints.

Jämtland County

The county's strategic environmental surveillance has had to give way for other responsibilities, such as challenges to development consents and national research responsibilities. In case of any increase in resources for environmental surveillance, the focus would be on operative environmental surveillance for dams and environmentally hazardous activities.

Örebro County

Sectors where the environmental surveillance is perceived as insufficient are those within the water sector, coastal protection, polluted areas and habitat and birds Directives. There is also a lack in the operative environmental surveillance for national parks and Natura 2000.

Västra Götaland

Environmental surveillance is mostly reactive, as a consequence of the limited resources available. Most of the environmental surveillance is desk based. The resources for surveillance of Seveso are not sufficient to meet its requirements. The limited resources for environmental inspections within the water sector has forced the county to a situation where inspections only occur when there is a specific need for this.

Kronoberg County

Planned inspections only take place in the most problematic, environmentally hazardous activities. All other environmental surveillance has been reduced as far as possible. For example environmental reports and production information has only been skimmed over.

Within the current budget the county has difficulties to maintain a level of environmental surveillance that is acceptable.

Östergötland County

The number of planned inspections has been reduced to a minimum. The lack of resources has meant that most of the environmental surveillance is reactive and the response to deal with any complaints regarding surveillance is very long as other areas are prioritised.

Västmanland County

The strategic environmental surveillance undertaken by the county has been downgraded in importance as a consequence of changes in personnel. The strategic planning is now focusing on education for operators for urban wastewater treatment plants about its environmental risks.

10.1 Sweden: Water: Non-IED Emissions, Urban Wastewater Treatment and Farm Infrastructure

Legislative Framework

Farm Infrastructure

In 1999, the Swedish Parliament adopted 15 Environmental Quality Objectives. With these new objectives, a holistic approach was taken as regards the efforts to reduce society's negative effects on the environment. One of the objectives, Zero Eutrophication, addresses the problem of losses of nutrients to land and water.

The measures aimed at reducing nutrient losses from agriculture are primarily based on this Environmental Objective and its targets. The Swedish Ordinance (1998:915) on Environmental Considerations in Agriculture includes rules on manure storage capacity. The regulations of the action programme for reduced nitrogen leaching from agriculture are set out in the Environmental Code.

For all agricultural enterprises with more than ten livestock units, there are requirements regarding manure storage capacity. In the areas identified as vulnerable, storage capacity requirements apply to all enterprises with more than two livestock units. An enterprise shall be able to store manure for at least six to ten months before spreading, depending on which part of the country is concerned and what species the manure comes from⁴²⁸. Table 25 summarises the rules in the ordinance.⁴²⁹

Table 25. Rules on manure storage capacity expressed as the number of months of manure produced on the farm to be stored, based on the number of animals on the farm, animal species and on the location in Sweden (Inga generella bestämmelser = no general rules)

Number of livestock units ¹	Skåne, Halland, Blekinge and Gotland as well as Öland and vulnerable coastal areas		Other vulnerable areas		Other areas	
	Bovines, horses, sheep and goats	Other animals	Bovines, horses, sheep and goats	Other animals	Bovines, horses, sheep and goats	Other animals
100–	8 months	10 months	8 months	10 months	8 months	10 months
10–100	8 months	10 months	6 months	6 months 10 months ²	6 months	6 months 10 months ³
2–10	6 months	6 months	6 months ²	6 months ²	Inga generella bestämmelser	Inga generella bestämmelser
1	No general rules	No general rules	No general rules	No general rules	No general rules	No general rules

In the south of Sweden, and in parts of the plains in central Sweden, special requirements regarding the filling and covering of slurry stores apply to agricultural enterprises that keep livestock.⁴³⁰

⁴²⁸ Jordbruksverket (2006), Plan of Action against Plant Nutrient Losses from Agriculture, http://www2.jordbruksverket.se/webdav/files/SJV/trycksaker/Pdf_ovrigt/ovr125gb.pdf

⁴²⁹ Jordbruksverket (2007), Action programme for reducing plant nutrient losses from agriculture How far have we reached?

http://www2.jordbruksverket.se/webdav/files/SJV/trycksaker/Pdf_ovrigt/ovr138ENG.pdf

⁴³⁰ Jordbruksverket (2006), Plan of Action against Plant Nutrient Losses from Agriculture,

Urban Wastewater Treatment

Sweden has incorporated the Urban Waste Water Directive into Swedish legislation, both in the Environmental Code and in the Swedish EPA's Regulation on treatment of wastewater from urban areas (SNFS 1994:7). Supplementary inspection rules are contained in the Swedish EPA's Regulation on inspection of discharges to recipient water and land areas from installations for treating wastewater from urban areas (SNFS 1990:14).⁴³¹

Sweden has classified its whole territory as a sensitive area for phosphorous, which means that all wastewater treatment plants greater than 10 000 pe have to reduce their phosphorous by at least 80 % or the phosphorous concentration is not to exceed 2 mg/l. For wastewater treatment plants greater than 100 000 pe the phosphorous concentration is not to exceed 1 mg/l. For nitrogen Sweden has classified the coastal area from the border with Norway to the east of Norrtälje county. The limit value for nitrogen for urban wastewater plants for 10 000 – 100 000 persons is 15 mg/l and for more than 100 000 persons it is 10 mg/l, as yearly averages.⁴³²

No specific requirements for wastewater effluent are stated in the Environmental Code. Instead, the BAT-principle is used to determine which reduction requirements are reasonable in the specific case. National requirements and common practice as well as local conditions are taken into account when setting the requirements.⁴³³

An interesting approach that is likely to have an impact on future inspections is described below. To fulfil the preliminary commitment of Baltic Sea Action Plan, the nitrogen emissions from municipal wastewater treatment plants in southern Sweden must be cut by nearly a third by 2021. This will require large and long-term investments in the reconstruction of municipal wastewater treatment plants in southern Sweden. To achieve the target as soon as possible, a programme called CEASAR (Certificates for Efficient Allocation of Shares Adjusted to Retention) has been proposed. CEASAR takes a broad approach to cut nitrogen emissions and includes the following measures⁴³⁴:

- A law on nitrogen certificates for municipal wastewater treatment plants is to be introduced by January 1, 2016.
- General regulations for retention, accredited measurements of nitrogen and verified reports of nitrogen for wastewater treatment plants is to be introduced by January 1, 2015.

http://www2.jordbruksverket.se/webdav/files/SJV/trycksaker/Pdf_ovrigt/ovr125gb.pdf

⁴³¹Naturvardsverket (2009), Wastewater Treatment in Sweden,

<http://www.naturvardsverket.se/Documents/publikationer/978-91-620-8416-5.pdf>

⁴³²Havsmiljöinstitutet (2011), Infor overseen av avloppsdirektivets kansliga omraden, sammanstallnig och bedomning av data fran Bottenhavet, 16 Juni 2011,,

http://www.su.se/polopoly_fs/1.120413.1358855340!/menu/standard/file/Bottenhavet.pdf

⁴³³Swedenvito (2004), Sustainable waste water treatment for a new housing area,

<http://www.ccb.se/documents/SustainableWWTforaNewHousingArea.HowtoFindtheRightSolution.pdf>

⁴³⁴ Naturvardsverket (2013), Styrmedel för ökad rening från kommunala reningsverk, För genomförande av aktionsplanen för Östersjön och Kattegatt samt miljö kvalitetsnormer för kväve och fosfor, report 6521, October 2012, <http://www.naturvardsverket.se/Documents/publikationer6400/978-91-620-6521-8.pdf>

- An information disclosure programme commences by July 1, 2014 or as soon as a decision is made on implementing CEASAR.
- Guidance to regional regulative authorities commences by July 1, 2014 or as soon as a decision is made on implementing CEASAR.
- Delivery of new data on retention and hydrological networks by July 1, 2014.
- Programme of enforcement, monitoring and reporting system by January 1, 2015.

As part of the CEASAR programme a wastewater treatment plant generates one nitrogen certificate for each kg of nitrogen load that is reduced to coastal waters. The industry target of 3 000 tonnes reduction in annual load determines the minimum number of nitrogen certificates, "the Nitrogen Removal Floor", to be generated by the industry. That is, the minimum amount of reduction in annual load to coastal waters that the industry should achieve every year. The total target reduction of annual nitrogen load is allocated among wastewater treatment plants as treatment quotas according to historic removal of nitrogen load. Thus plants with higher treatment ratios (relatively cleaner plants) will get a smaller treatment quota to fulfil. Once a year, each treatment plant has to submit to SwEPA the number of certificates required to show that it meets its treatment quota over the previous year. Trade with certificates in the CEASAR programme will create a price on nitrogen load to the marine basins: the Baltic, the Sound and the Kattegat and therefore an economic incentive for wastewater treatment plants in southern Sweden to implement the necessary reductions of nitrogen load.⁴³⁵

Non-IED Emissions

Information on point sources is based on environmental reporting by industries that are part of IED. For non-IED emissions the point sources seem to be covered under diffuse sources of emissions.

Diffuse emissions are described as those from agriculture, construction, use of solvents, fuel consumption in households, chemicals emitted during a product's use and small industries. However, data on diffuse emissions to water is not featured on Swedish Pollutant Release and Transfer Register. However, some diffuse emissions to water are included in international reporting, such as HELCOM.⁴³⁶

The primary approach for control of smaller point sources is focused on the achievement of quality standards for water and only if these are at risk is any investigate control initiated. It is important to note that Sweden does not routinely distinguish between IED and non-IED installations. All require a permit and comply with conditions to protect waters. Where appropriate, self-monitoring is required to allow for assessment of impacts on water bodies. However, in a recent IMPEL study⁴³⁷ the southernmost county in Sweden, Skåne, reported that the requirements for self-monitoring and control programmes do not meet the

⁴³⁵ Naturvårdsverket (2013), Styrmedel för ökad rening från kommunala reningsverk, För genomförande av aktionsplanen för Östersjön och Kattegatt samt miljö kvalitetsnormer för kväve och fosfor, report 6521, October 2012, <http://www.naturvardsverket.se/Documents/publikationer6400/978-91-620-6521-8.pdf>

⁴³⁶ SMED (2013), Diffusa emissioner till luft och vatten, 30.3.2012. <http://www.smed.se/wp-content/uploads/2012/06/Slutrapport.pdf>

⁴³⁷ Farmer, A. and Cherrier, V. 2011. Linking the Water Framework Directive and the IPPC Directive, Phase 2. IMPEL, Brussels.

requirements in the water Directives, but this should change as permits are revised. Inspections in Skåne examine both formal compliance and the impacts of activities on water bodies.

SEPA has placed regulated activities into four categories to determine the level of inspection activity. Each is given a 'weight' or risk factor regarding its potential environmental impact. Activities classified 'A' have a weight of 40, 'B' a weight of 8, 'C' a weight of 2 and 'U' a weight of 0.5. This, therefore, is a risk-based approach to inspection. Counties have responsibility to inspect categories A and B and municipalities C and U. However, counties can delegate inspection responsibilities for specific A and B activities to a municipality.

Inspection Planning Process

Farm Infrastructure

The Board of Agriculture employs plant nutrient advisors at four sites outside the main office. These advisors' work covers several counties to promote the plan developed by the Board of Agriculture, covering the following measures:

- adapts the use of plant nutrients to need, as regards cultivation;
- adapts feeding to needs;
- ensures that mineral fertilisers and manure are spread in a way that makes optimal use of the plant nutrients and avoids negative effects on the environment;
- stimulates the use of cropping systems and cropping techniques that combine financial profitability with minimal environmental effects; and
- minimises ammonia losses from agriculture, and thereby also eutrophication and acidification.

The task of the advisors is to make sure that the plan of action for reducing plant nutrient losses is carried out efficiently. This means that regional activities in the area of plant nutrients shall be run in a way that minimises ammonia losses from agriculture, and thereby also eutrophication and acidification.⁴³⁸

Urban Wastewater Treatment

The County Administrative Board is the responsible authority for urban wastewater treatment (for more than 2000 people), but has the option to delegate this responsibility to the municipality⁴³⁹. The operator of urban wastewater treatment plants for more than 2000 people is required to submit a yearly environmental report to the responsible authorities, including information on emissions. In the environmental report the operator has to describe how many samples have been taken from incoming and outgoing water and the concentrations of phosphorous and nitrogen. This information is compiled for the reporting requirements of the urban wastewater treatment Directive.

⁴³⁸ Jordbruksverket (2006), Plan of Action against Plant Nutrient Losses from Agriculture, http://www2.jordbruksverket.se/webdav/files/SJV/trycksaker/Pdf_ovrigt/ovr125gb.pdf

⁴³⁹ Naturvårdsverket och Svenskt Vatten (2013), Formulering av villkor och krav för utsläpp från avloppsreningsverk – vägledning, 23.4.2013, <http://www.naturvardsverket.se/upload/stod-i-miljoarbetet/vagledning/avlopp/villkor-och-krav-for-utslapp-fran-avloppsreningsverk-20130423.pdf>

The municipalities are responsible for the supervision of wastewater treatment plants for up to 2000 people. The “operator self-monitoring” approach requires those responsible for wastewater treatment plants to inform the authorities of any irregularities, including maintenance. It is then the responsibility of the authority to ensure that this “operator self-monitoring” is sufficient. In cases where the authority is suspecting that the “operator self-monitoring” is not working as it should it can put in place a control programme to be followed by those responsible for the waste water treatment plant. The intention is that the programme works as a support as well as a guarantee that the wastewater treatment plants are working to required standards. This might also involve meeting those responsible for the wastewater treatment plant in situ. In these cases the municipality will inform those responsible of the visit weeks in advance.⁴⁴⁰

Non-IED Emissions

The operator is anticipated to be able to understand how his activities impact on Environmental Quality Standards. This action needs to be proportionate to the size and type of activity. Guidance by SwEPA provides an example of the owner of a property and the impact of the property’s single wastewater source. The owner has to understand the impact that the wastewater source has on the environment but he is not expected to take samples of what this impact might be.⁴⁴¹

Inspection Capacity

Farm Infrastructure

In 2004 a survey was conducted to assess how the municipalities had carried out the operative supervision during 2003. Municipalities were asked to answer questions about supervision of farms.

Figure 6 shows the kinds of supervision that municipalities carried out.⁴⁴²

⁴⁴⁰ Miljösamverkan,Handledning för tillsyn av avloppsanläggningar >25 pe, Miljösamverkan Västra Götaland, http://www.miljosamverkan.se/upload/Regionkanslierna/Milj%C3%B6samverkan/Avloppsreningsverk/avlrenverk_handledn_ver050912.pdf

⁴⁴¹ Naturvårdsverket (2011), Vägledning om tillämpning av miljökvalitetsnormer och åtgärdsprogram för vatten inom tillsynsarbetet, 29.4.2011, https://www.havochvatten.se/download/18.64f5b3211343cffddb2800022035/1328609827900/MKN_och_vatten_inom_tillsynsarbetet.pdf

⁴⁴² Jordbruksverket (2007), Action programme for reducing plant nutrient losses from agriculture How far have we reached? http://www2.jordbruksverket.se/webdav/files/SJV/trycksaker/Pdf_ovrigt/ovr138ENG.pdf

Figure 6. Distribution of the municipalities' time spent on farm supervision.

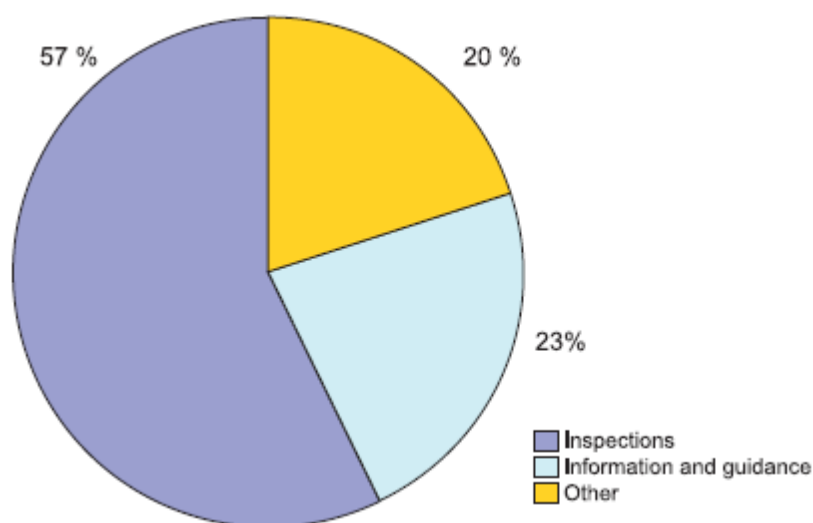


Table 26 shows the number of inspected activities and which rules the municipalities paid the most attention to. As can be seen from **Table 26**, the rules on the storage of manure are the most common subject of inspection. Second are the rules on livestock density and on spreading of manure.⁴⁴³

Table 26. Number of inspected activities in 2003 with regard to the specific rules.

Activity	Number of inspections
Storing of manure	8,200
Livestock density	6,400
Spreading of manure	5,500
Green land	4,200

The municipalities were also asked about how many cases they handed over to the office of the public prosecutor or to the police in 2003. The total number of cases related to the storage of manure, livestock density, the spreading of manure, and land under green cover during autumn and winter amounted to 34.

Urban Wastewater Treatment

In the introduction to the Swedish case study we provided a number of examples of how County Administrative Boards were coping with their environmental surveillance responsibilities. It is clear from these that the water sector is one of the areas that has been downgraded in importance by a number of County Administrative Boards. For instance the Uppsala County Administrative Board states that the main problem area is within the water sector, where it is estimated that the lack in surveillance resources is such that it is difficult

⁴⁴³ Jordbruksverket (2007), Action programme for reducing plant nutrient losses from agriculture How far have we reached?
http://www2.jordbruksverket.se/webdav/files/SJV/trycksaker/Pdf_ovrigt/ovr138ENG.pdf

to fulfil the need to achieve good ecological status of waters by 2021. Stockholm County Administrative Board is having increasing difficulties to deal with all complaints in relation to the water sector. In Västra Götaland the limited resources for environmental inspections within the water sector has forced the county to a situation where inspections only occur when there is a specific need for this. The only county that differs from the tendency of moving away from environmental surveillance in the water sector is Västmanland, where the strategic planning is focusing on education for operators for urban wastewater treatment plants about their environmental risks.

Inter-Institutional Arrangements

Farm Infrastructure

Operative supervision of the regulations regarding nutrient losses is normally carried out by the municipality.

Information services are part of the Swedish Environment and Rural Development Plan. This plan was drawn up to fit both the Swedish Environmental Objectives for agriculture as well as EU legislation. Each county administrative board annually draws up a plan for its county, together with various regional organisations. The county plans offer training, both to individuals and to whole groups together. Individual discussions may give the farmer knowledge about environment friendly solutions for the handling of manure and other plant nutrients, based on the enterprise's situation and needs.⁴⁴⁴

Regional advisors are required to spread information about results from research and trials in the area of plant nutrients to the operators in the region. Furthermore, they are also required to support other advisors in their work, and take part in various regional projects and studies within their special fields.⁴⁴⁵

Urban Wastewater Treatment

County Administrative Boards are responsible to assess the environmental reports submitted by the operators of urban wastewater treatment plants. But as is evident from the overviews presented in the introduction of this report, some of the County Administrative Boards do not have the resources to go through these in detail. And for those that do have the time to do this, the lack in resources is likely to trigger inspections only in the most obvious cases. Hence, it is essential that the County Administrative Boards are able to put the required effort in assessing these environmental reports with the funds that support inspections in cases they raise concerns. Another alternative would be a more co-ordinated approach on a national level that would remove some of the workload away from the County Administrative Boards, such as having SwEPA as the responsible authority with a close cooperation with the County Administrative Boards. This is also something that has been proposed as a possibility for the CAESAR programme.

⁴⁴⁴ Jordbruksverket (2006), Plan of Action against Plant Nutrient Losses from Agriculture, http://www2.jordbruksverket.se/webdav/files/SJV/trycksaker/Pdf_ovrigt/ovr125gb.pdf

⁴⁴⁵ Jordbruksverket (2006), Plan of Action against Plant Nutrient Losses from Agriculture, http://www2.jordbruksverket.se/webdav/files/SJV/trycksaker/Pdf_ovrigt/ovr125gb.pdf

Inspection Review and Reporting

Urban Wastewater Treatment Plants

All activities with permits under the Swedish Environmental Code, including treatment plants, carry out 'operator self-monitoring'. This usually involves inspecting the facilities themselves; their handling of chemicals and management of waste; and their emissions to water and air. In some cases, it also involves carrying out measurements in the recipient. All these data are reported County Administrative Boards in annual environmental reports.⁴⁴⁶

Costs of Inspection

The costs of inspection in Sweden are not adequately understood. In 1992 and 1995 Swedish Statistics and SEPA undertook joint surveys of the inspections costs in both counties and municipalities, but have not undertaken studies since then. However, Gren and Li (2011)⁴⁴⁷ provided some more recent results. They examined 48 inspections at county level and 287 at municipal level. The total costs at both levels would, therefore, be about SEK 261 million per year and they conclude that this equates to 3 per cent of the costs of environmental protection on industry. However, neither counties nor municipalities identify specific budget lines for environmental inspections.

As part of the CAESAR programme an estimation has been made for inspections required for a municipal wastewater treatment plant permit as a B-installation of the industrial emissions Directive. Based on the information from the County Administrative Boards it is estimated that as part of the permit the authorities would need 0.5 to 1.3 visits per installation at a price between 1850 to 3300 SEK (between 215 EUR and 390 EUR). Even if these costs are not specifically linked to inspections as understood as part of this study, they do provide at least some kind of estimate of level of inspection costs in relation to urban wastewater treatment plants.⁴⁴⁸

Effectiveness of the Inspection System

From the above it is evident that the effectiveness of the inspection system is very much compromised by the lack of resources within the County Administrative Boards. The approach is reactive and desk based. In some case there is not even enough resources to assess the environmental reports submitted by the operators.

⁴⁴⁶Naturvardsverket (2009), Wastewater Treatment in Sweden, <http://www.naturvardsverket.se/Documents/publikationer/978-91-620-8416-5.pdf>

⁴⁴⁷ Gren, I. and Li, C. 2011. Enforcement of environmental regulations: inspection costs in Sweden. Environmental Economics, Vol 2.

⁴⁴⁸ Naturvardsverket och Svenskt Vatten (2013), Formulering av villkor och krav för utsläpp från avloppsreningsverk – vägledning, 23.4..2013, <http://www.naturvardsverket.se/upload/stod-i-miljoarbetet/vagledning/avlopp/villkor-och-krav-for-utslapp-fran-avloppsreningsverk-20130423.pdf>

A recent study⁴⁴⁹ examined the effectiveness of control styles by inspection authorities in Sweden. The study collected data through questionnaires from inspectors in the counties and municipalities. The study does not report the activities being inspected, but they covered all four categories and, therefore, would have included activities both covered by IED and not covered by IED. The results were particularly interesting in relation to style. It distinguished a 'strict' style of traditional enforcement action and a 'soft' style which the authors refer to as 'more of making friends'. They found that while softer types of interaction can assist in compliance for larger companies, for smaller activities only traditional enforcement activity affects their compliance (as it does all other categories). The authors conclude that one should "apply a precautionary approach with respect to reliance on voluntary mechanisms for implementation of environmental policies. While traditional enforcement instruments, in terms of monitoring and inspecting firms, deter violation by all firm categories, other mechanisms can be more selective. Relatively large firms seem to be more responsive to environmental attitudes and abundance of social capital than small firms. Considering that the number of small firms can be quite large, accounting for approximately 64% of all regulated firms in Sweden, traditional enforcement weapons may be necessary to reach targets set by environmental regulations."

Another recent study⁴⁵⁰ has examined the application of sanctions by municipalities across Sweden for violations of the Environmental Code. The study does not limit the scope to any particular type of activity, but the results are included here because municipalities are responsible for control of small activities including non-IED activities. Sjoberg found significant differences in the use of fines between municipalities and within municipalities over time. Indeed, the study used as its basis a 2004 Swedish Government report that concluded that the sanctions applied were "in general good and effective", but that there was concern that there were differences in the application of fines. Furthermore, he cites others who question whether some municipalities place a lower priority on the environment and deliberately choose to ignore some violations. The study examined the application of fines from 2003-2009 and most were due either to non-compliance detected during inspections and late reporting by firms to the relevant authority.

Sjoberg (2013) noted that the frequency of inspections varies from several times a year to "practically never", with both planned and unplanned inspections. Where there is non-compliance and fines are issued, these are issued by the local environmental offices in the municipality. Fines range from 1,000 SEK to 1,000,000 SEK. It should be noted that firms pay charges for inspections so that inspection activity is cost-recovered for the municipality. However, the moneys from fines are not retained by the municipality, but go to the national government, so there is no monetary incentive to issue fines.

Regarding the variation in the application of fines, Sjoberg (2013) concluded that there is evidence that this reflects the political make-up of the municipality. In particular it was found that municipalities with Green Party representation tended to issue more fines, with

⁴⁴⁹ Holstein, F. and Gren, I. 2013. Violation of environmental regulations in Sweden: Economic motives, environmental attitudes, and social capital. Swedish University of Agricultural Sciences, Department of Economics. Working Paper 03/2013.

⁴⁵⁰ Sjoberg, E. (2013). Decentralized enforcement of national legislation: Political influence on environmental fines in Swedish municipalities. <http://www.econ.uconn.edu/seminars/papers/sjoberg.pdf>

the environment being a greater priority. This study, therefore, indicates that levels of enforcement action can be influenced by party political considerations. Given Holstein and Gren's (2013) finding that traditional control mechanisms are important for smaller activities, Sjoberg's findings suggest that municipalities may vary in their effectiveness in the control of smaller non-IED activities and this may (at least in part) be politically driven.

It is important to note that SwEPA has commissioned a major research study (budget of 1.8 million SEK) to develop methodologies for environmental inspections, present a design for the organization of inspections and develop a system for measuring the effects of the inspections and enforcement in order that the efficiency of enforcement can be improved. On the final objective the research project was established because to date there is no information system to determine effectiveness. Thus the objective is to develop such a prototype system allowing SEPA both the measure the effects of inspection and enforcement and so improve co-ordination of these activities across the country.

10.2 Sweden: Nature protection

Legislative Framework

Habitats and Birds Directives are transposed into the Environmental Code (1998:808) as well as the Species Protection Ordinance (2007:845).

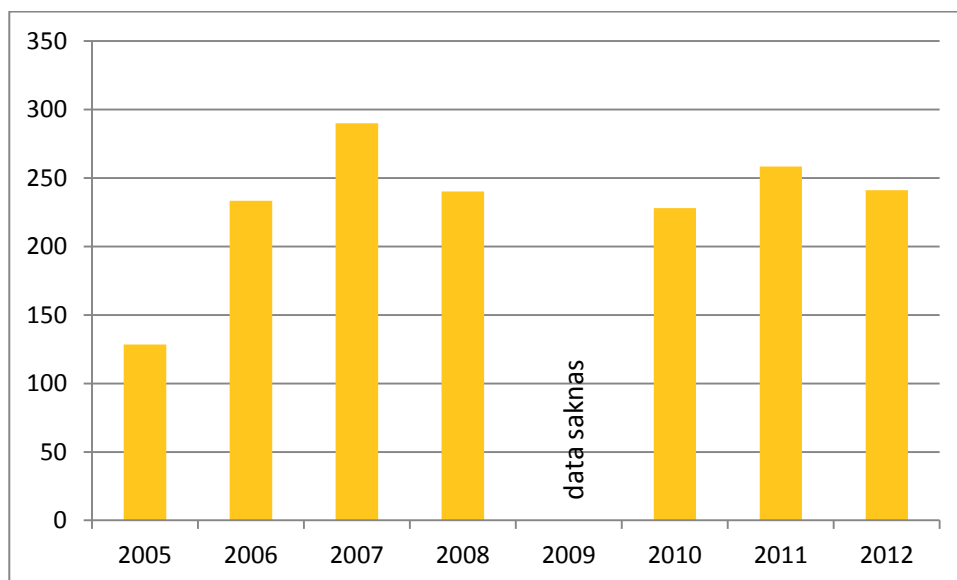
Supervision of protected areas is carried out by regional County Administrative Boards, the Swedish Forestry Agency and municipal environmental authorities. The County Administrative Boards also supervise activities that may affect Natura 2000 sites (although they may delegate that responsibility to municipal authorities).^{451,452}

The County Administration Board also acts as examining authority for applications for permits concerning activities that may affect Nature 2000 sites.

Inspection Planning Process and monitoring

The numbers of inspections conducted by the County Administrative Boards in relation to the protection of species are shown in Table 27. Note that the County Administrative Boards do not make a distinction between the inspections for the protection of species and therefore in addition to habitats and birds directives this figure also includes CITES inspections. See also next section on inspection capacity for further info.

Figure 7. Inspections for protected species from 2005 to 2012⁴⁵³.



⁴⁵¹ Ebbeson (2006), Natura 2000 in Sweden, Avosetta meeting in Krakov, January 13 and 14, 2006, <http://www-user.uni-bremen.de/~avosetta/repswe2006.pdf>

⁴⁵² Naturvardsverket (2007), Battre tillsyn I skyddade omraden, delrapport 1 – kartlaggning och forslag pa utvecklingsomraden <http://www.naturvardsverket.se/Documents/publikationer/620-5685-9.pdf>

⁴⁵³ Correspondence with SwEPA based on the analysis undertaken by SwEPA of the CITES reporting from the County Administrative Boards.

The National Inventory of Landscapes in Sweden (NILS) is a nation-wide environmental protection programme that monitors the conditions and changes in the Swedish landscape and how these changes influence biodiversity. The programme started in 2003 and is the first Swedish inventory programme that includes all types of terrestrial environments. Agricultural land as well as forests, wetlands, shores, alpine and populated environments are included. An important aim is to provide information to assess the achievement of Sweden's national environmental objectives and the condition of the Natura 2000 network.⁴⁵⁴

The Swedish National Inventory of Forests (RIS) is a nationwide inventory which comprises an annual sample of all forests and soils in Sweden. The inventory provides an image of current status and changes in Swedish forests, regarding both forest production as well as environmental conditions. RIS comprises the National Forest Inventory (NFI) and the Swedish Forest Soil Inventory (MI). Information from the inventory is used for developing and evaluating environmental and forestry policies. In addition, forestry companies, organizations within the sector, and scientists use the information.⁴⁵⁵

Sweden is monitoring the area of semi-natural pastures and mown meadows on a regular basis. This is done on both national and regional level. These habitats constitute about half of Sweden's HNV-farmland area (450,000 out of approximately 850,000 hectares). For the rest of the HNV-farmland area there is no on-going monitoring. In addition to the quantitative aspects, there is also a national monitoring scheme focusing on biodiversity in the most valuable (highest biological values) of Sweden's semi-natural pastures and mown meadows (approximately 270,000 hectares). The latter monitoring scheme is carried out as a part of the NILS study. Sweden also monitors farmland birds.⁴⁵⁶

Miljösamverkan Sverige⁴⁵⁷ has developed examples of what to consider when conducting surveillance as guidance for the County Administrative Boards. For control and inspection of Natura 2000 the County Administrative Boards ought to cover. As part of these measures it is recommended that the County Administrative Boards would assess how many person days of staff they would require to meet the needs.

Inspection Capacity

A review of the supervisory work of County Administrative Boards revealed that there are major deficiencies in the supervision of protected areas. On average, County Administrative

⁴⁵⁴ European Commission (2010), Biodiversity Knowledge Base, Country Profile – Sweden, http://cdr.eionet.europa.eu/se/eu/bap/envtcd65w/CPSE_Final.pdf

⁴⁵⁵ European Commission (2010), Biodiversity Knowledge Base, Country Profile – Sweden, http://cdr.eionet.europa.eu/se/eu/bap/envtcd65w/CPSE_Final.pdf

⁴⁵⁶ European Commission (2010), Biodiversity Knowledge Base, Country Profile – Sweden, http://cdr.eionet.europa.eu/se/eu/bap/envtcd65w/CPSE_Final.pdf

⁴⁵⁷ Miljösamverkan Sverige (2007), Exempelsamling för utredning av tillsynsbehov samt tillsynsplaner. <http://www.miljosamverkansverige.se/miljosamverkansverige/SiteCollectionDocuments/Projekt%20och%20rapporter/Naturv%C3%A5rd/Naturv%C3%A5rdstillsyn/exempelsamling-utredning-tillsynsbehov-tillsynsplaner.pdf>

Board's reported a 50 per cent shortage of human resources in 2007 based on estimated needs and actual inspections according to their supervision plans.⁴⁵⁸

As part of the yearly reporting to SwEPA, the County Administrative Boards have to indicate how many days they have planned for needed inspections (operative surveillance) and how many inspections they actually have carried out. Table 27 shows the relationship between needed and planned inspections for protected species for all counties 2011 and 2012. Note that these inspections are related to species protection in general and cover also other legislative responsibilities in this area, such as CITES.⁴⁵⁹

Table 27. Needed and planned inspections for protected species for all counties in 2011 and 2012.

County	Inspection need in 2011	Conducted inspections in 2011	Inspection need in 2012	Conducted inspections in 2012
Stockholm	-	30 days	-	-
Uppsala	-	5 days	10 days	6 days
Södermanland	4 days	4 days	4 days	13 days
Östergötland	25 days	11 days	17.5 days	11 days
Jönköping	5.6 days	3 days	8.75 days	6.6 days
Kronoberg	25 days	1,5 days	4 days	3 days
Kalmar	-	0 days	15 days	0 days
Gotland	-	0 days	1 day	0 days
Blekinge	-	0 days	5 days	0 days
Skåne	150 days	90 days	90 days	45 days
Halland	-	5 days	10 days	9 days
Västra Götaland	-	19 days	45 days	35 days
Värmland	-	27 days	58 days	23 days
Örebro	5 days	2.5 days	-	4.7 days
Västmanland	27 days	11.5 days	12 days	4.7 days
Dalarna	-	5 days	7.5 days	8.75 days
Gävleborg	67 days	17 days	53 days	46 days
Västernorrland	-	4 days	30 days	-
Jämtland	-	11 days	1 day	-
Västerbotten	50 days	17 days	18 days	17 days
Norrbottn	-	6 days	14 days	0 days

As can be seen from the above table, the actual numbers of inspections do not normally meet the anticipated need and in addition the days allocated for inspections have reduced in 2012 compared to 2011.

⁴⁵⁸ Naturvardsverket (2007), Bättre tillsyn i skyddade områden, delrapport 1 – kartläggning och förslag på utvecklingsområden, <http://www.naturvardsverket.se/Documents/publikationer/620-5685-9.pdf>

⁴⁵⁹ Correspondence with SwEPA based on the analysis undertaken by SwEPA of the CITES reporting from the County Administrative Boards Boards

Inter-Institutional Arrangements

The organisation of supervision among County Administrative Boards is not working as well as it could. Improved and clearer division of responsibility between both administrators and field workers has been identified as an area where improvements are called for.⁴⁶⁰

Miljösamverkan Sverige is the main institute seeking to coordinate the surveillance responsibilities between the different authorities. It has provided a number of reports that aim to improve the coordination between authorities involved in surveillance, including Natura 2000.

Inspection Review and Reporting

Supervision planning at County Administrative Boards exists at almost all County Administrative Boards, but often they are of poor quality and have not been updated or followed up.⁴⁶¹

Effectiveness of the Inspection System

Sweden's Environmental Quality Objectives⁴⁶² (EQOs) guides to a large extent Sweden's environmental policy. The detailed assessment of the progress in achieving the EQOs from 2012 concludes that one of the reasons for Sweden being unlikely to meet the EQO target of a rich and diverse plant life target is the insufficient surveillance. Hence, the assessment recommends increased resources for this EQO.⁴⁶³

Costs of Surveillance

The funds for environmental surveillance of Natura 2000 are financed by the overall budget of County Administrative Boards, but these have not been earmarked. It is therefore the County Administrative Boards that decide how much of these funds will be used for financing surveillance to satisfy the legal requirements of the Environmental Code. In a report from 2007, SwEPA points out that the County Administrative Boards show a deficit in available financing for their surveillance plans of protected areas as they seem to prefer other priorities.⁴⁶⁴ The general lack of resources in 2011 for environmental surveillance in general and for species protection in particular, shows that this is still an on-going problem. As shown in Table 27 the County Administrative Boards have been unable to match the needed inspections for protection of species and this situation has worsened in 2012 compared to 2011.

⁴⁶⁰ Naturvårdsverket (2007), Bättre tillsyn i skyddade områden, delrapport 1 – kartläggning och förslag på utvecklingsområden, <http://www.naturvardsverket.se/Documents/publikationer/620-5685-9.pdf>

⁴⁶¹ Naturvårdsverket (2007), Bättre tillsyn i skyddade områden, delrapport 1 – kartläggning och förslag på utvecklingsområden, <http://www.naturvardsverket.se/Documents/publikationer/620-5685-9.pdf>

⁴⁶² covers 16 areas, including the objective of a rich and diverse plant life, with ambitious targets to be met

⁴⁶³ Naturvårdsverket (2012), Steg på vägen, Fördjupad utvärdering av miljömålen 2012. Report 6500, June 2012, http://www.miljomal.se/Global/24_las_mer/rapporter/malansvariga_myndigheter/2012/fordjupad-utvardering-2012/fordjupad-utvardering-2012-webb.pdf

⁴⁶⁴ Naturvårdsverket (2007), Bättre tillsyn i skyddade områden, delrapport 1 – kartläggning och förslag på utvecklingsområden, <http://www.naturvardsverket.se/Documents/publikationer/620-5685-9.pdf>

10.3 Sweden: CITES

Legislative Framework

Sweden was among the first countries to ratify CITES in 1974. The CITES Regulation has been transposed into the Environmental Code (1998:808) as well as the Species Protection Ordinance (2007:845).

The Swedish Board of Agriculture is the administrative authority and SwEPA is the scientific authority. The Swedish Museum of Natural History is the supporting scientific authority. The implementation of CITES is the responsibility of the customs and the police.⁴⁶⁵

The Swedish Board of Agriculture is the administrative authority and is required to control the import and export of CITES plants and animals from third countries. This is done by providing certificates in close co-operation with Swedish Environmental Protection Agency (SwEPA). The Swedish Board of Agriculture maintains an electronic register of these certificates and the police has been using this information as part of their inspections. The Swedish Board of Agriculture provides the County Administrative Board⁴⁶⁶ with guidance and education in this matter.⁴⁶⁷

The customs are responsible to inspect all goods. According to the Custom's Decree (2001:1281) the reasons for this inspection have to outweigh the inconvenience put upon the individual in question. In the case of imports from the EU, the inspections are governed by the custom's Decree (1996:701). According to this Decree the customs do not have the authority for inspections in relation to animals and plants covered by CITES imported from the EU.⁴⁶⁸

According to the Species Protection Ordinance (2007:845), the customs have to inform the County Administrative Board without delay about any plants or animals that have been confiscated. In determining species it is possible for the authorities to contact experts to help with the identification. These experts are nominated by the Swedish Board of Agriculture after consultation with SwEPA and Swedish Museum on Natural History.⁴⁶⁹

All import and export certificates are provided by the Swedish Board of Agriculture and the application forms are available on its website.

The surveillance to achieve the aims of the Environmental Code not only covers inspections but also requirements to provide information and advice. According to the Decree 1998:900

⁴⁶⁵ SwEPA website, Accessed 8.3.2013, <http://www.naturvardsverket.se/Miljoarbete-i-samhallet/EU-och-internationellt/Internationellt-miljoarbete/miljokonventioner/Konvention-om-handel-med-hotade-arter/>

⁴⁶⁶ The County Administrative Board is the representative of the Government in the region and the coordinating body for State activities in the county.

⁴⁶⁷ SwEPA website, Accessed 8.3.2013,

⁴⁶⁸ Naturvardsverket (2007), Informationsflöde och rapporteringssystem för främmande arter, report 5694, April 2007, <http://www.naturvardsverket.se/Documents/publikationer/620-5694-8.pdf>

⁴⁶⁹ Naturvardsverket (2009), Handbok för artskyddsförordningen Del 2 – preparering, handel och förevisning, Handbok 2009:3, April 2009, <http://www.naturvardsverket.se/Documents/publikationer/978-91-620-0161-2.pdf>

on surveillance according to the Environmental Code, a surveillance plan has to be developed every year and updated to address any identified surveillance needs.

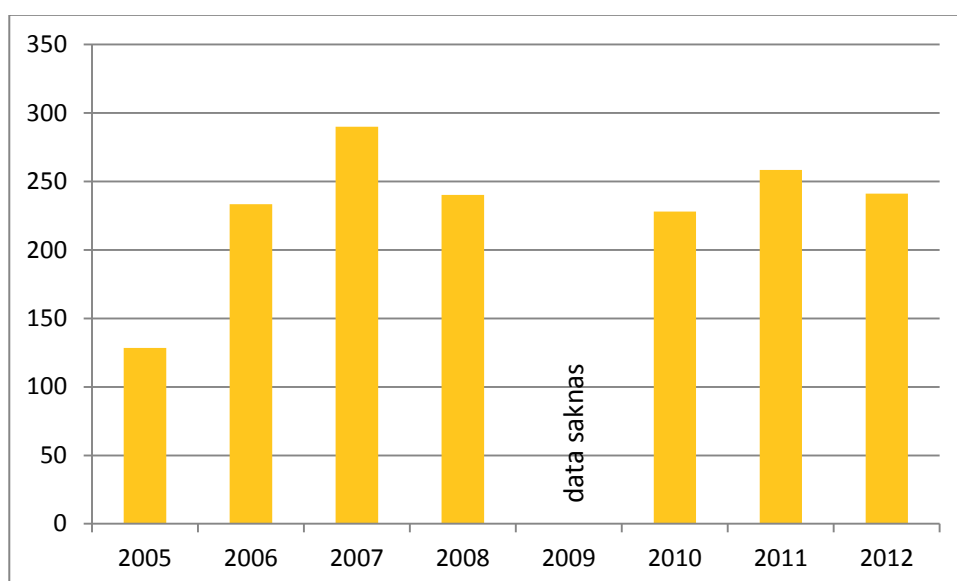
The County Administrative Boards are required to submit by 15.3.2013 a report to SwEPA, describing how the surveillance of CITES is conducted in their county.⁴⁷⁰

The legislation of lost property applies to animals found without an owner and CITES animals are included. The police is responsible for registering any correspondence on lost animals. Some police authorities have been known to sell CITES animals that have been taken care of by individuals as lost property. Also, there are doubts that found animals are controlled whether they are chip-marked.⁴⁷¹

Inspection Planning Process

The number of CITES inspections conducted by the County Administrative Boards in relation to the protection of species are shown in Figure 8. Note that the County Administrative Boards do not make a distinction between the inspections for CITES species and other species and hence these figures include also inspections in relation to habitats and birds Directives.

Figure 8. Inspections for protected species from 2005 to 2012⁴⁷².



Even if these figures are for all protected species they do provide an indication of the number of inspections conducted by County Administrative Boards. There are also other interesting aspects that provide some insights into the inspections of CITES species. In 2009

⁴⁷⁰ Swedish Agency for Marine and Water Management, website, Accessed 8.3.2013, https://www.havochvatten.se/download/18.2a9b232013c3e8ee03e331/1358415608090/F%c3%b6rdelning+u+ppdrag+som+hanteras+av+andra+myndigheter2013_beslut20130108_2.pdf

⁴⁷¹ Naturvårdsverket (2007), Informationsflöde och rapporteringssystem för främmande arter, report 5694, April 2007, <http://www.naturvardsverket.se/Documents/publikationer/620-5694-8.pdf>

⁴⁷² Correspondence with SwEPA based on the analysis undertaken by SwEPA of the CITES reporting from the County Administrative Boards.

eels became CITES species and in 2012 there were 234 sellers/fishers with an eel permit. However, regardless of the anticipated increase of inspections as a consequence of this change, the overall number of inspections has not increased, leading to the assumption that no inspections in relation to eels have been undertaken.⁴⁷³

Customs inspections are in general based on profiling and research for imports coming from third countries, and ought to apply for CITES as well.⁴⁷⁴

The illegal trade of endangered species and animals has a turnover in hundreds of millions EUR in Sweden, but how the market works is still relatively unknown.⁴⁷⁵

The approaches between the 21 County Administrative Boards vary. For instance the County Administrative Board of Stockholm has contacted companies and shops that are considered to potentially be involved with CITES plants and animals. As part of a one week effort in September 2012, the County Administrative Board of Stockholm visited these shops and companies. The aim was to provide information on the bans that exist but at the same time check for illegal plants or animals. The inspections focused on around 20 preparations that are identified as those that have an increasing demand and market, and include Asian ginseng, Hoodia, root of Saussurea Costus and among animal products tiger, leopard, brown bear and rhinoceros. In case any CITES animals or plants are found, the police will be contacted on the site.⁴⁷⁶

Miljösamverkan Sverige (Environmental Co-operation Sweden) is an institute for the improvement of co-operation of inspections between the County Administrative Boards, Swedish Environmental Protection Agency, The National Board of Health and Welfare, the Swedish Board of Agriculture and the Swedish Agency for Marine and Water Management within the sectors covered by the Environmental Code. The aim of the work is to provide a more coherent approach to inspections across the country.

Environmental Co-operation Sweden⁴⁷⁷ has developed examples of what to consider when conducting surveillance as guidance for the County Administrative Boards. For control and inspection of CITES the County Administrative Boards ought to cover:

- Breaches of CITES notified or encountered by the County Administrative Board.

⁴⁷³ Correspondence with SwEPA, based on the analysis undertaken by SwEPA of the CITES reporting from the County Administrative Boards

⁴⁷⁴ Naturvårdsverket (2009), Handbok för artskyddsförordningen Del 2 – preparering, handel och förevisning, Handbok 2009:3, April 2009, <http://www.naturvardsverket.se/Documents/publikationer/978-91-620-0161-2.pdf>

⁴⁷⁵ County Administrative Board of Stockholm, accessed 8.3.2013.
<http://www.lansstyrelsen.se/stockholm/Sv/nyheter/2012/Pages/utokad-insats-mot-handel-med-hotade-vaxter-och-djur.aspx>

⁴⁷⁶ County Administrative Board of Stockholm, accessed 8.3.2013.
<http://www.lansstyrelsen.se/stockholm/Sv/nyheter/2012/Pages/utokad-insats-mot-handel-med-hotade-vaxter-och-djur.aspx>

⁴⁷⁷ Miljösamverkan Sverige (2007), Exempelsamling för utredning av tillsynsbehov samt tillsynsplaner, <http://www.miljosamverkansverige.se/projekt/Rapport%20Naturvrdstillsyn/Exempelsamling%20f%C3%B6r%20Utredning%20av%20tillsynsbehov%20samt%20tillsynsplaner.pdf>

- Control of permits for CITES plants and animals. Inspections visits or written re-reporting.

As part of these measures it is recommended by Environmental Co-operation Sweden that the County Administrative Boards would assess how many person days of staff they would require to meet the needs.

Based on a report from the Swedish National Police Board there is no proactive surveillance for CITES plants or animals, however, this report is from 2008 and the approach could have become more active since.⁴⁷⁸

ArtDatabanken has developed the Species Gateway⁴⁷⁹, a reporting system on the internet for organisms funded by SwEPA. There are no routines in including environmental inspection information into this database, even if it is possible. It is up to SwEPA and the Swedish Board of Agriculture to decide who will be responsible to add these data.⁴⁸⁰

Inspection Capacity

Sweden has a low detection rate of environmental crime. The report by the National Police Board does not believe this is an outcome of a successful policy to prevent environmental crime but rather an indication of a lack of knowhow on the measures to prevent and identify environmental crime. In other cases there is an understanding of the issue but not enough resources to put preventative measures in place. Another contributing factor to the lack of preventative measures is the perception that environmental crime is not regarded as important as other crimes.⁴⁸¹

The customs has uncovered potential CITES crimes. However, these are mostly based on information from private persons, companies or authorities. Otherwise the discovery of CITES products is secondary and can be found in connection with looking for narcotics.⁴⁸²

Among police authorities the average annual working time on animal crime varies between 0.2 to 3 work years. For about a third of these police authorities it is 0.5

The County Administrative Boards do not have sufficient resources to conduct proactive surveillance. Of the 21 counties only the county of Västerbotten has a balance between the planned resources and the needed resources for protected species. For further info on the

⁴⁷⁸ Bra (2008), Illegal handel med hotade djur- och växtarter, webreport 2008:14, http://www.bra.se/download/18.cba82f7130f475a2f180007765/2008_14_illegal_handel_med_djur_vaxarter.pdf

⁴⁷⁹ <http://www.artportalen.se/default.asp>

⁴⁸⁰ Naturvårdsverket (2009), Nationell strategi och handlingsplan för främmande arter och genotyper, Report 5910, December 2008, <http://www.naturvardsverket.se/Documents/publikationer/978-91-620-5910-1.pdf>

⁴⁸¹ Rikspolisstyrelsen (2010), Strategier mot miljöbrott Ett samarbetsprojekt mellan Rikspolisstyrelsen och Riksenheten för miljö- och arbetsmiljömål, http://www.polisen.se/Global/www%20och%20Intrapolis/Strategier/01Polisen%20nationellt/miljobrott_1_10_0512.pdf

⁴⁸² Bra (2006), Ar vi bra på miljöbrott? Webbrapport, 2006:5, http://www.bra.se/download/18.cba82f7130f475a2f1800010432/2006_ar_vi_bra_pa_miljobrott.pdf

planned and actual inspections for each county please see the section of "inspection capacity" as part of the Nature (habitats and birds Directives), as these statistics also cover CITES species.

Inter-Institutional Arrangements

Based on the reporting on CITES, the County Administrative Boards are struggling to describe how well the legislation has been implemented. According to SwEPA this is a consequence of the international nature of illegal trade of CITES species and the lack of a working co-operation with the other responsible authorities, such as the police and customs. It is also recommended that the County Administrative Boards would need a register of activities that require repeated inspections.⁴⁸³

Environmental Sweden is responsible for coordinating the surveillance responsibilities between the different authorities mentioned earlier. In its efforts to improve the coordination between the relevant authorities, the main emphasis is directed towards the County Administrative Boards. This is mostly done by guidance reports that try to improve the coordination between authorities involved in surveillance, including CITES.

Inspection Review and Reporting

According to the Decree 1998:900 on surveillance according to the Environmental Code, a surveillance plan has to be developed every year and updated to address any identified surveillance needs. Since 2004 the County Administrative Boards have had to report back to SwEPA how the surveillance of the CITES legislation been implemented. This report needs to provide an estimate of the total number of issues/items to be inspected and how many issues/items have actually been inspected. In addition the report needs to describe the measures undertaken for CITES certificates according to Appendix A⁴⁸⁴.

The County Administrative Boards are required to submit by 15.3.2013 a report to SwEPA, describing how the surveillance of CITES is conducted in their county.⁴⁸⁵

Effectiveness of the Inspection System

There has been an increase in the number of confiscated CITES animals and plants coming from abroad. The number of confiscated CITES animals and plants by the customs is given in Table 28. The considerable increase in confiscated CITES products in 2011 has been contributed to the increase of ordering CITES products from outside the EU on the internet.⁴⁸⁶

⁴⁸³ Correspondence with SwEPA, based on the analysis undertaken by SwEPA of the CITES reporting from the County Administrative Boards.

⁴⁸⁴ Correspondence with SwEPA, based on the analysis undertaken by SwEPA of the CITES reporting from the County Administrative Boards.

⁴⁸⁵ Swedish Agency for Marine and Water Management, website, Accessed 8.3.2013, https://www.havochvatten.se/download/18.2a9b232013c3e8ee03e331/1358415608090/F%c3%b6rdelning+u+ppdrag+som+hanteras+av+andra+myndigheter2013_beslut20130108_2.pdf

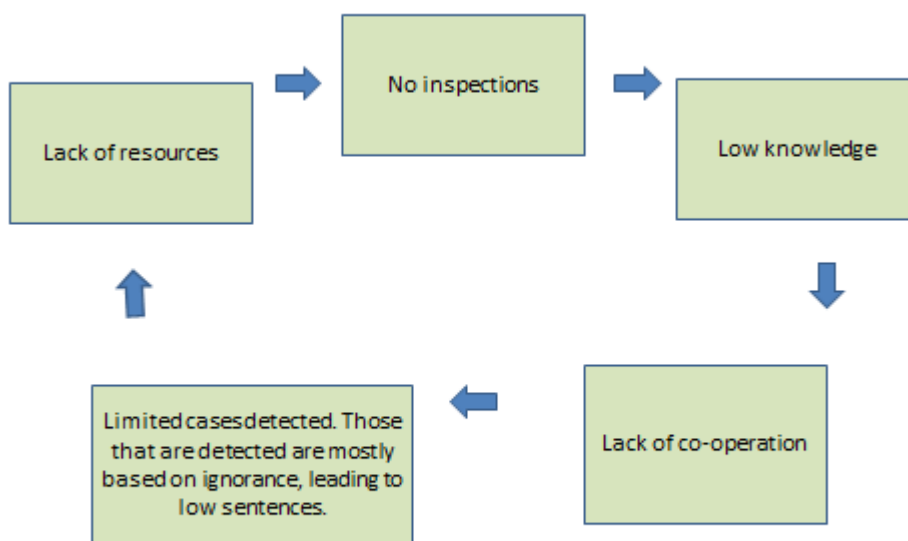
⁴⁸⁶ Tullverket, Accessed 8.3.2013. <http://news.cision.com/se/tullverket-/r/fordubblade-tullbeslag-av-utrotningshotade-arter,c9257122>

Table 28. Number of confiscated animals and plants.

Year	2007	2008	2009	2010	2011
Confiscated CITES plants and animals	15	21	20	22	29

The Swedish National Police Board found the Swedish approach insufficient to address CITES crimes in 2008. It presented the vicious circle of Swedish CITES surveillance, as shown in Figure 9.

Figure 9. The Vicious circle of Swedish CITES surveillance⁴⁸⁷



Costs of Inspection

The individual/business is responsible for the application fees for CITES. The costs of the surveillance for CITES by the County Administrative Boards is difficult to separate from their overall administrative and control functions.

⁴⁸⁷ Adapted from Bra (2006), Ar vi bra pa miljobrott? Webbrapport, 2006:5, http://www.bra.se/download/18.cba82f7130f475a2f1800010432/2006_ar_vi_bra_pa_miljobrott.pdf

11 UNITED KINGDOM

Introduction

The UK case studies address the following areas:

Water:

- Drinking water
- Abstraction of water
- Landspreading of fertilisers
- Farm infrastructure
- Urban waste water treatment

Nature protection:

- Habitats and protected areas
- Species protection

Trade in endangered species:

- CITES

The UK is a Member State with devolved administrations. However, the levels of devolution vary, with Scotland and Northern Ireland most devolved and Wales less so. However, given the relatively sizes of the country, cases in this report tend to focus on England or England and Wales as appropriate. For CITES (and to some extent species) the case is treated UK-wide as the criminal investigative framework is not divided. Occasionally interesting cases from Scotland are also included in this report.

Generally, England can be viewed as having a strong centralised environmental enforcement system. For many areas this is delivered by the Environment Agency (EA), which has responsibilities across most areas of water, waste, industrial pollution control, etc. Similarly, for nature protection, Natural England (NE) is a centralised body.

However, with the cases addressed in this study other enforcement bodies are also important. Most critical are the police and UK Border Agency (customs) for CITES and wildlife crime. There has, therefore, to be close working relationships with the EA and/or NE on these issues. The Rural Payments Agency is also a critical partner when enforcement issues are linked to sanctions in relation to cross compliance and in partnership on inspections.

The only completely separate inspection body in relation to the cases addressed is the Drinking Water Inspectorate. This is perhaps not surprising as the Directive effectively is a consumer protection measure aimed at the quality of a product, rather than one of enforcement in the natural environment itself.

All of the enforcement bodies state support for risk-based approaches to enforcement, although the basis for risk assessment is more evident in some cases than others, such the

Environment Agency's OPRA risk assessment evaluation. Furthermore, one pressure for such an approach is reducing regulatory burdens and responding to budget cuts on public administrations, so there is an issue of how far better targeting of inspection is driven by delivering improved effectiveness of enforcement alone.

Finally, with regard to sanctions, the UK has traditionally applied either potentially weak administrative responses (e.g. warning letters) or used aspects of criminal law. This has now changed for many areas with the introduction of civil sanctions. The regulators tend to express significant support for this new type of sanction. However, in most cases the ability to apply such sanctions is very recent, so in some cases their use has so far been very limited or non-existent. In any case, it is far too early to judge their effectiveness. Civil sanctions have not been included in the suit of sanctions available to the Drinking Water Inspectorate as the Inspectorate has stated that it does not consider that these are needed, although this is not clear why.

11.1 UK: Drinking water

Introduction

This case examines the inspection and enforcement of the Drinking Water Directive. In this case the focus is on the institutional arrangements and practices in England and Wales.

Legislative framework⁴⁸⁸

The standards set out in the Drinking Water Directive are transposed in England and Wales by the Water Supply (Water Quality) Regulations 2000 (SI 2000 No 3184).

The regulatory framework for water supplies in England and Wales, including the powers and duties of the Drinking Water Inspectorate and the duties of water suppliers, are set out in the Water Industry Act 1991 as updated by the Water Act 2003.

For private water supplies local authorities have statutory duties under the provisions of the Water Industry Act 1991, Water Act 2003, the Private Water Supply Regulations 2009 (England) and 2010 (Wales).

Institutional framework and partnership/inter-institutional arrangements

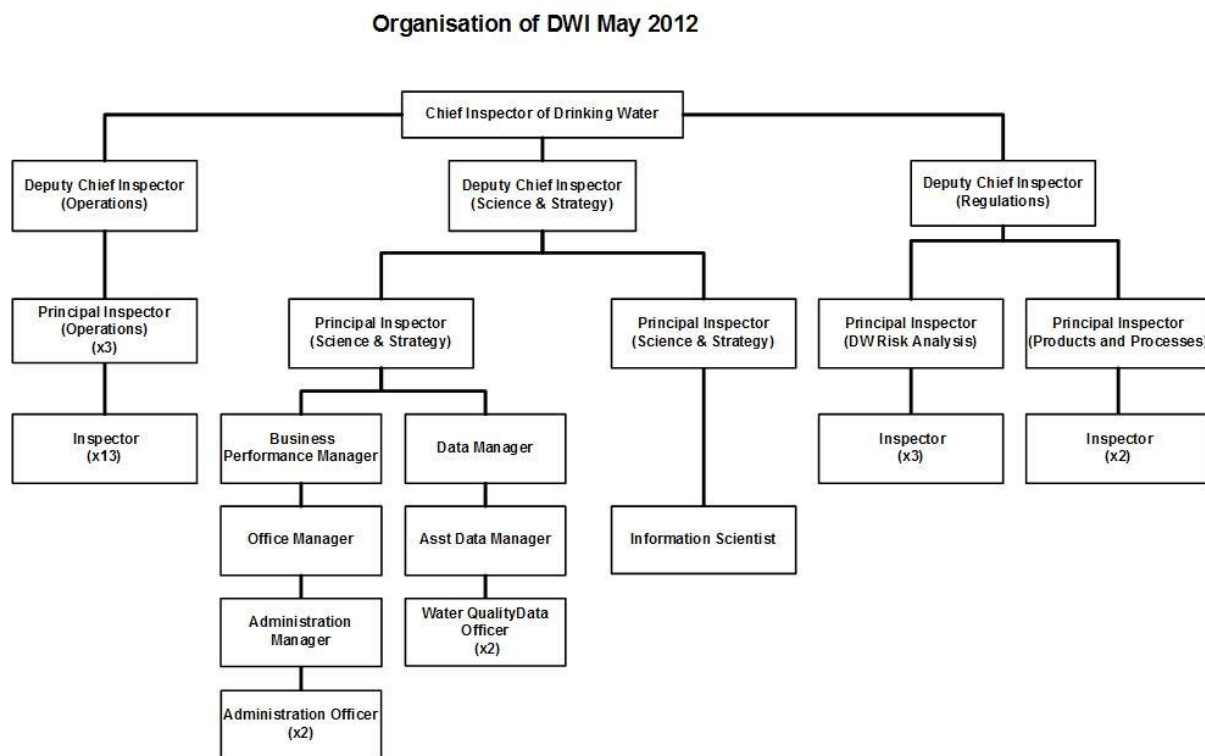
Governmental inspection related to the enforcement of the Drinking Water Directive is undertaken by the Drinking Water Inspectorate. This was formed in 1990 to provide independent reassurance that public water supplies in England and Wales are safe and drinking water quality is acceptable to consumers. The Drinking Water Inspectorate is organised into three parts⁴⁸⁹:

- **Operations:** The Operations group leads the core process of technical audit of water companies and covers operating practices of water companies, assessment of water company sampling programmes and results, investigation of consumer complaints about drinking water quality and assessment of incidents potentially affecting drinking water quality.
- **Regulations:** The Regulations group lead on water company programmes for improving drinking water quality and the Inspectorate's input into the economic regulator's (Ofwat) periodic review of water prices. Additionally, the regulations team oversees the Inspectorate's enforcement processes.
- **Science and Strategy:** The Science and Strategy Group leads on scientific evidence and Defra's water quality and health research programme, strategic relationships with external and international stakeholders, corporate governance arrangements and strategic business planning, communications and knowledge management strategies, water quality data management and enquiries from the public.

⁴⁸⁸ DWI Technical manual: Legislative background to the Private Water Supplies regulations 2009 Section 9 (E & W) of the Private Water Supplies: Technical Manual.

⁴⁸⁹ DWI (2010). Securing safe, clean drinking water for all - Our Strategic Objectives 2010-2015.

Figure 10. The organisational structure of the Drinking Water Inspectorate⁴⁹⁰.



The Inspectorate has limited need of close working relationships with other organisations on enforcement activity. It has formal memoranda of understanding with its equivalent organisations in Scotland and Northern Ireland and with Ofwat, the economic regulator.

Local authorities are responsible for the safety of private water supplies⁴⁹¹. To do this they must carry out a risk assessment of each private water supply to establish whether there is a significant risk to human health⁴⁹². Local authorities are also responsible for arranging that private water supplies are monitored to determine compliance with the drinking water standards. Where a failure of a standard is reported, the local authority must investigate to determine the cause and take appropriate action to secure that private supply owners address the problem. Inspectors from the Drinking Water Inspectorate have a supervisory role and the Inspectorate provides technical advice to local authorities and reports on national performance.

The Health Protection Agency (HPA) helps to protect the public against infectious disease, hazardous chemicals, poisons and radiation. The HPA has a number of experts who can advise on the potential public health risks from microbiological or chemical contamination

⁴⁹⁰ Source: DWI website

⁴⁹¹ A private water supply is one not provided by a water company, i.e. not through the mains. About 1% of the population of England and Wales have private water supplies and mostly in rural areas. They include wells, boreholes, springs, streams, rivers, lakes and ponds.

⁴⁹² DWI Technical manual: Legislative background to the Private Water Supplies regulations 2009 Section 9 (E & W) of the Private Water Supplies: Technical Manual.

of water supplies and will issue advice, via the Drinking Water Inspectorate when appropriate, to assist local authorities. The HPA delivers its functions at a local level through Health Protection Units (HPU). The HPUs support the work of local authorities in relation to the safety of drinking water supplies; however, they have no formal statutory duties and powers under the Private Water Supply Regulations. HPUs are likely to be approached by local authority environmental health staff for advice and support regarding the results of testing of private water supplies. HPA staff are not legally responsible for determining whether a particular private water supply is a potential danger to human health. However, in the case of a serious incident, HPA will take a more active role, carrying out risk assessments, etc. In some cases the HPU will set up and lead an incident management team to coordinate the health protection response. In serious emergencies, the HPU will lead a Scientific and Technical Advisory Cell (STAC) feeding directly into the wider Incident Management Team.

Inspection planning and process

The Drinking Water Inspectorate has developed strategic objectives for 2010-2015⁴⁹³. It has four strategic objectives.

Strategic objective 1: Water suppliers deliver water that is safe and clean. The inspectorate will achieve this by:

- Scrutinising water suppliers' operational delivery from source to tap.
- Regulating for sustainable drinking water supplies through long-term resilience and maintenance of water supply systems by water companies.
- Conducting regulatory functions using a risk management approach to water supply that is evidence based, and makes provision for managing emergencies and mitigating risk from the environment.
- Working with other water regulators in the exercise of their powers to support the delivery of safe, clean drinking water.
- Regulating to ensure that water suppliers use only approved and safe products and processes.

Strategic objective 2: The public have confidence in their drinking water. The inspectorate will achieve this by:

- Minimising the risk of the public being exposed to unsafe drinking water.
- Taking decisive and timely independent regulatory action when needed that is in the interests of consumers.
- Conducting independent verification of the arrangements for collecting and reporting drinking water quality data.
- Publishing accurate and relevant drinking water quality information (including the actions taken to remedy deficiencies) that is tailored to the needs of local community representatives. Conducting fair and independent appraisal of consumer complaints about drinking water quality.

⁴⁹³ DWI (2010). Securing safe, clean drinking water for all - Our Strategic Objectives 2010-2015.

- Ensure everything done has a sound evidence base which we proactively maintain and publish.

Strategic objective 3: Drinking water legislation that is fit for purpose and implemented in the public interest. The inspectorate will achieve this by:

- Interpreting and applying the legislation in line with best regulatory practice.
- Providing timely technical advice and guidance to water suppliers, local authorities, health officials and other regulators at a national and international level.
- Scrutinising and influencing proposals that may impact on the supply of safe, clean drinking water.
- Engaging with legislators and consulting with stakeholders to ensure that legislation and regulatory powers and duties remain fit for purpose.
- Implementing the forward work programme as a WHO Collaborating Centre for drinking water safety, and engaging with the global drinking water quality and health community to develop and share international best practice and promote innovation in drinking water safety and regulation.

Strategic objective 4: DWI is a progressive and trusted organisation. The inspectorate will achieve this by:

- Publishing its actions and performance record, and being accountable to Ministers, to consumers, to water suppliers and to our other stakeholders.
- Conducting the way it works in accordance with the Regulator's Compliance Code, and the ethics of the professional organisations to which our staff belong.
- Engaging with all stakeholders, and especially consumers and local community organisations, to ensure that the services provided continue to be fit for purpose.
- By employing and supporting staff capable of delivering those services efficiently.
- Being independent, accessible, consistent and transparent in all it does.

Following UK initiatives on better regulation, the Legislative and Regulatory Reform Act 2006 places the Hampton principles of better regulation in statute (see Box below). The Act introduced a new code of practice for regulators – Regulators Compliance Code⁴⁹⁴. This applies to the regulatory functions of Drinking Water Inspectorate as it states “The effective use of enforcement powers in regulatory schemes is important to secure compliance with the law and, where necessary, to ensure that those who have not complied may be held to account”.

The Hampton principles

Sir Philip Hampton’s 2005 review (Reducing administrative burdens: effective inspection and enforcement) set out key principles that should be consistently applied throughout the regulatory system:

- Regulators, and the regulatory system as a whole, should use comprehensive risk assessment to concentrate resources on the areas that need them most.

⁴⁹⁴ DWI (undated). Securing safe, clean drinking water for all. Enforcement policy.

- Regulators should be accountable for the efficiency and effectiveness of their activities, while remaining independent in the decisions they take.
- No inspection should take place without a reason.
- Businesses should not have to give unnecessary information, nor give the same piece of information twice.
- The few businesses that persistently break regulations should be identified quickly and face proportionate and meaningful sanctions.
- Regulators should provide authoritative, accessible advice easily and cheaply.
- Regulators should be of the right size and scope, and no new regulator should be created where an existing one can do the work.
- Regulators should recognize that a key element of their activity will be to allow, or even encourage, economic progress and only to intervene when there is a clear case for protection.

The control system relies on self-regulation, whereby water companies check water samples themselves and a sub-sample of these is subject to independent checking. Therefore, Drinking Water Inspectorate inspectors independently check tests undertaken by water companies and audit water company laboratories. If any one of the millions of tests each year fails the standards then the inspectors use their powers to require the water company to make the necessary improvements to drinking water quality. The inspectors undertaken site visits to check that improvement work is completed on time. This system is considered to be effective as in its first year of operation DWI tests led to 648 enforcement actions, while 14 years later only 29 enforcement actions were needed⁴⁹⁵.

The primary focus of self-regulation is the development of Water Safety Plans by each water company. These assess the operations and risks for water supply and how companies will address these. Each is independently checked by the DWI and around 800 have been produced. This approach places the thinking for risks to compliance on the operator and improves operational management.

In some cases incidents occur. In such cases it is the function of the Drinking Water Inspectorate to investigate the incident and provide an independent report of the cause with recommendations on how to prevent similar events from happening again. Sometimes investigations of incidents lead to a water company being prosecuted (further detail is given below).

Consumers can raise concerns over their drinking water supply. In the first instance they should contact the water company. They provide advice and test the water if necessary. If they are not satisfied with their response, consumers can contact the Drinking Water Inspectorate. An inspector will investigate the matter with the water company and inform the consumer of the outcome. Inspectors request a full report on the complaint from the water company and will decide whether it needs to take any further action. This takes a minimum of 10 working days but may be longer for more complicated issues.

⁴⁹⁵ May, A. and Colbourne, J. 2009. Regulatory risk assessment roll-out for England and Wales. Water Utility Management International. March 2009: 12-14.

The Drinking Water Inspectorate has adopted four principles of its enforcement policy^{496, 497}:

- **Proportionality** in securing compliance involves taking account of the risk of adverse impacts. Sometimes this will require enforcement action to be taken even though the risks may be uncertain, in which case decisions will be guided by the best available evidence.
- **Consistency** means taking a similar approach in similar cases to achieve similar outcomes within which a degree of discretion is available, such as taking account of the attitude and competence of the regulated business.
- **Transparency** includes helping those regulated to understand what is required of them, what remedial action is required and details of any rights of appeal.
- **Targeting** of enforcement action means prioritising and directing regulatory effort effectively by concentrating on the activities which create the most significant risk, either because the nature of the activity is inherently high-risk or because of a lack of appropriate controls or appropriate attitude in other less high-risk activities.

Follow-up and use of sanctions

Where investigation uncovers an offence, the Inspectorate has three options available for sanctions – advisory letters, civil enforcement remedies and criminal sanctions⁴⁹⁸.

Advisory letters: where circumstances do not warrant carrying out a detailed investigation of a potential breach of law the Inspectorate may send an advisory letter or make recommendations in a written inspection report reminding the regulated business of the need to obey the law without prejudice to other purely civil remedies.

Civil enforcement remedies include the use of statutory powers such as:

- Stop and Remediation Notices;
- Minded to Enforce Letters (inviting the business to enter into a legally binding agreement to affect a remedy, these agreements are called undertakings and once in place they negate the need for an Enforcement Order);
- Formal Letters requiring the business to make an application for a time limited exemption or approval (where such discretion is available to us in law);
- Enforcement Orders (requiring the business to enter into a legally binding agreement to affect a remedy).

Before issuing a formal letter or notice the Inspectorate will explain the actual or potential breach of the law. The letter always offers the opportunity of a meeting with a Deputy Chief Inspector.

Criminal Investigations are carried out to gather evidence to be used in a criminal trial. In such investigations, special provisions apply for the protection of suspects; e.g. they are

⁴⁹⁶ DWI (undated). Securing safe, clean drinking water for all. Enforcement policy.

⁴⁹⁷ DWI (2009). Drinking Water Safety – Guidance to health and water professionals.

⁴⁹⁸ DWI (undated). Securing safe, clean drinking water for all. Enforcement policy.

entitled to be cautioned in accordance with the Police and Criminal Evidence Act (1984). Where a criminal offence is suspected of having been committed then the decision to carry out a criminal investigation will be made based on the following criteria:

- The impact or potential impact of the offence on consumers;
- The alleged offender's response to previous advice and guidance;
- The risk of other similar offences being committed in relation to the same or other drinking water supplies under the control of the suspect;
- The likelihood that avoidance of regulatory requirements was intentional as opposed to a simple error or misunderstanding by the offender;
- The extent to which the risk management focus of the legislation is evident in the alleged offender's actions.

The Chief Inspector will only commence a prosecution when satisfied that there is a "realistic prospect of conviction" on the available evidence. In addition to relevant matters set out in the Code for Crown Prosecutors relating to the personal circumstances of the offender and the circumstances of the offence, the Chief Inspector will consider other factors in deciding whether or not to prosecute:

- The impact, or potential impact, of the offence on consumers having regard to the Inspectorate's strategic objective that the public have confidence in their drinking water;
- The implications of the offence for the credibility and enforcement of the regulatory regime;
- The perceived benefit accruing to the offender from not being duly diligent e.g. in relation to industry best practice, not carrying out adequate maintenance of assets or failing to invest in adequate water treatment, competent operators and competent analysts or failing to collect sufficient samples and analyse these for all the relevant organisms and substances;
- Whether the offence was committed deliberately or if inspectors were obstructed in the course of their duties;
- The previous enforcement record of the offender;
- The attitude of the offender, including behaviour towards inspectors, and whether robust and permanent corrective measures to remedy the offence or prevent any reoccurrence are being put in place;
- Where offences are prevalent or difficult to detect, the general deterrent effect on others by making an example of the offender;
- Whether inspectors have given previous written advice to the offender which if followed would have reduced the likelihood of an offence being committed;

The law allows the Inspectorate to prosecute "any relevant person". The Inspectorate would normally prosecute the business itself, except in exceptional circumstances where the offence arose out of the personal actions of an employee that were knowing, deliberate and clearly contrary to training and instructions.

Box: example of prosecution (Source: DWI website)

Severn Trent Water Limited pleaded guilty on 13 September 2012 at a Magistrate's Court to charges brought in relation to three events under the Water Industry Act 1991 (as amended) and the Water Supply (Water Quality) Regulations 2000 (as amended). The Company was fined for each event:

- Chesterfield: Fined £5,000 on each of six counts of water unfit for human consumption, fined £5,000 on one count of a failure to disinfect water, fined £5,000 on one count of not subjecting water to sufficient preliminary treatment to prepare it for disinfection, fined £5,000 on one count of failure to design and continuously operate an adequate treatment process for the source and fined £5,000 on one count of failing to adhere to the national conditions of use for substances or products applied to or introduced to the water, total £50,000.
- Sandiacre: Fined £4,000 on each of four counts of water unfit for human consumption, total £16,000.
- Melbourne: Fined £5,000 on one count of a failure to disinfect water and £5,000 on one count of a failure to operate an adequate treatment process continuously, total £10,000.

Cautions can be issued under the Criminal Justice Act 2003. Before a caution can be imposed, the offender must admit their guilt in writing and agree to the imposition of requirements to assist in their rehabilitation or reparation. If the offender does not comply with these requirements, they may be prosecuted for the original offence. A caution will be considered when the Inspectorate is satisfied that all necessary remedial action to prevent a recurrence has been taken by the regulated business and the offence arose, at least in part, as a result of a simple mistake or genuine misunderstanding.

The Inspectorate has an appeal process. The business can meet with a Deputy Chief Inspector to hear any proposals for alternative remedies. If, after this, the business considers the enforcement action to be unfair, it can appeal to the Chief Inspector of Drinking Water in writing. The Inspectorate will then discuss the issue with the business within seven days and then reach a final decision on the appropriate enforcement action, normally within 30 days.

There is no provision in law for the use of civil penalties. The Drinking Water Inspectorate's policy is that it is not seeking such powers⁴⁹⁹. The Inspectorate states that such powers are not necessary, but does not give a reason for this.

⁴⁹⁹ DWI (undated). Securing safe, clean drinking water for all. Enforcement policy.

Inspection capacity

The Drinking Water Inspectorate is a small organisation of 39 staff, based in London, but working across England and Wales. The staff consist of 29 Inspectors and 10 technical and support staff.

Inspectors are experienced professionals with strong technical, scientific or engineering backgrounds. The technical and support staff include experts in data management, information and knowledge management, and business administration.

The expertise of the staff is reflected by the status of the Inspectorate as World Health Organisation Collaborating Centre for Drinking-water safety. This includes an agreed forward work programme with WHO and others to further knowledge and understanding of drinking water safety. The Inspectorate also contributes to research on drinking water issues to improve its ability to undertake its work. One function is to manage the national Drinking Water Quality and Health Research Programme on behalf of Defra. This is funded at around £1 million a year. The Inspectorate considers that the research programme is 'fundamental to our effectiveness as a regulator'⁵⁰⁰.

The Inspectorate's Senior Management Team has overall responsibility for the management and strategic direction of the Inspectorate, working with Defra. Delivery of our day-to-day activities is the responsibility of the Management Team of Principal Inspectors. The Inspectorate has Key Performance Indicators which allow the water industry to hold it to account. These include targets for data handling and compliance assessment; requests for information; investigating events and initiating enforcement action. Performance statistics are published on the Inspectorate's website.

The operating costs of the Inspectorate are just under £2.5 million each year and are funded by Defra and equate to 13 pence for each household connected to the water supply (compared to an average household water supply bill of over £150).

One of the main changes introduced by the 2009 and 2010 regulations (see above) was that since 1 January 2010 the Inspectorate has had a supervising role in relation to how well local authorities are carrying out their new duties. In the five years before 2010 the Inspectorate received and answered an average of 45 private supply enquiries annually but this rose to 444 during 2011 (79% from local authorities, the remainder by stakeholders and suppliers). The demand on the Inspectorate's technical enquiry service has been delivered through improved efficiency with no additional resources. The Inspectorate considers that this reflects the strength of its knowledge and information systems.

The Drinking Water Inspectorate charges fees for the recovery of its services⁵⁰¹. It undertook a consultation with the water industry which stated that it preferred a charging scheme that was simple. The Industry also agreed to the principle of charging for certain regulatory activities by reference to a fee for a daily rate and for the checking of sample results, by

⁵⁰⁰ DWI (2010). Securing safe, clean drinking water for all - Our Strategic Objectives 2010-2015.

⁵⁰¹ DWI (2013). Information Letter. Cost Recovery: Publication of Fees. 5 March 2013.

reference to a fee fixed for a standard number of samples. The fees are based on approximations based on the staff related costs and resource allocations across teams involved in regulatory functions.

There are non recoverable costs of the work of the Inspectorate. These include the costs of policy activities such as providing technical advice to Ministers and at EU level. The work on approval of materials and substances in contact with water and the Inspectorates supervisory role of the regulation of private water supplies by local authorities is not included in the fees. This work costs about £0.5m pa and is funded by Defra.

For compliance checking of sampling and analysis of results submitted, this involves inspectors and other staff who manage water quality data and other reporting and communications support systems. The current costs for this activity are around £ 1.5m p.a.

For the checking of water supply management arrangements (inspections), investigation of events, and consumer complaints, the costs include travelling to company sites and have a higher input by more senior inspectors. The current costs for this activity are around £0.4m p.a.

The fee for each 100 sample results submitted and checked is based on the number of drinking water sample results submitted in the previous year by each company. This “fixed” cost element constitutes the majority of the fees paid by the industry. At the end of the financial year, any correction necessary for actual samples submitted is accounted for in subsequent invoices. The number of samples Water companies must take and the parameters to be tested for is set out in the Regulations.

The fee for each chargeable period (day) is based on the number of days required for each task. This ‘variable’ fee depends on the amount of activity, which could be higher where there are repeated failures or incidents. This fee includes the time spent on site and also all time spent on preparation, travel, and reporting or follow up actions, such as putting in place new or revised notices or statutory programmes of work (undertakings), reviewing progress reports or revised risk assessment reports; evidence gathering and communication with consumers and others stakeholders affected by a particular water quality event or consumer complaint. The fees are reviewed each year on or before 30 June.

Inspection review

The work of the Drinking Water Inspectorate is subject to review by Defra and its own annual reports comment on its work and where issues lie. A review of concerns over drinking water enforcement, for example, led to the extension in the role of the Inspectorate in 2010 for private water supplies. The Inspectorate has reviewed its work in the light of better regulation principles (see above).

Transparency and reporting

The Drinking Water Inspectorate publishes detailed annual reports. These reports detail the compliance of public and private water suppliers across England and Wales. There are also

reports of incidents and prosecutions. The latest 2011 report of incidents runs to 74 pages, detailing the incidents, population affected and duration. All were investigated by the Inspectorate during 2011.

In 2011 the Inspectorate carried out 136 incident investigations. Several of these identified deficiencies of a sufficiently serious nature to warrant enforcement action to prevent a recurrence and six cases resulted in prosecution. Since 1997 to 2011 there have been 22 successful prosecutions. Fines imposed ranged from around £2,500 to over £125,000. 25 cautions were issued between 1995 and 2011.

The Inspectorate, as described above, provides detailed responses on inspection activity to those consumers who have raised complaints. However, individual inspection reports are not published, but could be requested by the public.

When significant sanctions are applied, the Inspectorate publicises the results, especially for prosecutions. This highlights the importance of its work with consumers and shames the business affected.

Effectiveness of the inspection system

In determining effectiveness, one measure is to consider the rate of compliance with the requirements of the EU Drinking Water Directive. In 2011 in England and Wales the percentage of the 1.9 million tests of public water supplies taken which complied with the Directive was 99.96%, i.e. with 0.04% failed to meet one of the chemical or microbiological standards. For private water supplies 7.2% of 103,143 tests failed to meet drinking water standards in 2011. For the latter this is an improvement from 2010 and previous years. For public water supplies the pass rate was similar to 2010, but this has been a levelling off at a high compliance level from a low compliance rate when the first Directive was introduced. Compliance is, therefore, high. It is difficult to know how far this reflects the effectiveness of inspection compared to the investments made by water companies, which is directed by the decisions of the economic regulator, Ofwat.

In 2011 the EC raised concerns about private water supplies indicating that fewer than 60% met the microbiological standards in the Drinking Water Directive. It therefore stated that additional enforcement action was needed. With the new oversight of private water supplies by the Drinking Water Inspectorate much more action has been taken in the UK on risk assessment and risk management approaches to improve small water supplies. Therefore, since the start of 2010 in England and Wales the microbiological failure rate of private supplies is 10.6% for E. coli, down from the figure of 13.7% reported previously. This is a trend in the right direction, but more needs to be done. However, the enforcement framework is in place. During 2011, local authorities also improved the completeness and accuracy of their private supply records providing the Inspectorate with details of an additional 4,346 supplies in England bringing the total to 44,079. However nine local authorities in England that have yet to provide records on private water supplies to the Inspectorate.

Box: improving compliance in Northern Ireland⁵⁰²

Drinking water compliance is determined by 'mean zonal compliance' based on the parameters for drinking water quality. Across Northern Ireland about 40,000 samples are taken each year. In 2004 mean zonal compliance was 98.65% and in 2011 this had risen to 99.83%.

Conclusions

The Drinking Water Inspectorate has been in place for many years. As a result it has become well known to the water industry and increasingly effective in its enforcement. However, the gap in enforcement coverage for private water supplies was addressed with new functions for the Inspectorate in 2010.

Overall, the Inspectorate is a highly effective enforcement authority. It has a long-track record of enforcement leading to improved compliance. It has highly skilled staff and sufficient budget and was able to take on its new duties with efficiency savings. It also has a range of sanctions available and all are used, including prosecutions. Its inspection work is reactive to respond to incidents, but its experience means that while these are inherently unpredictable, it can reasonably estimate the resource needs for the year. In any case all costs associated with inspection work for incidents are fully recovered from the regulated business (the major water industries). The strong link to research is also a strength informing its regulatory work and enhancing its international status.

⁵⁰² Northern Ireland Environmental Statistics Report. January 2013

11.2 UK abstraction of water

Introduction

This case study examines the control framework for abstraction of surface water and groundwater in England and Wales.

Legislative framework

Abstraction licensing and enforcement is undertaken in England and Wales under the Water Resources Act 1991 and the Water Act 2003. The latter altered the basis for the control of abstraction, particularly addressing historical licenses that no longer provided the necessary degrees of environmental protection. It further paved the way for the control of abstraction necessary to meet the quantitative requirements of the Water Framework Directive⁵⁰³.

The Water Act 2003 provides a flexible system to regulate and manage water resources and, if someone abstracts or impounds water without a valid licence, the Environment Agency (EA) has powers to take remedial action. The Act extended powers of entry for water resources activities to strengthen the EA's enforcement and inspection activities. It also increased the fines that courts could impose for offences from £5,000 to £20,000.

Institutional framework

The primary regulator for water abstraction in England and Wales is the Environment Agency. It is responsible for most aspects of water management, being the competent authority for implementing the Water Framework Directive. Within this context it determines the flows necessary for achieving good ecological status and, therefore, abstraction management needs to be integrated into these objectives.

The EA issues licences for those that abstract water and undertakes compliance checks on those licences.

The EA works with others such as Natural England to understand better the flow requirements for waters in England⁵⁰⁴. Furthermore, it works with others to provide a less burdensome and consistent interaction with stakeholders through its 'Single Voice' approach whereby regulators provide common messages to those being regulated. Staff in the EA local offices also work closely with other organisations including local authorities, and with communities. With regard to water resources management in particular in March 2012, it set up a national drought group to provide a high-level steer on water management across all the main sectors of water use. The group includes representatives from Defra, other government departments, water companies, Natural England and other organisations.

The other institution involved in compliance checking of water licenses is the Rural Payments Agency. This focuses its activities on farms receiving single farm payments, some

⁵⁰³ EA. 2012. Managing water abstraction. How we maintain a level playing field. Pp 1-2.

⁵⁰⁴ EA. Corporate Plan 2011-15, p. 9. <http://a0768b4a8a31e106d8b0-50dc802554eb38a24458b98ff72d550b.r19.cf3.rackcdn.com/geho0211btkv-e-e.pdf>

of which have abstraction licenses. The RPA and the EA share information on the results of inspections. Further information on the role and practice of the RPA is given below.

Abstraction licenses in England and Wales

Those abstracting more than 20m³/day of water are required to have a licence. The licence establishes the limits to abstraction, including seasonal requirements, and requirements, such as metering and reporting on volumes of water abstracted⁵⁰⁵.

While licences set standard conditions for abstraction, the EA can also apply 'hands off flow' or 'level conditions' to abstraction licences⁵⁰⁶. This has been the case for over 30 years. These are specific conditions and restrictions to address low flow or drought conditions. In some cases, the EA can use section 57 of the Water Resources Act 1991, to vary licences to stop or reduce spray irrigation. These conditions allow the EA to reduce or stop abstraction when flows at a gauging station, or levels in a borehole, pass a specified threshold. Around 40 per cent of surface water licences and three per cent of groundwater licences contain these conditions. The conditions use environmental flow indicators to ensure that abstractions do not cause river flows to fall below the environmental flow indicators and so meet the objectives of the Water Framework Directive.

The Environment Agency has introduced the Restoring Sustainable Abstraction (RSA) programme in England and Wales. This aims to find a balance between abstraction from rivers, reservoirs and groundwater sources, and the needs of the environment (including Natura 2000 sites and WFD requirements). In order to implement the programme, the EA:

- Identifies, investigates and works to solve environmental risks or problems caused by unsustainable licensed water abstraction.
- Considers the level of environmental impact abstractions are causing or could cause.
- Works with all abstractors whose abstractions may be having an environmental impact, to find effective solutions.

The RSA programme has worked with licence holders to prevent and reduce damage to the environment by modifying abstraction licences, such as by: moving or swapping existing abstractions, seeking alternative solutions that use water more efficiently and less harmfully, ensuring only water that is needed is allowed to be taken to remove risks, for example, to Natura 2000 sites, placing conditions on licences that allow water to be taken at times when it is least likely to harm the environment, committing licence holders to reduce abstraction when there are alternative supplies and working with other organisations and local groups to solve abstraction-related problems. Overall, of the 21,000 abstraction licences in England and Wales, around 580 licences are part of 260 open RSA schemes. Many licences do not need changing.

Around half of all licences identified as a potential risk through RSA are used for public water supply, but this represents around 70 per cent by volume of the licences being

⁵⁰⁵ EA. Top tips for complying with your water abstraction licence. 2012.

⁵⁰⁶ EA. Managing water abstraction. How we maintain a level playing field. April 2012.

investigated. Overall, public water supply in England and Wales accounts for around 35 per cent of the volume of (non-tidal) water that is licensed to be abstracted and around 48 per cent of the volume that is actually taken in England and Wales. Around one per cent of abstracted water is used for agriculture and spray irrigation. However, around one third of all licences identified as a potential risk through RSA are used for agriculture. Finally, one sixth of the licences being investigated are used for industrial, amenity/environmental, power generation, and other potable uses, i.e. around 25 per cent by volume of the licences being investigated⁵⁰⁷. The following table shows the percentage of licences for different sectors being investigated as part of RSA.

Table 29. Numbers of licences being investigated as part of RSA

Type of use	England (% approx)	Wales (% approx)
Public water supply	51	43
Agriculture	31	36
Industry	6	8
Amenity / environmental	5	1
Power generation	2	9
Other potable uses	1	0
Other	3	2

The RSA programme has resulted in the return of around 55 billion litres of water per year to the environment in England and Wales - equivalent to the annual domestic water use of around 850,000 people. It has also reduced the size of many licences beyond the actual amount taken. By April 2012 16 licences had been changed compulsorily by section 52 of the Water Resources Act 1991, while 76 licences changed voluntarily by abstractors under section 51 of the Water Resources Act 1991.

It is also important to note that in England and Wales there is a system of **water rights trading**⁵⁰⁸, which is unusual in the EU (Spain also has such a system). Water rights trading is the transfer of rights to abstract water from one person to another. The transferred rights are set out in a new abstraction licence. If an operator already has an abstraction licence, they can sell the rights to some, or all of that water. If they need a licence to abstract water, but no new licences are available, they can buy the rights to abstract water currently held under someone else's licence. As trading will involve a change in the specific location of the abstraction and possibly a change in what the water is used for, the EA needs to approve this through granting a new licence or varying an existing one. The varied or new licences are enforced in the same way as other licences.

Strategic planning for compliance control

The strategic planning for abstraction control is an integrated process between catchment management, licencing and enforcement. The EA adopted the Streamlining Abstraction

⁵⁰⁷ EA. Enforcement and sanctions guidance. January 2011 and EA. Enforcement and sanctions statement. January 2011.

⁵⁰⁸ EA. A guide to water rights trading.

Processes (SAP) to manage the allocation of permitting resources for issuing extra abstraction licenses required as a result of the Water Act 2003. This is a risk-based permitting approach and a risk-based compliance assessment. Very low risk licence applications receive standard licence conditions, whereas other higher risk applications require specific licence conditions. The assessment of risk includes the evaluation of information from aquifer balances data and Catchment Abstraction Management Strategy (CAMS) information on pressures on water availability. The compliance assessment approach is flexible, changing in response to drought or wet conditions. The EA has been deregulating, on a risk basis, some 23,000 abstraction licences (46 per cent of the total Water Resources licences in 2003) that were of low impact, at <20 m³/day, as set by risk-based legislation in the Water Act 2003. In these cases, compliance assessment activities ceased.

For enforcement activities, the risk-based approach involves targeting inspection according to licences graded according to the following categories⁵⁰⁹:

- Highly critical – generally the most important and potentially damaging licences, such as a licence that requires positive action by the operator (e.g. large Water Company licences), can be inspected more than once a year depending on the season, etc. There is no fixed limit on the number of visits. This group includes a few spray irrigation licences.
- Critical – such as spray irrigation where water is abstracted in the summer when flows are lower and also there is a need for good measurement as 50 per cent of the licence annual charges could be payable on the volume abstracted. They are visited once a year.
- Less critical – visited on average once every 5 years.

It is important to note that the EA’s corporate plan⁵¹⁰ specifically has targets to address unsustainable abstraction licences. The following table sets out these targets. Much of this may be delivered through the licensing process, but enforcement action is also needed to make these improvements. For such targets the EA has to report on how well it has met these targets to government and stakeholders/public.

Table 30. Targets in the EA Corporate Plan 2011-15.

Measures	2010/11 Forecast	2011/12 Planned	2012/13 Planned	2013/14 Planned	2014/15 Planned
Number of licences that become environmentally sustainable (delivery actions)	36	38	46	44	160
Number of schemes completing investigations and option appraisal stages (scheme decisions)	54	34	38	64	60

⁵⁰⁹ EA. Enforcement and sanctions guidance. January 2011 and EA. Enforcement and sanctions statement. January 2011.

⁵¹⁰ EA. Corporate Plan 2011-15.

The EA has a published enforcement policy (see above). It states that ‘the aim of enforcement is to make sure business and industry take appropriate action to protect the environment, make sure regulations [...] are complied with and secure better outcomes for the environment, people and business.’ It may decide to enforce when any of the following occur: an incident; breach of the conditions of a permitted activity; non-compliance with legislation. The objective of the EA’s enforcement activity is ‘outcome-based’. The following outcomes are the EA’s priorities: stop offending; restore and/or remediate; bring under regulatory control; punish and/or deter.

Inspections of compliance with abstraction licences

The Environment Agency carries out on-site inspections and checks abstraction returns from those with licences. It takes a risk-based approach to inspections based on the sensitivity of a water source and the potential for damage. In particular, it inspects where there is a high potential for damage to the environment or where there is a poor compliance history.

Typically inspection is focused on the following:

- Where the EA has imposed hands off flow conditions or section 57 irrigation bans. This happens when there is a drought and drought plans contain information about compliance.
- Checks will be increased during a drought.
- In response to incidents, such as reports of low flows.
- If the EA detects over-abstraction or other non-compliance through returns from those undertaking abstraction.

The primary reason for inspection is to check compliance with the conditions in the abstraction licence. However, visits will also use the opportunity to give advice and guidance to help with compliance. To assist with this the EA has published guidance - ‘top tips for complying with your water abstraction licence.’⁵¹¹ The EA can give advice about how the operator can save water, whether a water meter is installed and measuring accurately, and answer any other questions about the licence.

The action the EA takes when it finds a breach or offence depends on the individual circumstances of the case. The actions range from giving corrective advice and guidance to, potentially, prosecution in the most serious cases. The EA’s priority is to help the licence holder to do the right thing, and make this part of their normal practice.

The EA uses different enforcement options to achieve environmental outcomes to stop offending, restore/remediate damage, bring abstraction under regulatory control and punish/deter if necessary. The response is specific to the individual circumstances of each case and is based on the public interest factors set out in Enforcement and Sanctions Guidance⁵¹². The enforcement options include criminal sanctions (warnings, formal cautions and prosecution, with fines up to £20,000 in a magistrates court) and can also include civil

⁵¹¹ EA. Top tips for complying with your water abstraction licence. 2012.

⁵¹² EA. Enforcement and sanctions guidance. January 2011.

sanctions. The latter have been available since 4 January 2011⁵¹³. The financial penalties are paid to the Treasury, not the Environment Agency. The range of sanctions available and used is set out further below.

Cross compliance and inspection

Inspections are also made by the Rural Payments Agency. The RPA examines a range of issues including how farmers meet their cross compliance requirements including Good Agricultural and Environmental Condition 18 (GAEC18) on abstraction. This requires that farmers holding an abstraction licence for irrigation must meet all the conditions in the licence to continue receiving your full payment for agricultural support.

Under EU CAP legislation, annual cross compliance inspections must take place for:

- at least 1% of farmers submitting applications to the Single Payment Scheme and other direct payments; and
- at least 1% of farmers that entered into new commitments under relevant rural development schemes from 1 January 2007.

Inspections are selected by a combination of a risk based assessment and a random element. Cross compliance inspections are likely to be unannounced, but if notified, it is likely to be less than 48 hours before the inspection. A cross compliance inspection may be carried out by one or more inspectors and farms may be inspected more than once during the year. The RPA checks compliance with the abstraction licence when they inspect farms. Furthermore, the EA reports breaches of irrigation licences from its inspections to the RPA. The following paragraphs are from the RPA's statement of the processes of inspection.

At the start of the inspection, the inspector will explain what is involved. After the inspection, they will explain what they found during the inspection. The inspector may take as evidence, where required, photographs and/or other evidence to support both compliance and non-compliance. The inspector will not be in a position to confirm any applicable payment reduction levels at this stage.

The inspector will fill in a full written report detailing the results of the inspection. This is sent to RPA in its role as paying agency. RPA will assess all of the inspection findings and may carry out validation on them. RPA will then decide if payments are to be reduced and how much they will be reduced by. If breaches are found, farmers will be informed within 3 months from the date of the inspection.

With regard to abstraction licences, the inspector will check that the farmer is meeting the conditions in the abstraction. To do this, they will usually need to read the water meter, check the meter calibration certificate, see where the farmer takes the water from and where it is used. If the farmer is abstracting water during the inspection and the licence has a Locally Prescribed Flow condition, the inspector may take a flow reading.

⁵¹³ EA. Civil sanctions quick guide.

The RPA decides whether to reduce the single payment or issue a warning letter. If the RPA reduces the payment, the EA will not usually impose a civil sanction financial penalty as well, unless the farmer has made a significant financial gain from non compliance.

Follow-up: use of sanctions by the EA

There are different offences available related to abstraction licence offences⁵¹⁴. Some are administrative (e.g. failing to report on licence operation). Offences relating to abstraction (e.g. operating without a licence or not according to conditions of a licence, etc.) can result in a range of possible criminal sanctions: warning, formal caution, prosecution, but not a fixed penalty notice. These are described in the following table. The EA can also use full range of civil sanctions for offences which occurred after 6 April 2010 in England and 15 July 2010 in Wales. These are set out in a subsequent table.

Table 31. The criminal sanctions available for offences relevant to abstraction (source: EA, 2011⁵¹⁵)

Warnings	A warning is a written notification where the EA believes an offence has been committed. The notification can be either a warning letter; or a site warning that is normally issued on-site or otherwise as a result of a compliance visit to a permitted site or activity. It will be recorded and may, in the event of further non-compliance, influence subsequent choice of sanction.
Formal caution	A formal caution is the written acceptance by an offender that he has committed an offence and may only be used where a prosecution could properly have been brought. It differs from a formal warning, which is simply a record and warning about an offence that has been or may be committed. The formal caution is a formal recorded criminal sanction which will be produced in court if there is further offending. It differs from the imposition of a civil sanction as the circumstances which led to the offence have been considered to be appropriate for a prosecution and, indeed, a repetition of similar offending would be likely to lead to such a response. Formal cautions are intended to be a specific deterrent to an offender and are suitable for cases where, although a prosecution could be initiated, other factors mitigate against this. Where a formal caution is not accepted the EA will normally prosecute for the original offence.
Prosecution	The sanction of prosecution is available for all criminal offences by law and can result in imprisonment and fines. Where the EA decides that a criminal sanction is appropriate it will assess the case in accordance with the requirements of the Code for Crown Prosecutors before commencing a prosecution and determine whether there is sufficient evidence and be satisfied that the prosecution is in the public interest.

The Code for Crown Prosecutors requires the EA to apply for compensation and ancillary orders, such as anti-social behaviour orders and confiscation orders, in all appropriate cases. Ancillary orders that a court may make following a conviction that are possibly relevant to an offence related to abstraction include:

- disqualification of directors;
- confiscation of assets - Proceeds of Crime Act 2002;

⁵¹⁴ EA. Offence Response Options. June 2012.

⁵¹⁵ EA. Enforcement and sanctions guidance. January 2011.

- anti-social behaviour orders;
- forfeiture of equipment used to commit the offence;
- disqualification from driving;
- compensation; and
- vehicle seizure.

Table 32. Civil sanctions available to the EA (Source: EA, 2011 as above)

Fixed Monetary Penalties (FMPs)	These are fixed penalties most suitable for offences with minor or no direct environmental impact, such as paperwork and administration offences. They are most appropriate where advice and guidance has failed to secure the necessary improvements. Fixed Monetary Penalties are set at £300 for business and £100 for individuals, with discounts for early payment. They may be used for offences where a low-level monetary penalty is more likely to change the offender's behaviour and encourage future compliance for example because advice and guidance has failed. They can be issued for minor offences that need some kind of enforcement action but which, depending on the public interest factors, may not be serious enough to warrant a prosecution.
Variable Monetary Penalties (VMPs)	These are monetary penalties which can be imposed directly for more serious offences and are determined using a published methodology. VMPs may be used instead of criminal sanctions for offences where imposing a financial penalty may change offender behaviour and deter others and/or lead to faster resolution. A VMP may enable the recipient to offer a Third Party Undertaking to make restitution to adversely affected third parties, including local communities. VMPs will also be used to remove an identifiable financial gain or saving resulting from the non-compliance. VMPs may be used where there is evidence of negligence and mismanagement.
Compliance Notices	These require the offender to come back into compliance. They may be used in a case where the offender has previously been in compliance with a requirement, such as regularly submitting returns, but is currently not fulfilling their obligations. The notice should ensure that the offender takes action to stop the non-compliance, addresses the underlying causes and comes back into compliance. They may be used where previous advice or guidance to encourage compliance has not been followed and a formal notice has become necessary to ensure compliance. They can be combined with a Variable Monetary Penalty and a Restoration Notice.
Restoration Notices	These require the offender to take steps to put right any damage caused as a result of the non-compliance and address any harm. These notices can be used where damage has been caused to the environment and the action and work needed to address the damage can be identified and carried out by the offender. They can be combined with a Variable Monetary Penalty and a Compliance Notice.
Stop Notices	A Stop Notice can be used: <ul style="list-style-type: none"> • to immediately stop an activity that is causing, or presents a significant risk of causing, serious harm to human health or the environment and where a specified offence is being, or is likely to be, committed; • to immediately stop an activity that is likely to be carried on that will cause, or will present a significant risk of causing, serious harm to human health or the environment, and the activity likely to be carried on involves or will be likely to involve a specified offence being committed.
Enforcement Undertakings	These are legally binding voluntary agreements offered by those who may have committed an offence and accepted by the EA. An Enforcement Undertaking can be accepted from a person where there are reasonable grounds to suspect that a specified offence has been committed. They will only be accepted where the EA has sufficient confidence that its terms will be delivered. It is unlikely to accept an Enforcement Undertaking where it has already decided that a prosecution is required or when it is already in discussion as to the level of a Variable Monetary Penalty. The terms of the Enforcement Undertaking will normally contain an element of restoration as well as steps to ensure future compliance such as long-term

	investment in environmental management systems. Enforcement Undertakings should encourage legitimate business operators to make amends, come into compliance and prevent recurrence.
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Capacity

On 31 March 2012 the EA had 11,471 permanent employees and the annual budget in 2011-2012 was over £1.1 billion⁵¹⁶. However, as noted below, it is not possible to identify exactly the resources directed at enforcement of abstraction licences. The EA has teams based in offices across England and Wales.

The EA spends over £100 million a year on managing water resources⁵¹⁷. The entire cost of this is funded by the licence fees for abstraction licenses – this is part of the EA's requirement in law for cost recovery. Licence holders do not pay for inspection activity itself, but the activity is funded indirectly by the budget generated from the licence applications. Currently the EA get £136m/year from abstraction licences and its corporate plan states that this will remain stable for the next few years.

Overall, the costs to the EA for water resource management include a wide range of activities, including:

- Collecting and analysing data from the network of 14,300 river, rainfall and groundwater monitoring stations;
- Improving, developing and maintaining the monitoring network;
- Issuing and updating licences;
- Drawing up Catchment Abstraction Management Strategies (CAMS);
- Augmenting river flow;
- Technical assessments, including modelling, associated with the above activities.
- Inspection and enforcement activity.

The EA manages water resources through integrated operational teams located in its local offices. The teams include the following:

- Hydrometric teams, who provide the data on river flows, rainfall, and groundwater levels.
- Hydrology and hydrogeology teams, who analyse hydrometric data and advise on the extent to which a new abstraction would alter patterns of flow.
- Fisheries and ecological specialists, who advise on the potential effect of a new abstraction on the water environment, and whether mitigation or adaptation might be required.
- Compliance monitoring teams, who inspect abstractions, including verification of self-monitoring by the abstraction licence holders.
- Water Resources Regulatory teams, who determine applications for new/changed licences.

⁵¹⁶ EA. Corporate Plan 2011-15 and EA. Annual Report and Accounts 2011-2012.

⁵¹⁷ National Audit Office. Efficiency in water resource management. 2005.

- Other teams, such as legal and finance staff, etc.

The National Audit Office in 2005 stated that the EA ‘does not have detailed central records of how many people it employs on these tasks’. This is still the case. The NAO estimated that the total available front line staff for water resources work was 1,007. The overwhelming majority of these were in the operational teams concerned with licensing and control.

It is important to note that enforcement staff are in highly specialised teams with detailed specialisms necessary to understand the hydrology of abstractions and their impacts on the environment. Thus the quality of staff is high. Furthermore, the EA maintains a strong continuing training programme.

Effectiveness of inspection

EA use of sanctions

Between 1998-99 and 2003-04, there were 104 prosecutions for non-compliance with abstraction and impounding licences⁵¹⁸. A further 114 formal cautions were issued, with warning letters sent in another 1,285 cases. From April 2010 to the present, there have been 10 cases – all either court cases or cautions. Data on the use of sanctions is published by the EA. On abstraction there is as yet no published use of civil sanctions. For example, in the first year of use of civil sanctions (2011-2012) businesses entered into 81 enforcement undertakings. However, the majority of these were for packaging waste offences. In total, businesses agreed to pay over £850,000 to environmental charities or projects as a result of this new approach (source: EA website⁵¹⁹).

Cross-compliance inspection results

The latest published data on cross compliance inspections is for 2011 (source: RPA website⁵²⁰). With regard to inspection results for GAEC 18, the most common failures found during the 2011 inspection regime were because the farmer had failed to adhere to the conditions of their water abstraction licence and also failure to submit a record of the volumes of water abstracted under the licence or failure to submit annual abstraction returns. The following table provides details of the number of compliance failures for GAEC 18 and for all SMR/GAEC conditions under cross compliance together with the percentage of payment reductions applied. It shows that some farmers are found to not comply with their abstraction licences and these normally result in low reductions in payments. However, such failures are less frequent than other cross compliance requirements.

Table 33. The number of compliance failures for GAEC 18 and for all SMR/GAEC conditions under cross compliance together with the percentage of payment reductions applied (Source: RPA).

⁵¹⁸ National Audit Office. Efficiency in water resource management. 2005.

⁵¹⁹ <http://www.environment-agency.gov.uk/business/regulation/116844.aspx>

⁵²⁰ <http://rpa.defra.gov.uk/crosscompliance/inspectionstatistics>

GAEC	1% Cross Compliance Inspections (No. failed)	Standalone Inspections (No. failed)	Reduction Applied								Total failures found
			WL	1%	2%	3%	4%	5%	>5% to 15%	>15%	
GAEC 18	4	33	23	12	0	1	0	0	0	1	37
Total for all SMR and GAEC	396	1650	170	555	0	746	9	366	132	68	2046

It is extremely difficult to determine the effectiveness of inspection⁵²¹. Indeed, the EA has been undertaking work to try to understand this issue more generally across its enforcement action. With regard to abstraction, the issue is further complicated by the radical changes to licensing resulting from the Water Act 2003 and the EA's Restoring Sustainable Abstraction programme – which has resulted in reductions in water abstracted and a better targeted risk-based approach to licensing and enforcement. Which elements deliver results is not possible to determine. Furthermore, the EA is improving its understanding of the links between abstraction, flows and the objectives of the Water Framework Directive and how far enforcement action contributes to this. This is an on-going process.

Other

In 2009 the EA commissioned a study to examine how well it could understand the effectiveness of its regulatory activity⁵²². This included interviews with 11 operators of abstraction licences. The following table presents their responses to the questions posed on the regulatory regime and its effectiveness. Overall, the responses indicate that the regime is effective, including views on the expertise of the regulatory, its targeting of inspections and role of sanctions. Only in considering the issue of potential falsification of records and their detection do the responses appear negative.

⁵²¹ National Audit Office. Effective inspection and enforcement: implementing the Hampton vision in the Environment Agency. 2008.

⁵²² EA. Investigating the effectiveness of compliance assessment activities. Science Report: SC040042/SR. 2005.

Table 34. Responses to a survey undertaken for the EA in 2009 examining the views of operators to compliance and enforcement of regulations for abstraction licences.

Question	Abstraction licence (11)
Are you aware of the Regulations?	All 'yes'
Do you have access to a copy of or know where to source a copy of the Regulation?	10 'yes', 1 'no'
Do you know if there is any guidance available to support the Regulation?	'Most' aware
Do you find the language of the Regulation easy to understand?	Four 'No'
Are you clear what aspect of the Regulation applies to your company?	10 'yes', 1 'no'
Do you understand what the Regulation is trying to do (its objective)?	2 'No'
Do you consider complying with the Regulation to be overly burdensome on company time?	Most 'no'
Do you think that breaking the rules would reduce the financial burden of the Regulation? (Consider cost and benefit of violation but out with enforcement costs)	8 'no'
Do you think that breaking the rules would reduce the burden on company time? (Consider cost and benefit of violation but out with enforcement costs)	10 'no'
Do you believe that complying with the regulations has benefits?	All 'yes'
Do you believe that non-compliance with the regulation will lead to resource efficiency, economic and competitive disadvantages?	8 'no'
Do you believe that complying with the Regulations enhances the Company's reputation?	9 'yes'
Do you think that complying with the rules could create any other social advantages?	8 'yes'
Do you believe the regulation is being implemented correctly?	7 'yes', 3 'no'
Do you regard the implementation rules of the regulation to be practical?	9 'yes'
Does your company have a good compliance record?	All 'yes'
Do you generally have respect for authority?	10 'yes' (1 no answer)
Do you respect the judgement of those responsible within the EA for enforcement of regulation?	8 'yes', 2 'no'
Do you believe there is a strong likelihood of records relating to the Regulation being inspected?	Strong 'yes'
Do you see a records inspection as a significant risk to your company?	10 'yes', 1 no answer
Do you believe there is a strong likelihood of a site inspection relating to the Regulation?	Strong 'yes'
Do you see a site inspection as a significant risk to your company?	All 'no'
Is all of your relevant data checked during a records inspection?	10 'yes', 1 'no'
Do the records provide sufficient information to demonstrate non-compliance with the Regulation?	2 'yes', 5 'no', 4 no answer

Would it be easy for inspectors to detect violations?	6 'yes', 2 'no', 3 no answer
Do you think it would be difficult to falsify records?	Trend to 'no'
Do you think there is a strong likelihood of falsified records being detected during a records inspection?	7 'no'
Is everything of relevance on-site checked in a site inspection?	Tend to 'yes'
Do you think site inspections provide sufficient information to demonstrate compliance with the Regulation?	Generally 'yes', but 4 no answer
Do you think that organisations that have a history of breaching the Regulation are inspected more frequently than those who comply with the rules?	Over half 'yes'
Do you think that targeted inspections find more offenders than random inspections?	8 'yes', 3 'no'
Do you think that the Environment Agency is capable of identifying the likeliest offenders?	6 'yes', 3 'no answer
Once a violation has been detected, do you think the EA is likely to instigate enforcement action?	8 'yes'
Do you think it is easy for the Environment Agency to prove a violation has occurred?	8 'yes'
Do you think that the risk of a sanction in a court of law is high?	5 'yes'
Do you know what sanction you would face in the event of a violation of this Regulation?	8 'no'
Do you regard the sanctions of the Regulation as severe?	6 no answer
Would you say that sanctions are imposed quickly?	No trend
Would the enforcement of a sanction have any disadvantages for your company as a whole?	8 'yes'
Does the enforcement of a sanction have any disadvantages for the individual responsible for the breach?	7 'yes'
Would it be a concern if you were sanctioned and this information was made public?	All 'yes'

11.3 UK landspreading of fertilisers and farm infrastructure

Introduction

This case study focuses on landspreading and also farm infrastructure in relation to implementing the Nitrates Directive in England. However, there is also some additional best-practice information from Scotland which has adopted a more institutionally integrated approach to farm inspections.

The UK has not had a good track record in the implementation of the Nitrates Directive and has been found to be non-compliant by the ECJ, requiring additional implementation. For example, in 2002 about 55% of England's land surface was designated as an NVZ. In 2009 this was extended to 68%. However, this has been on the issue of national interpretation of the requirements of the Directive.

The focus for water pollution has historically been on point sources rather than diffuse. However, the analysis required under the Water Framework Directive of pressures affecting water status has shown that 30% of water bodies (1,726 water bodies) are failing to achieve Good Ecological Status because of diffuse pollution⁵²³, so that more effective measures and enforcement are needed.

Legislative framework

The regulations that implement the Nitrates Directive in England are the Nitrate Pollution Prevention Regulations 2008. These came into force on 1 January 2009. New regulations reflecting the revised NVZs will replace them from around mid-May 2013 following the NVZ review of 2012 and appeals process. If a farmer will be in an NVZ for the first time from March 2013, they will need to comply with the same rules as those in existing NVZs, except that they will have until autumn 2015 to comply with the closed periods and to put slurry storage in place

Statutory Instrument 2009/3365, SI 2010/2941 and SI 2012/66 set out the cross compliance requirements. On 1 January 2012 a new cross compliance regulation to protect water from pollution by fertilisers and manures was introduced (GAEC19).

The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 (amended 1997) provide the EA with powers to require farmers to improve the facilities for storing these substances where there was a significant risk of pollution. These regulations were remade in April 2010.

Institutional framework

The Environment Agency (EA) is the public authority responsible for inspection on farms of requirements relating to landspreading and farm infrastructure to implement the Nitrates Directive. However, given the link to cross-compliance, the Rural Payments Agency is also

⁵²³ NAO. Tackling diffuse water pollution in England. 2010.

involved with regard to follow-up action through making changes to single farm payments in the light of cases of non-compliance.

The EA is the competent authority for implementing the Water Framework Directive (WFD) and for many areas of pollution control. It has, therefore, its enforcement role for the Nitrates Directive set within the context of the wider work areas of river basin management, including assessment of the pressures (including diffuse pollution) on water bodies.

Scotland has adopted 'Scotland's Environment and Rural Services' (SEARS) as a partnership between relevant public bodies aiming to improve the experience among land managers by working together to provide an efficient and effective authorisation and inspection service. Scotland is not the focus of this case, but it is a good practice example and is described in the following box.

Scotland's Environment and Rural Services (SEARS)⁵²⁴

The eight public bodies which are partners of SEARS are:

- Animal Health and Veterinary Laboratories Agency (AHVLA)
- Cairngorms National Park Authority (CNPA)
- Crofters Commission
- Forestry Commission Scotland (FCS)
- Loch Lomond and The Trossachs National Park Authority (LLTNPA)
- Scottish Environment Protection Agency (SEPA)
- Scottish Government Rural Payments and Inspections Directorate (SGRPID)
- Scottish Natural Heritage (SNH)

For the purposes of this case study, these partners involve those directly involved in inspection for environmental protection on farms (including SEPA, SNH and the rural payments authority).

SEARS was launched in 2008 and its aim is a one stop shop for farmers, including ensuring that on farm inspections by one authority address the concerns of other authorities – thus minimising the number of inspections. Thus the number of inspections was reduced by 3,016 in 2010-11, bringing the total reduction to 8,012 in the three years since the launch of SEARS in 2008. This represents a total reduction of about one sixth of the inspection burden. The responsibility for enforcement action still rests with the designated competent authority – so when an inspector from a partner authority identifies a case of non-compliance, this is referred to the organisation responsible, for them to take follow-up action.

The implementation of the WFD in Scotland resulted in major regulatory changes. Three levels of regulatory control were introduced:

⁵²⁴ Scottish Government. SEARS Annual Review 2010-11. September 2012.

- General Binding Rules involving predefined statutory rules which must be adhered to for the lowest risk activities. No prior authorisation is required;
- Registrations for small 'low risk' activities which may lead to cumulative impacts. These are subject to a quick prior authorisation process resulting in the issue of a very simple form of authorisation; and,
- Licenses for the bigger and highest risk activities. These involve a prior authorisation process with a longer determination time involving consultation with the public and interest parties, site-specific risk assessment and in many cases site-specific conditions.

The inspection regime is risk-based focusing on the levels of risk identified in the authorisation process.

In order to achieve this SEARs partners undertake joint training. This not only includes staff from organisations which might be expected to include diffuse pollution, for example, in their work areas. Thus training of 156 FCS staff has included training on diffuse pollution regulations. SGRPID staff were trained in undertaking SEPA's Controlled Activities Regulation (CAR) and General Binding Rules (GBR) Inspections during land-based inspections Thus a wide range of inspection staff from different organisations can inspect for landspreading and farm infrastructure issues.

SEARS also provides a single focus for advice to farmers. This is not only delivered through joint publicity and information, but SEARS is developing 'rural hubs' as offices on the partner organisations which can provide advice across all rural issues.

SEARS has other benefits. In research conducted early in the operation of SEARS, rural land managers consistently estimated that they spent around 1.83 hours a week on average completing paperwork for SEARS organisations. By 2010, respondents reported an estimated 11.4% reduction in the time they spent on paperwork generated by the SEARS partners. That estimate is the annual equivalent of 200,000 hours freed. Stakeholder surveys have also consistently expressed very high levels of satisfaction with SEARS. In 2010 the Scottish Government commissioned a study⁵²⁵ using the Standard Cost Model (used to assess regulatory burdens within the EU) to determine the burden changes within SEARS. Unfortunately, the research concluded that 'challenging to measure the range of benefits arising from SEARS as they are a mixture of collaboration, efficiency, perception and reduced burden benefits which the SCM methodology was unable to measure. While some of these benefits could potentially be measured using a full cost-benefit analysis, there are concerns that effort of such an exercise might be disproportionate to the benefits.'

The table on the following page gives the results on the number of inspections and breaches of SMRs from 2008-2011. It shows difference between the SMRs. However, for NVZs it demonstrates that while the number of inspections has significantly declined, the number of breaches identified has increased.

⁵²⁵ Scottish Government. Using the Standard Cost Model to Measure Administrative Burden: A Pilot Using Scotland's Environmental and Rural Services (SEARS) as a Case Study. 2010.

Table 35. Number of inspections and SMR breaches for three SMRs in Scotland 2008-2011.

	2008			2009			2010			2011		
	No of envt SMR breaches	No of Inspections	Breach as % insp.	No of envt SMR breaches	No of Inspections	Breach as % insp.	No of envt SMR breaches	No of Inspections	Breach as % insp.	No of envt SMR breaches	No of Inspections	Breach as % insp.
SMR2 - Protection of groundwater against pollution	37	769	4.8%	13	505	2.6%	8	362	2.2%	5	132	3.8%
SMR3 - The use of sewage sludge in agriculture	0	6	0.0%	0	71	0.0%	1	5	20.0%	0	4	0.0%
SMR4 - Protection of water in NVZs	4	134	3.0%	2	136	1.5%	5	78	6.4%	17	90	18.9%

Inspection planning

The EA uses risk-based inspection planning (see enforcement policy information in the section on abstraction control above) to guide much of its enforcement work (as does the RPA). The section below on effectiveness shows that the EA does have issues linking enforcement work to particular diffuse pollution problems (which would be needed for some risk assessment criteria). However, it does have full responsibility for water management, making it best placed for such assessment.

However, the following section shows that the number of inspections being undertaken by the EA has reduced to the minimum allowed for under EU law, i.e. to 1%. This suggests that the impact of budget pressure and to reduce burdens on agriculture might be driving inspection efforts.

Inspections

At the start of the inspection, the inspector will explain what is involved and provide a clear explanation of why they are there and explain how they will carry out the inspection and how long it will take. On leaving the farm the inspector will explain what they found. They may take as evidence, where required, photographs and/or other evidence to support both compliance and non-compliance.

If a farm is in a Nitrate Vulnerable Zone the inspector will inspect:

- storage structures;
- field activities; and
- temporary field solid manure storage.

If the farm is not in a Nitrate Vulnerable Zone, the inspector will check field activities to check compliance with the No spread zones (GAEC 19). The inspector examines the farmer's records - electronic and/or paper. Within an NVZ, records inspected include (RPA, 2012):

- the size of the farm;
- projected livestock numbers and nitrogen production and loading calculations;
- actual livestock numbers and manure production and slurry storage calculations;
- organic manure spreading risk map;
- locations of temporary field manure storage sites and dates used;
- nitrogen spreading four stage plan; and
- field records recording when and where nitrogen fertiliser is spread, and if necessary the nitrogen max calculation.
- records of imports/exports of livestock manures.

The 'control report form' is used by inspectors to record the findings of the inspection. A copy of the form is given to the farmer. For each SMR/GAEC area which is not compliant the inspector will complete a form. This records the assessment indicators, which are: the intent

(whether the non-compliance was due to negligence or was committed intentionally), the extent of the effect of the breach (whether it is limited to the farm or has an “off-farm” effect), the severity of the breach, whether the breach is permanent or rectifiable and if this breach has occurred previously. This is used to determine whether or not payments should be reduced. Where non-compliance is found, the seriousness of the breach will be assessed by the inspector with regard to the criteria set out in EU Regulations, i.e. severity, permanence and repetition. Inspectors are also required to assess whether the breach occurred as a result of the farmer’s negligence or was caused intentionally. To help farmers through the process of inspections and explain is looked for during an inspection, RPA has published extensive Cross Compliance Verifiable Standards for England that its inspectors use⁵²⁶.

The number of inspections undertaken by the EA has changed. Under cross-compliance rules, in England and Wales the 1% inspection requirement of farms receiving single farm payments means that 1,100 farms should be inspected as a minimum. In 2009 the Agency carried out almost 3,620 inspections of farms, of which 2,725 assessed compliance with the Nitrates Directive. Therefore, the EA inspected over 1,600 more farms than required under cross-compliance rules. However, since 2010 the EA has reduced the number of inspections undertaken to 1,100 farms, i.e. the minimum required under cross-compliance.

The following table provides information on the number of inspections undertaken on farms by different government bodies for different reasons. Note that this is for all purposes (hence the numbers for the EA are larger, including inspections for farm IED installations, for example), but shows that while the EA inspections are a significant number, farmers receive more visits for other purposes. The NAO concluded that the total cost of all regulation amounted to about 10% of an average farm’s net profit.

Table 36. Inspections and other visits undertaken on farms (source: NAO 2012⁵²⁷).

Institution	Planned inspection	Investigate complaint	Investigate potential disease outbreak	Disease surveillance	Provide advice	Total
Animal Health and Veterinary Laboratories Agency	7,640	630	3,830	57,540	0	69,640
Local authorities (trading standards)	10,040	3,280	0	0	-	13,320
Rural Payments Agency	11,340	240	0	0	0	11,580
Natural England	860	80	0	0	9,960	10,900
Environment Agency	4,490	750	0	0	-	5,240
Food and	0	0	0	0	2,500	2,500

⁵²⁶ RPA. Guidance For Cross Compliance Inspectors (2012). Guidelines for classifying the seriousness of cross compliance failures. Pp 1-5.

⁵²⁷ NAO. Streamlining farm oversight. 2012. Pp. 22.

Environment Research Agency						
Health and Safety Executive	500	70	0	0	-	570
Veterinary Medicines Directorate	250	0	0	0	0	250
Total	35,120	5,050	3,830	57,540	12,460	114,000

The NAO 2010 examination of the EA's inspection system⁵²⁸ concluded that it 'does not have a single integrated system that accurately records all its regulatory inspection activities, and is unable to produce accurate records of these' as the records are incomplete and dispersed.

An improved risk-based approach to farm inspection was introduced in 2008. Risk factors used to select farms include location, emissions levels, pollution potential, and operator performance.

The EA does not have full access to Defra's data on individual farms. According to the NAO, Defra explains this as a confidentiality issue, but the EA stated that its staff can spend up to 45 minutes during each inspection collecting data that Defra already holds. The NAO concluded that this 'is a waste of Agency resources and a source of annoyance to farmers who assume that this information is already shared'. The NAO also noted that there are data compatibility issues between the EA and Natural England.

Raising awareness

The RPA works with farmers on raising awareness on cross compliance generally. The EA works with individual farmers during visits. It has also developed the England Catchment Sensitive Farming Delivery Initiative (with Natural England), which seeks to improve farmers' environmental performance in a proactive way. This has made some improvements, but much awareness raising remains to be done. Defra also oversees a £2.1 billion Environmental Stewardship Initiative. Over 70% of agreements under the Initiative include options that can improve water quality, but very few have this as a primary goal. However, it does provide an additional platform for awareness raising.

Whole farm approach

Defra, in partnership with the Environment Agency, The Rural Payments Agency and Natural England, established the 'Whole Farm Approach' to streamline reporting and support inspections. It is an electronic system which enables farmers to log in and receive tailored advice about their farms. It also provides information before inspection takes place to the relevant authorities so that inspections can be better targeted and more efficient.

⁵²⁸ NAO. Tackling diffuse water pollution in England. 2010.

The online Cross Compliance Self-Assessment Tool

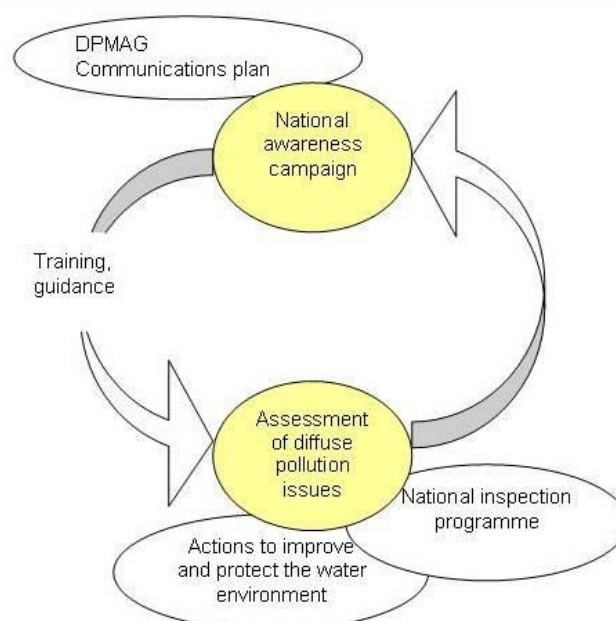
The online Cross Compliance Self-Assessment Tool (CCSAT) enables farmers to quickly and easily assess their current farming practices against both the GAECs and the SMRs. The CCSAT provides an action plan, a checklist, tailored advice and guidance and further information. The CCSAT requires a login and initial asks a series of 'shaping questions' to tailor the cross compliance standards specifically to the farm. It also retrieves all saved data. CCSAT develops an action plan and checklist for the farm and highlights areas to think about improving practice on the farm. This tool allows all farmers to obtain tailored advice for their farm which is simply not possible to do in person given the number of inspectors and the number of farms.

Scotland

Building on the SEARS approach in Scotland, a national campaign has been developed on diffuse pollution, integration inspection into a coherent management framework. This is described in the following box.

Box: National Campaign in Scotland on diffuse pollution⁵²⁹

In Scotland SEPA has developed a national campaign to mitigate diffuse pollution in Scotland and its primary focus is on compliance with General Binding Rules for diffuse pollution control. The national campaign is based on awareness raising and site inspections by SEARS partners to check statutory requirements of practice are being adopted. The campaign requires a detailed assessment of stakeholders to help target information and enforcement. The national inspection programme relies on SEPA providing training for SEARS partners. It is overseen by the Diffuse Pollution Management Advisory Group. The following figure from SEPA illustrates the campaign and shows the role of inspection in delivering objectives as well as informing the awareness raising activities in an iterative manner.



⁵²⁹ SEPA. Rural diffuse pollution plan for Scotland.

Follow-up: Sanctions

In addition to farms losing single farm payments for non-compliance with cross-compliance, the EA has a number of other sanctions it can use for enforcement action, including anti-pollution works notices and direct prosecution for pollution. The NAO surveyed EA staff and reported that 74% per cent of operational staff and 80% of managerial staff felt that the EA should take more enforcement action against those causing diffuse pollution⁵³⁰. Thus the NAO concluded that the sanctions do not 'in their current form appear very effective at tackling diffuse pollution'.

For example, the Water Resources Act 1991 gives the EA power to prosecute those knowingly polluting water bodies. However, it has proved difficult to put together the evidence for prosecution for diffuse pollution incidents compared to point source pollution.

The NAO reported that anti-pollution works notices can be issued to prevent, remedy or prohibit any activities which have led, or could lead to, water pollution (such as inadequate storage of manure, silage and pesticides). The EA may also carry out work it feels necessary to mitigate any threat and to recover the costs incurred from the person or business responsible using these notices. Such works notices have been identified in the River Basin Management Plans as an important tool for tackling this type of pollution in the future.

On average the Agency has served around 11 notices annually since 2004-05 and some Regions have issued only one notice. NAO reports that EA staff view works notices as too complex, require a disproportionate level of evidence to support the notice and have a lack of management and legal support. The EA is, therefore, streamlining their use.

Non-compliance

The following table provides the 2011 results for cross compliance inspections with SMR4 and comparison with the total number of failures for all cross compliance requirements. Note that GAEC19 was introduced in 2012, so is not part of the compliance statistics. It can be seen that there are compliance failures for the SMR, although a small part of overall cross-compliance failures. The following table gives the reasons for failures. Most are administrative (record keeping), while a small number relate either to landspreading issues or farm infrastructure.

⁵³⁰ NAO. Tackling diffuse water pollution in England. 2010.

Table 37. 2011 results for cross compliance inspections with SMR4 and comparison with the total number of failures for all cross compliance requirements⁵³¹.

SMR/GAEC	1% Cross Compliance Inspections (No. failed)	CCA Standalone Inspections (No. failed)	Reduction Applied								Total failures found
			WL	1%	2%	3%	4%	5%	>5% through to 15%	>15%	
SMR4	66	6	0	40	0	12	0	20	0	0	72
Total	396	1650	170	555	0	746	9	366	132	68	2046

Table 38. Reasons for farmers' failure to comply with the Nitrates Regulations in 2010 (source: RPA website as above).

Reason	Number not complying
Insufficient records	43
Nitrogen in excess of crop requirement	13
Fertiliser applied inappropriately	5
Excess of organic manure field limit	3
Whole farm nitrogen limit exceeded	3
Insufficient manure storage for closed period	1
Fertiliser applied in closed period	1
Total	69

Capacity

The following table provides data from the 2012 NAO report on the staff effort required to undertake farm visits from three institutions. Note that the EA visits include visits beyond the scope of this study (e.g. for IED compliance checking). It can be seen that the staff costs per hour for the EA and RPA are the same, but lower than the AHVLA. However, the latter has fewer full time equivalent (FTE) staff and, therefore, undertakes far more visits per staff member.

⁵³¹

Source:

RPA

website:

<http://rpa.defra.gov.uk/rpa/index.nsf/UIDMenu/9B27CED347D543A58025721B003EC086?Opendocument>

Table 39. Inspection numbers and costs for farm visits by three UK authorities (source: NAO)

Institution	Number of farm visits	Number of FTE staff	Average number of visits per FTE staff	Hourly cost of front-line staff (£)
Environment Agency	5,238	71.4	73	19
Rural Payments Agency	11,574	213.0	54	19
Animal Health and Veterinary Laboratories Agency	8,261	45.2	183	29

NAO 2010 concluded that the annual costs to the EA of employing and training staff to undertake farm inspections for the Nitrates Directive were estimated by Defra at between £1.2 million and £1.9 million (note these can cover more than just inspections for the Nitrates Directive). The average inspection visit is estimated at 15 hours.

Annually the EA spends over £140 million on its water quality work (diffuse pollution work does not have a separate budget line but it is estimated at about £8 million). The Agency planned to spend an additional £32.3 million, on top of its existing expenditure on water quality, but much will go to point source issues. Similarly, the NAO 2010 concluded that approximately 350 of its 1,300 Environment Officers undertake some work on diffuse pollution. All of this activity is funded through government grant in aid – it is not possible to cost-recover it like many other areas of the EA’s regulatory/enforcement work.

Effectiveness of inspection

The NAO 2010 concluded that while there is evidence of reduction in nitrate levels entering surface waters ‘there is currently no evidence that the Nitrates Directive, or the Agency’s associated regulatory inspection activity, has contributed to this’, not least due to the ‘long lead time between the taking of corrective action and its impact’. Indeed the EA concluded to the NAO that the potential to tackle nitrate pollution through regulations is limited. For example, in 2008, only 3 per cent (69) of the 2,300 farms inspected under the Nitrates Directive in 2008 failed to meet their obligations (a breakdown is given in the table below). Note of the 69 cases of non-compliance, 47 had single farm payments reduced by between 1 and 3 per cent under cross compliance rules. The EA gave the following reasons for low levels of compliance failures:

- The limited scope of the Nitrates Regulations.
- One-off inspections do not necessarily provide an indication of typical farming practice.
- The preference of the EA for taking a more advisory approach to issues it considers to be minor, in line with the Government’s policy for better regulation.

The NAO in 2012 concluded that the ‘relationship between the frequency of farm visits, levels of compliance and mitigating risk is complex’. It was not able to provide firm conclusions on their effectiveness. It noted that bodies such as the EA and RPA had ‘not systematically analysed or modelled the relationship between levels of compliance and number and frequency of farm visits’. However, the EA has undertaken some thinking, so has reduced inspections by about half since 2007, while compliance levels over this period rose from 82% to 87%.

NAO in 2012 found that Defra had not collected the data on inspections and analysed these for the different bodies involved, not systematically analysed rates of non-compliance. This means that the data through which improved co-ordination of inspection and reduced costs to farms are not robust enough. Thus the NAO found that 83% of farmers it surveyed regularly have to provide the same information to more than one regulator.

The NAO in 2010 concluded that the EA’s ‘annual expenditure of £8 million has had little impact in reducing diffuse pollution and therefore in mitigating the environmental impacts and financial costs of poor water quality in England. Accordingly it concluded that the Agency’s work to date has not proved value for money’. It considers that the reasons for this are:

- the EA has lacked sufficient information on the causes of diffuse pollution and on why some water bodies are failing quality standards, to target its resources effectively;
- little progress has been made in persuading those causing most diffuse pollution to acknowledge their responsibility, undermining the effectiveness of the Agency’s voluntary initiatives to change behaviours;
- it has limited evidence of the effectiveness of its inspection activity; and
- the EA has been slow to recognise the ineffectiveness of some of the existing sanctions and regulations to tackle diffuse pollution.

In order to assess compliance with the general binding rules (GBRs) adopted in Scotland as part of its approach to implementing the WFD, catchment walks are undertaken. This involves staff from SEPA staff and Scottish Water staff literally walking priority catchments where water bodies are at most risk, recording problems including instances of non-compliance with the seven GBRs. This ‘walking’ began in March 2010 and was 95% completed within 18 months⁵³². The purpose of the walking was at one level to identify non-compliance, but this compliment the evidence base for action and provided evidence to show that problems exist in communication with rural land managers.

Overall 5,835km were walked and 5,169 instances of non-compliance with GBR’s were found. The results are set out in the following table. 75% of these cases were due to livestock farming and 22% as a result of cultivation within 2m of a river bank (McCamphill, 2013). Where non-compliance is found there is a programme of return visits. Return visits have been undertaken in four catchments. Of the 328 return visits, 241 farms had started or

⁵³² McCamphill, C. 2013. Scottish approach to addressing agriculture pressures for the WFD. Presentation to European Commission Workshop on Linking Water Management and WFD Objectives. Brussels. 2013.

completed work to take them into compliance, but for 87 there was no change (McCamphill, 2013). The policy of SEPA is to allow for a 3rd return visit (all three visits to take place over two years) and if there is still no compliance, farmers can be taken to court. This demonstrates that the compliance assessment and follow-up regime has significant effectiveness.

Table 40. Cases of non-compliance with GBRs in priority catchments⁵³³

Catchment	Cases of non-compliance for each GBR							Total	Distance Walked (km)
	18	19	20	21	22	23	24		
South Esk	10	254	234	6	0	0	0	504	400
Ugie	3	189	38	2	0	0	1	233	278
Buchan	3	238	4	3	0	1	0	249	324
Deveron	11	270	63	2	0	0	0	346	846
Dee	4	261	20	2	0	0	0	287	457
Galloway	2	498	52	35	0	0	0	587	629
Stewartry	1	382	16	5	0	0	0	404	286
Tay	2	542	381	33	0	0	0	958	1153
Eye	1	263	18	4	0	0	0	286	130
Ayr	32	383	35	0	0	0	0	450	350
Doon	3	70	11	1	0	0	0	85	140
N. Ayrshire	1	59	5	0	0	1	0	66	65
Irvine	13	399	9	4	0	0	0	425	525
Garnock	4	263	18	4	0	0	0	289	252
TOTAL								5169	5835

⁵³³ GBRs relevant to diffuse pollution are 18 (storage and application of fertilisers), 19 (keeping of livestock), 20 (cultivation of land), 23 (application of pesticides) and 24 (operation of sheep dipping facilities).

11.4 UK Urban Waste Water Treatment

Introduction

This case study examines the control framework for urban waste water treatment in England and Wales.

Legislative framework

The Urban Waste Water Treatment (England and Wales) Regulations 1994 (SI 1994 No. 2841) transpose the requirements of the Urban Waste Water Treatment Directive (91/271/EEC) into UK legislation and adopt virtually the same wording as the Directive.

Statutory water and sewerage companies, which own and operate the public sewerage system and the treatment works have to meet the requirements of the Regulations. The Environment Agency requires the water companies to monitor their own discharges for compliance with the directive standards by collecting composite samples over 24-hour periods. The self-monitoring is done to specified standards and procedures and the EA audits the water companies' compliance with these procedures.

Institutional framework

The enforcement regulator for WWTPs in England and Wales is the Environment Agency. It is responsible for most aspects of water management, being the competent authority for implementing the Water Framework Directive. As noted above, the water companies self-monitor discharges and the EA audits these companies to check compliance.

The EA requires that samples of the discharges are taken to ensure that the consent requirements are met. If a discharge does not meet the requirements of the directive then it takes action to ensure that the water company makes improvements to bring it into compliance. The EA is also responsible for recommending to the government areas for designation as 'sensitive areas'. These designations are reviewed every four years.

Any discharge to controlled waters requires a discharge authorisation which sets out standards for parameters monitored in effluent. For intermittent discharges an authorisation may specify the volume of discharges to be made or may include the need to screen discharges to remove sewage litter. Discharge authorisations are referred to as 'Environmental Permits' in England and Wales.

The UK has approximately 9,000 sewage treatment plants in total⁵³⁴. About 2,000 of these serve populations and industries generating sufficient organic load to require secondary treatment under the UWWT directive. There are currently 589 Sensitive Areas.

⁵³⁴ Defra. Waste Water Treatment in the UK. 2012. Pp. 1-49. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69592/pb13811-waste-water-2012.pdf

Box: The role of private water companies in enforcement

In England and Wales most major WWTPs are operated by the private water companies and regulated by the Environment Agency. However, discharges are made to the sewage system which feeds these WWTPs. The water companies issue trade effluent consents to operators of trade premises authorising discharges into the public sewer. These contain conditions which are enforceable under the law. The 1991 Water Industry Act gives the water companies enforcement powers with regard to these discharges. Wessex Water, for example, currently has around 1,200 such consented discharges⁵³⁵. It has Commercial Wastewater Advisers and Operations Scientists which undertake proactive work with companies discharging to sewer, providing guidance and advice to help deliver compliance by those companies. Thus Wessex Water states that “As a result, we rarely take formal enforcement action”. It has an enforcement policy that states that it aims to be co-operative, consistent and targeted. Wessex Water has a policy of ‘escalating enforcement’. This involves the following ‘levels’:

- Level 1: initial visit and formal letter.
- Level 2: First formal meeting and production of an action plan.
- Level 3: Second formal meeting, formal samples.
- Level 4: Report to Directors on next steps.

Enforcement action moves to the next level if the regulated entity fails to comply following action in the previous level. The final level may result in prosecution, a caution, civil action for damages, etc. Note that at any stage the Water Company can see to recover the costs that it has incurred from the enforcement actions.

Strategic planning for compliance control

The EA has a strategic planning for WWTP inspections⁵³⁶. On-site inspections are at a minimum frequency of once every five years. The first inspections for larger discharges commenced in 2001 and first inspections for smaller discharges commenced in 2006. On-site inspections are pre-programmed so that they are evenly spread throughout the five year period.

These inspections can be programmed to take place alongside Operator Self-Monitoring (OSM) site inspections, but the EA states that OSM site inspection visits should be unannounced wherever possible⁵³⁷. Operator Monitoring Assessments (OMA) auditing is carried out once every five years at the same time as the OSM OMA audit. MCERTS (the EA’s Monitoring Certification Scheme) accredited laboratory audits are carried out by UKAS assessors on an annual basis.

⁵³⁵ Wessex Water (undated). Trade Effluent Enforcement.

⁵³⁶ EA. Assessing compliance of discharges permitted under the Urban Waste Water Treatment Directive. 2010.

⁵³⁷ EA. Guidance on undertaking an Operator Monitoring Assessment of discharges to water subject to Operator Self Monitoring and Urban Wastewater Treatment Directive self monitoring. 2012.

The EA uses compliance assessment plans to plan compliance assessment work. It allocates them using Operational Risk Appraisal (Opra) scores generated from the previous calendar year's data. Opra is a risk assessment tool, based on assessment of the size and operation of an activity, sensitivity of the environment, compliance history, etc⁵³⁸.

Inspections

The EA used to inspect and audit three aspects of UWWT self-monitoring by water companies:

- On-site inspection of the installation, collection and transportation of composite samples from automatic sampling equipment at agreed sewage works' sampling point(s).
- OMA audit of the UWWT quality management system.
- Audit of laboratories carrying out UWWTD analysis and checking that it has MCERTS accreditation for all UWWTD analysis.

However, the introduction of formal MCERTS accreditation means that the company laboratory is checked on an annual basis as part of this accreditation, so that further independent checks are no longer needed.

The self-monitoring requirements of water companies vary according to the size (risk) of the WWTP⁵³⁹, as outlined below. Note that if inspection finds that the number of determinand results provided is less than number required then the EA reports the discharge as non-compliant. The monitoring programme for each discharge must be recorded by the operator before the start of a calendar year and be available to the EA on request. Changes to the programme must also be recorded.

Population equivalent	Minimum annual number samples that must be collected at regular intervals during the year
2,000 to 9,999	12 samples during the first year. If the discharge complies in the first year then 4 samples in subsequent year are required. If, having complied with the provisions of the regulations in the first year; and one sample of the four fails, 12 samples in the year that follows are required. Note: Directive allows reduced sampling for all determinants
10,000 to 49,999	12 samples
50,000 or over	24 samples

EA environmental officers undertake the inspections. A site inspection takes approximately three and a half hours.

⁵³⁸ Full details of how Opra works is available here: <http://www.environment-agency.gov.uk/business/regulation/31827.aspx>

⁵³⁹ EA. Methodology for assessing compliance (MAC) for water discharge activities regulated under the Environmental Permitting Regulations 2010.

The following provides the steps required by each inspector for the site visit inspection (EA, 2010).

Step	Action
1	Use the UWWTD site inspection form and complete a Compliance Assessment Report (CAR) form as part of each on-site inspection. An example of a completed UWWTD site inspection form is included at the end of this document.
2	Provide a copy of the completed CAR form to the operator and consent holder as soon as possible after the on-site inspection.
3	Place the CAR form on the public register.
4	Ensure any issues identified which may impact on the UWWTD monitoring programme are made available for the UWWTD OMA Audit.

The water company is responsible for the quality management system / manual and this must include details of all procedures and record keeping relevant to the automatic sampling. The manual forms a training and reference document for the staff undertaking the setting up and deployment of the automatic samplers. OMA UWWTD audits are carried out once every five years at the same time as the annual OSM OMA⁵⁴⁰.

The following provides the steps required by each inspector for the OMA audit.

Step	Action
1	Use the OMA Guidance document to direct the OMA audit.
2	Consider any issues which impact on UWWTD self-monitoring that have been encountered in any preceding on-site inspections and use them to provide further focus to the OMA audit.
3	Arrange to meet water company representatives who have an appropriate understanding and responsibility for the UWWTD programme and its quality management system, and who also have access to documentation and records to ensure that the OMA audit can be carried out effectively and efficiently.
4	Use the OMA guidance document and score each relevant element and produce a summary sheet including any actions which arise from the audit.
5	The summary report document does not have to be completed at the time of the audit, a copy of the summary report must be sent to the water company and placed on the public register.

The EA considers a discharge to be non-compliant if the permit contains the UWWT Regulation series of conditions and these conditions are active from the statutory deadline (at the latest) and the water company does not provide the treatment level (for example

⁵⁴⁰ EA. Auditing of self-monitoring compliance information provided for the Urban Waste Water Treatment Directive. 2010 and EA. Guidance on undertaking an Operator Monitoring Assessment of discharges to water subject to Operator Self Monitoring and Urban Wastewater Treatment Directive self monitoring. 2012.

secondary or tertiary) as required by the regulations for the discharge size and type of receiving water for the whole agglomeration by the statutory deadline.

Following the inspection, any non compliance must be entered on to the EA's database. All breaches of permit conditions are classified by severity according to the table below, this categorisation links non-compliance to enforcement action.

Table 41. Categories of severity of non compliance with WWT requirements

Category	Description
Category 1	Permit condition non-compliance that could cause a Common Incident Classification Scheme Category (CICS) 1 incident OR cause an exceedence of a recognised Environmental Quality Standard (such as an EU Directive standard or existing River Quality Objective).
Category 2	Permit condition non-compliance that could cause a Category 2 incident OR cause significant but localised damage to a SSSI or other important aquatic wildlife habitat.
Category 3	Permit condition non-compliance that could cause a Category 3 incident OR cause minor impact on a fish population and/or habitat.
Category 4	Permit condition non-compliance that has no potential to cause environmental harm.

Follow-up: use of sanctions by the EA

There are different offences available and the range of criminal and civil sanctions for failure to achieve discharge consents is similar to those for abstraction. Therefore, the reader is referred to that case study for more details of the types of sanctions available.

Follow-up: investment decisions

The decisions for investment to upgrade WWTPs to ensure compliance with the Directive is discussed between the water companies and the economic regulator, Ofwat⁵⁴¹. Spending and price reviews are regularly undertaken, examining the investments needed for all water companies to meet their objectives. Environmental objectives include WWT, but also concern nature protection, leakage reduction, drinking water quality, etc. The link with consumer prices allows a determination of appropriate investment. Concerns over costs for upgrading have been one reason for historical non-compliance of the UK with the UWWTD. The following table shows the capital investments made since 1990 on improving WWT. Note that there is significant investment not driven by the Directive and the required investment has declined. Indeed, a major driver now is the Water Framework Directive.

⁵⁴¹ Defra. Waste Water Treatment in the UK. 2012.

Table 42. Capital investments made by water companies in England and Wales to improve treatment (UWWTD and other drivers).

	UWWTD (£m)	Other (£m)	Total (£m)
1990-2000	3,600	6,000	9,600
2000-2005	2,600	2,000	4,600
2005-2010	1,300	1,800	3,100
2010-2015	500	2,600	3,100

However, there is little effective link with enforcement activity by the EA. This is because the consent conditions for which compliance is assessed are those appropriate to the type of WWTP. If a WWTP is in a newly designated Sensitive Area it will need to upgrade to nutrient removal. However, its discharge consent will be amended only when this upgrade is made. In the section on effectiveness below, it will be seen that non-compliance is limited and it is strategic investment decisions rather than permit compliance which drive the level of UK compliance with the Directive.

Capacity

The overall capacity and funding of the EA is given in the section on abstraction. There are no separate figures on the staff allocation for enforcement of the UWWTD specifically. However, it can be seen that the frequency of inspections and number of WWTPs covered by the Directive (see above) represents a relatively small resource requirement compared to the EA's other water and environmental inspection activities.

Effectiveness of inspection

The levels of compliance of the major water companies' WWTPs are set out in the second table below. It shows that this has increased over time, so that average compliance is now over 99%. The table before that gives a breakdown of the types of compliance failure for Southern Water as an example. It can be seen that most relate to intermittent discharges. Whether this is due to the inspection system or not is difficult to determine.

Box: Changing compliance in Northern Ireland⁵⁴²

In Northern Ireland compliance for waste water discharges is determined on the 95th percentile of the permit condition standards. There are 232 WWTPs serving a population equivalent of 250 or more and in 2011 the compliance rate was 93%. For trade discharges, compliance has risen from 76% in 2001 to 91% in 2011. Private sewage compliance rates in 2011 were 78% (in 2010 it was 88%).

⁵⁴² Northern Ireland Environmental Statistics Report. January 2013. Pp. 42. <http://www.doeni.gov.uk/ni-environmental-statistics-report-2013.pdf>

Table 43. Example of non-compliance reported for Southern Water Services Ltd for 2009.

	No. of discharges on register during calendar year (in force).	No. of discharges assessed for compliance	No. of discharges confirmed failing in calendar year.
Sewage Treatment Works: Total Number	277	274	4
Look-Up Table	262	259	0
Upper Tier	134	132	0
Absolute Non-Sanitary	79	78	1
WSpIc Disinfection - self monitored	7	7	1
WSpIc UWWT - self monitored	140	139	2
Descriptive Consent Conditions (Other)	0	0	0
WSpIc Trade Discharges -Water Treatment Works	19	3	0
WSpIc Trade Discharges - Other (including trade effluent treatment facilities)	0	0	0
Intermittents	1469	35	35
Non-Numeric Consents (Descriptive)			
Sewage Treatment Works: Total Number	91	48	0
WSpIc Trade Discharges -Water Treatment Works	0	0	0
WSpIc Trade Discharges -Other (including trade effluent treatment facilities)	0	0	0
Total	1856		39

Table 44. Percentage of WWT units deemed to be in compliance 2000-2010 (Data: July 2011).

England and Wales region	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Anglian	77.3	96.36	93.6	93.8	94.8	91.8	97.5	99.4	100	98	98.7
Dwr Cymru	25	89.1	97.8	97.6	100	100	100	100	100	99.2	99.2
United Utilities	60	96.6	95.4	93.3	97.7	94.3	96.6	98	98.6	99.3	99.3
Northumbrian		66.67	97.2	86	92	96.1	95.5	95.7	98.6	98.5	100
Severn Trent	71.43	100	99	99	100	99.1	99.3	100	100	99.6	99.3
South West	100	76	68	78.1	90.3	84.8	94	90.6	91.8	95.9	98.8
Southern	100	85.11	77.8	96.4	87.3	96.7	97.2	99.3	99.3	98.6	98.6
Thames	100	10	98.6	98.7	98.7	98.4	98.8	100	99.4	100	100
Wessex		92.31	100	100	100	100	100	100	99.2	100	99.2
Yorkshire	100	98.46	98.3	99.1	100	97.8	96.6	99.3	100	98.7	100
Average for all Water Companies	79.22	81.06	92.6	94.2	96.1	95.9	97.6	98.2	98.7	98.8	99.2

Other evidence of effectiveness

In 2009 the EA commissioned a study⁵⁴³ to examine how well it could understand the effectiveness of its regulatory activity⁵⁴⁴. This included interviews with ten operators of water discharges (it is not clear how many concerned WWTPs). The following table presents their responses to the questions posed on the regulatory regime and its effectiveness. Overall, the responses indicate that the regime is effective, including views on the expertise of the regulatory, its targeting of inspections and role of sanctions.

Table 45. Responses to a survey undertaken for the EA in 2009 examining the views of operators to compliance and enforcement of regulations for water discharge consent.

Question	Water discharge consent (10)
Are you aware of the Regulations?	All 'yes'
Do you have access to a copy of or know where to source a copy of the Regulation?	All 'yes'
Do you know if there is any guidance available to support the Regulation?	Half aware
Do you find the language of the Regulation easy to understand?	Four 'No'
Are you clear what aspect of the Regulation applies to your company?	9 'yes', 1 'no'
Do you understand what the Regulation is trying to do (its objective)?	Most 'yes'
Do you consider complying with the Regulation to be overly burdensome on company time?	Most 'no'
Do you think that breaking the rules would reduce the financial burden of the Regulation? (Consider cost and benefit of violation but out with enforcement costs)	9 'no'
Do you think that breaking the rules would reduce the burden on company time? (Consider cost and benefit of violation but out with enforcement costs)	6 'no', 4 'yes'
Do you believe that complying with the regulations has benefits?	All 'yes'
Do you believe that non-compliance with the regulation will lead to resource efficiency, economic and competitive disadvantages?	5 'no'
Do you believe that complying with the Regulations enhances the Company's reputation?	10 'yes'
Do you think that complying with the rules could create any other social advantages?	7 'yes'
Do you believe the regulation is being implemented correctly?	All 'yes'
Do you regard the implementation rules of the regulation to be practical?	8 'yes'
Does your company have a good compliance record?	All 'yes'
Do you generally have respect for authority?	All 'yes'
Do you respect the judgement of those responsible within the EA for enforcement of regulation?	9 'yes'

⁵⁴³ EA. Investigating the effectiveness of compliance assessment activities. Science Report: SC040042/SR. 2005.

⁵⁴⁴ EA. Strategic overview of the effectiveness of regulations: method development. 2009.

Do you believe there is a strong likelihood of records relating to the Regulation being inspected?	Strong 'yes'
Do you see a records inspection as a significant risk to your company?	10 'yes', 1 'no'
Do you believe there is a strong likelihood of a site inspection relating to the Regulation?	Strong 'yes'
Do you see a site inspection as a significant risk to your company?	All 'no'
Is all of your relevant data checked during a records inspection?	All 'yes'
Do the records provide sufficient information to demonstrate non-compliance with the Regulation?	Strong 'yes'
Would it be easy for inspectors to detect violations?	Strong 'yes'
Do you think it would be difficult to falsify records?	7 'yes'
Do you think there is a strong likelihood of falsified records being detected during a records inspection?	Majority 'no'
Is everything of relevance on-site checked in a site inspection?	Generally 'yes'
Do you think site inspections provide sufficient information to demonstrate compliance with the Regulation?	Generally 'yes'
Do you think that organisations that have a history of breaching the Regulation are inspected more frequently than those who comply with the rules?	8 'yes'
Do you think that targeted inspections find more offenders than random inspections?	All 'yes'
Do you think that the Environment Agency is capable of identifying the likeliest offenders?	9 'yes'
Once a violation has been detected, do you think the EA is likely to instigate enforcement action?	All 'yes'
Do you think it is easy for the EA to prove a violation has occurred?	No trend
Do you think that the risk of a sanction in a court of law is high?	7 'yes'
Do you know what sanction you would face in the event of a violation of this Regulation?	7 'yes'
Do you regard the sanctions of the Regulation as severe?	7 'yes'
Would you say that sanctions are imposed quickly?	No trend
Would the enforcement of a sanction have any disadvantages for your company as a whole?	8 'yes'
Does the enforcement of a sanction have any disadvantages for the individual responsible for the breach?	7 'yes'
Would it be a concern if you were sanctioned and this information was made public?	8 'yes'

Conclusions

The UK has had a poor and drawn out track record of compliance with the UWWTD. However, it also has had a long track-record of discharge consents for WWTPs and their enforcement. Thus levels of compliance with such consents is generally high and has improved. Compliance is driven by self-assessment backed up by infrequent inspections, but this seems to be sufficient within the regulator's overall risk-based approach to enforcement.

11.5 UK Habitats and protected areas

Introduction

For the purposes of the review of enforcement of protection of habitats in the UK, this case study focuses on the measures undertaken in England.

Legislative framework

The legislative framework for enforcement of protection of habitats in England covers a range of issues. With regard to habitats protected through Natura 2000, this is included in the general protection measures for Sites of Special Scientific Interest (SSSIs), many of which are Natura sites.

SSSIs are protected under Part II of The Wildlife and Countryside Act 1981. This Act has been amended by section 80 of the Countryside and Rights of Way Act 2000, substituted by Schedule 9 to the Countryside and Rights of Way Act 2000 and is inserted by section 55 of the Natural Environment and Rural Communities Act 2006. The enforcement of this amended Act is supported by the Environmental Damage (Prevention and Remediation) Regulations 2009. These Regulations apply where damage to land, water or biodiversity is extremely severe. Also the Environmental Impact Assessment (Agriculture) (England) (No.2) Regulations 2006 aim to protect uncultivated land and semi-natural areas from being damaged by projects that increase agricultural productivity. They also guard against possible negative environmental effects from the restructuring of rural land holdings. The Heather and Grass etc. Burning (England) Regulations 2007 are also enforced by Natural England. The areas affected by these regulations overlap with SSSI designation.

In respect of European protected sites, the Habitats Regulations make it an offence: for an owner or occupier to carry out a prohibited operation without complying with the conditions set out in the Regulations; for any person to either carry out an operation on, or not to comply with a restoration order relating to, land covered by a special nature conservation order.

Section 28 P of the Wildlife and Countryside Act 1981 (as amended) outlines offences with respect to SSSIs. If a person is found guilty of an offence then they are punishable by a fine of up to £20,000. Offences can be committed when:

- An owner or occupier of a SSSI contravenes the SSSI notification;
- A person intentionally or recklessly destroys or damages any of the features for which the site has been designated;
- A person intentionally or recklessly disturbs any fauna for which the site has been designated
- A person fails to comply with a requirement of a management notice.

Institutional framework

Natural England is the competent authority responsible for determining whether damage has occurred to most habitats and to initiate enforcement action. Furthermore, it is also responsible for initiating compensatory or restoration actions.

It is important to note that other competent authorities have responsibilities which interact with those of Natural England. This includes the Environment Agency with regard to protection of water bodies (i.e. the overlaps between meeting objectives of the Water Framework Directive and the requirements of protected areas within the scope of the WFD). In this regard the Environment Agency has duties to monitor water bodies, undertaking investigations of incidents (e.g. of pollution) affecting those water bodies and taking enforcement action in response to these. Where such impacts affect SSSIs, this will be done in collaboration with Natural England.

With regard to enforcement activity, Natural England has Protected Areas Teams. These set standards and work to ensure consistency on regulatory aspects of nature conservation designations. These teams bring together the understanding of management objectives with those of damage caused by non-compliant activity.

Partnership working and Inter-institutional arrangements

There is no one central co-ordination body for enforcement activity, but relationships of various types developed between respective authorities.

Much of Natural England's compliance and enforcement work is delivered in partnership with other agencies, including the Police, Crown Prosecution Service (CPS), Environment Agency, Forestry Commission and the Rural Payments Agency (RPA). The latter is a good example.

Natural England works with the Rural Payments Agency (RPA) on enforcement of agri-environment schemes which may be used to deliver protected area objectives. For these schemes risk factors are used to determine inspections. The process and methodology are transparent and are agreed every year between Natural England and RPA. In addition, Natural England analyses results and numbers of irregularities found (mid and end of the year) to inform the process. Work has been done to minimise burdens, for example, from 2008 selections have been made at a beneficiary level rather than at a scheme level, which means that if a beneficiary has more than one agri-environment scheme they can expect fewer compliance visits (if they comply). Where irregularities are identified as a result of a compliance inspection they are followed up e.g. recovery of monies or area adjustments are made.

Where breaches of the law occur within protected areas (SSSI/SPA/SAC) due to agricultural activity, this information is shared with RPA as it is likely to mean that cross-compliance requirements have been breached for Single Farm Payment (if claimed). RPA then visit or factor the breach in to their risk selection model – depending on severity of the breach.

At the UK level the Wildlife Law Enforcement Working Group (WLEWG) was established in 2003 following a meeting in which the top priorities for enforcement of crimes of conservation importance were agreed by the main UK organisations. This defined wildlife crime as “any activity that contravenes laws (within any country or countries in the UK) that provides protection to species and/or habitats”. Membership includes the Police (ACPO, coordinating, specialist and lead officers), the conservation agencies of the countries of the UK (CCW, NIEA, JNCC, NE and SNH) dealing with species and sites enforcement issues. More details of WLEWG are described in the chapter on UK species protection. It has identified protection of habitats and, in particular, damage from off road vehicles as a priority.

Inspection planning and process

Implementation and enforcement policy

Natural England published its enforcement guidance in 2011⁵⁴⁵. This states that if it discovers or receives a report of an incident in which it believes offences may have been committed, it will conduct an investigation in order to establish the facts of the case, the seriousness of the damage and the wider relevance of the incident. In simple cases investigations may be no more than site visits conducted by its officers who may deal with the matter by offering advice, but in more serious cases it may use specialist investigating officers to take witness statements and interview suspects under caution. In order to properly protect those involved all investigations it complies with the legal requirements of the Police and Criminal Evidence Act 1984 (PACE) and the Codes of Practice made under it. For prosecutions and many civil sanctions it is required to prove that offences have been committed beyond reasonable doubt.

The enforcement guidance also sets out in detail the types of sanctions that may be imposed for different types of offences and how these will be applied. This is detailed in the subsequent sections of this case study.

Types of inspection visit and use of risk-based inspection

Inspections do take place in a context in which there is also work on prevention, compliance promotion and awareness-raising. Indeed, Natural England has prioritised advice and guidance as a proactive tool to reduce the need for stakeholders to follow a regulatory route. It produces a wide range of guidance to help applicants establish the most suitable resolution to their problem. All the guidance can be downloaded from its website.

Natural England is not an inspectorate such as is the case with the Environment Agency. However, it regularly visits sites to assess condition, discuss management issues with owners, etc. Furthermore, other agencies, e.g. RPA, also undertake inspections. Drawing on these different site visits, potential incidents of damage to sites are identified, which would instigate more detailed inspection by Natural England specialist staff.

⁵⁴⁵ Natural England. Enforcement Guidance. December 2011

Natural England states that it is risk-based in its approach to regulation, including to inspections (compliance and pre-application visits). However, little information is provided on concrete criteria on the application of this approach. Rather information is provided on the relationship between risk-based approaches are the delivery of guidance and on the use of sanctions (see below), rather than on site visit inspections per se. On inspections, it states that these are based on a standard risk model using likelihood and impact and a high, medium, low assessment. This is supported by generic guidance examples. This is intended to ensure that risks are assessed on a case by case basis supported by experienced staff.

However, the House of Commons Public Accounts Committee has stated⁵⁴⁶, with reference to the risk-based approach, that more needs to be done to ensure sufficient compliance inspections are taking place to meet Natural England's strategy targets. Indeed, the House of Commons Public Accounts Committee noted that stakeholders believe too few inspections are carried out. Indeed, when inspections take place they are generally perceived as constructive and a good source of advice. The Committee noted that "Staff and stakeholders agree that inspections have multiple important functions: to monitor sites of concern, to increase NE's exposure which in turn encourages compliance and strengthens the role of compliance as a lever for consultants over developers, and to provide valuable field experience for new advisors which strengthens NE's capacity to make office-based risk assessments and licence approval decisions."

Natural England also highlights its partnership with RPA, drawing on information gathered from the RPA inspections. The latter are risk-based, but these reflect the concerns of rural payments themselves, rather than the risks of potential damage to a site or vulnerability of a site.

Natural England is examining ways to improve its inspection regime such as including minimum requirements in Personal Performance Agreements⁵⁴⁷. In addition Enforcement Leads have been created in each region to act as "conduits for enforcement knowledge". One aim of this role is to ensure the consistency of risk assessments and inspections. This will be supported by improved training, information sharing and network, together with random quality assurance reviews to check specific cases.

Follow-up to inspections

Follow-up: use of sanctions

Natural England has access to a wide range of different types of sanctions in the case of non-compliance for protected areas. The application of these sanctions is set out in its enforcement policy⁵⁴⁸.

It is important to note that where an offence is detected, Natural England may not resort immediately to the use of sanctions. It may consider that future compliant behaviour can be

⁵⁴⁶ House of Commons Public Accounts Committee. Natural England's Role in Improving Sites of Special Scientific Interest. July 2009.

⁵⁴⁷ Natural England Annual report on Natural England's enforcement activity. 1 April 2011 to 31 March 2012.

⁵⁴⁸ Natural England. Enforcement Guidance. December 2011

achieved by provision of better advice and guidance. This may be written or verbal and may be the only action it takes. However where this voluntary cooperative approach does not work or where the impact on the environment is of concern a sanction may be applied.

There is a wide range of civil sanctions available regarding protection of nature. These were introduced by The Regulatory Enforcement and Sanctions Act 2008 (RES), the Environmental Civil Sanctions (England) Order 2010 and the Environmental Civil Sanctions (Miscellaneous Amendments) Regulations 2010. Collectively they are referred to as 'RES' civil sanctions. The following table describes each of these in detail. The aim is to use the appropriate sanction to restore damage, ensure future compliance, act as a deterrent, etc. How these are used is described later. The powers were made available to Natural England on 3rd January 2012.

Natural England also is able to use prosecutions and other court appearances for more serious offences. It should be noted that a criminal prosecution is not allowed by law if a 'RES' civil sanction has been complied with for that particular offence, the only exception being when a 'RES' Stop Notice has been served.

Table 46. 'RES' civil sanctions under the Regulatory Enforcement and Sanctions Act 2008 (Source: Natural England)

Sanction	Details
Compliance Notice	These require the offender to take specified steps within a specified period of time to ensure that an offence does not continue or happen again.
Enforcement Undertakings	These allow offenders to volunteer steps to remedy a potential or actual offence including ensuring future compliance, restoring harm, giving up a financial benefit, or providing restitution to affected local communities. If the agreed steps are taken, no civil or criminal sanctions could follow.
Fixed Monetary Penalty	These allow regulators to serve a Notice requiring a fine of a fixed amount (£300 for body corporate or £100 for individuals). This is envisaged for minor and clear-cut offences (e.g. failure to submit monitoring data within required timescales) where previous advice and guidance has been ignored. The money goes to the Government's Consolidated Fund.
Non-Compliance Penalty Notice	These can be served following non-compliance with a RES Restoration or Compliance Notice. The financial penalty is based on the costs an offender is avoiding by not complying with the notice. The money goes to the Government's Consolidated Fund.
Restoration Notice	These require the offender to take specified steps within a stated period to ensure that the position is restored, so far as possible, to what it would have been if no offence had been committed.
Stop Notice	These prevent the offender from carrying on an activity until they have taken steps to come back into compliance. They can only be used where NE reasonably believes that an unlawful activity is causing or presents a significant risk of causing serious harm to human health or the environment.

Third Party Undertakings	This enables an offender to provide restitution to affected local communities where they have been notified of the intention to serve a Compliance Notice, Restoration Notice or Variable Monetary Penalty.
Variable Monetary Penalty	These allow regulators to calculate the amount of the fine to be able to remove financial benefit of non-compliance in more serious cases, and additionally deter non-compliance where appropriate. They will be typically used for medium offences and as an alternative to prosecutions for significant offences where there are strong mitigating factors. The money goes to the Government's Consolidated Fund.
<i>'Specialist' civil sanctions</i>	
Sanction	Details
'EDR' Prevention and Remediation Notices	Prevention and Remediation Notices are available for cases that fall within the Environmental Damage (Prevention and Remediation) Regulations 2009. A prevention notice can be served when there is an imminent threat of damage, or where there is actual damage and there is a need to prevent it from getting worse. A remediation notice will be served when there is damage to be restored.
SSSI Restoration Order	A court order requiring a SSSI to be restored can be sought but only following a successful prosecution for a SSSI offence.
'EIA' Stop and Remediation Notices	These notices are available under the Environmental Impact Assessment (Agriculture) (England) (No.2) Regulations 2006. A stop notice will prohibit all work with immediate effect. A remediation notice will aim to return damaged semi-natural land to its former condition.
Enforcement (Pesticide) Notice	A notice to remedy significant deficiencies, which breach regulations, in the storage arrangements or the use of pesticides. The notice will direct any reasonable remedial or preventative measures that need to be taken.
Enforcement (Weeds) Notice	A notice that requires the clearance of certain injurious weeds.
Possession Order	An order of the civil court to secure the eviction of those in illegal encampments on National Nature Reserves.
Withholding financial incentives	Where offences are committed by those in receipt of payments under agri-environment schemes payments can be withheld to remove any financial gain or to ensure payment is not made until a person returns to compliance.
Condition/ revocation/refusal of a permission	Many of the regulatory regimes we operate involve granting permissions (e.g. consents, licences) for activities that would otherwise be unlawful. Where such activities are not being undertaken in accordance with the permission extra conditions can be added to ensure future compliance, revoke the permission completely, or refuse to provide permission in the future.
<i>Criminal</i>	

<i>sanctions and injunctions</i>	
Sanction	Details
Simple caution	A formal warning to an offender about an offence that they have committed and their future conduct. NE typically uses simple cautions where prosecution would not be in the public interest and where alternative civil sanctions are not available.
Prosecution	A criminal conviction to punish significant and or persistent environmental offending and to create a deterrent against future non-compliance.
Injunction	An order of the civil court directing a particular activity to stop or for certain activities to be carried out. Courts may grant Injunctions where there has been or is highly likely to be a breach and a real risk or actual environmental harm. NE will only seek an injunction in serious cases and as a last resort where all other options have failed to prevent offences being committed.

The choice of sanction is an issue of proportionate regulation. To help decide which sanction to apply, Natural England classifies incidents according to how serious they are⁵⁴⁹. This has four categories: technical, minor, medium or significant. This is determined according to the environmental impact, aggravating and mitigating factors set out below. Of these, the former is most important. The following box provides examples of technical, minor, medium or significant incidents and how the assessment factors affect this determination.

Environmental impact – *not in order of priority and not exhaustive*:

- rarity – how rare the affected habitat or species is at a local, regional, national and international scale;
- scale – an assessment of how large an area of habitat has been affected or how many individuals/species have been disturbed or killed;
- severity – the degree of damage to the habitat or level of harm caused to the species;
- recovery potential – whether the species or habitat can recover, over what timescale, and will human intervention be necessary.

Aggravating factors – *not in order of priority and not exhaustive*:

- the offender's state of mind and level of culpability: deliberate, reckless, negligent or accidental;
- action or lack of action prompted by gain, typically financial motives – profit or cost saving;
- disregarding warnings from Natural England, another regulator, or from within the workforce;
- lack of co-operation with Natural England or other regulator;
- complex restoration operation required;
- previous relevant offences committed;

⁵⁴⁹ Natural England. Enforcement Guidance. December 2011

- offence widespread (nationally or locally) or likely to be repeated by the offender or others.

Mitigating factors – *not in order of priority and not exhaustive*:

- steps taken to remedy the breach;
- prompt reporting of offence;
- admission of responsibility;
- good compliance record and or conduct;
- the offender’s minor role with little personal responsibility;
- ready co-operation with the regulatory authority.

NE uses sanctions to achieve a range of outcomes including:

- the restoration of environmental harm;
- the prevention of further harm;
- the removal of illicit financial gain;
- a deterrence against reoffending (by the original offender and others); and
- where necessary the punishment of serious and persistent offenders.

Examples of offences and levels of response from Natural England regarding SSSIs⁵⁵⁰

Significant incident

Incident example: track construction through a mosaic of habitats.

Damage example: 1ha direct habitat loss and wider degradation due to interruptions in drainage and hydrology.

Aggravating factors: deliberate breach, awareness of offence, offence prompted by financial motives, expensive restoration required, wider non-environmental impact (loss of landscape amenity).

Mitigating factors: none.

Sanction to be taken: prosecution and restoration order.

Medium incident

Incident example: winter grazing without consent.

Impact example: overgrazing and poaching of grassland.

Aggravating factors: deliberate breach, awareness of offence, disregarding warnings.

Mitigating factors: none.

Sanction to be taken: RES stop notice.

Minor incident

Incident example: motorbike scrambling in shingle.

Impact example: minor wheel rutting.

⁵⁵⁰ Natural England. Enforcement Guidance. December 2011

Aggravating factors: nuisance impacts on local community.
Mitigating factors: unaware of offence and open admission of responsibility.
Sanction to be taken: warning letter.

Technical incident

Incident example: coppicing without consent.
Impact example: none – coppicing beneficial although some concerns about quality.
Aggravating factors: none.
Mitigating factors: genuinely unaware of need to obtain consent and subsequent cooperation.
Sanction to be taken: advisory letter.

The choice of sanction to be applied is determined by assessment of both potential or actual harm (impact) combined with culpability. In general advice and guidance, backed up where necessary with advisory/warning letters, is the normal response to technical or minor incidents; civil sanctions will typically be used for offences classified as medium; and prosecution will be reserved for offences classified as significant and where the Code for Crown Prosecutors indicates that prosecution is in the public interest. Natural England will only prosecute with reference to the relevant public interest factors outlined in the Code for Crown Prosecutors. The first test in the Code is whether there is a realistic prospect of conviction. The second test is whether it is in the public interest to prosecute.

Follow-up: Restoration of environmental harm

An important priority for the follow-up to inspection and discovery of damage is to restore the protected site. Natural England's policy⁵⁵¹ is that it will always request full restoration following illegal damage to the environment and it views this as its priority in enforcement action. Natural England states that it will always seek to secure the restoration of damaged features to the condition they would have been in had the offence not occurred and that it will always seek to secure the restoration of that feature in situ. However, it does accept that in many cases natural recovery will be the best option and in such cases it will simply seek a commitment to leave the area to recover naturally over the necessary timescales.

Where offences are classified as minor Natural England will usually request voluntary restoration, but if this is not forthcoming it will consider using its powers to require restoration, such as RES Restoration Notices. Where offences are classified as medium or significant it is likely to use its powers to require restoration immediately.

Where irreversible damage has been caused it will give consideration to the improvement or creation of similar or alternative features at alternative locations. Such locations will generally be nearby, within the same land ownership and ecologically sound. Only in these circumstances will restoration elsewhere be considered.

⁵⁵¹ Natural England. Enforcement Guidance. December 2011

Where offences are classified as minor and the damage is considered to be repairable, Natural England's local staff are generally responsible for deciding whether the features should be left to recover naturally, or whether any active restoration should be sought, and if so, the scope and requirements of that restoration. Where offences are classified as medium or significant the local staff must work with Natural England's own specialist ecologists or geologists to collectively make a decision as to the appropriate restoration requirements. Where restorative works are complex and require specialist contractors Natural England will expect to be consulted on the contractor to be used and it may decide to establish indicators of success and to monitor on-going restoration.

Regarding the costs of restoration, these are always expected to be borne by the offender. This is an important aspect of the polluter pays principle. No financial support (e.g. via agri-environment) will be given.

Follow-up: Prevention of further environmental harm

Where offences have been committed Natural England will always seek a commitment that they will not recur. Where offences are classified as technical or minor it will usually provide advice and guidance and seek a voluntary commitment to future compliance, but where this approach fails it will consider imposing a sanction that requires an activity to be carried out in compliance with the law in future. Where offences are classified as medium or significant it is likely to use its powers to require future compliance straightaway.

A number of civil sanctions can be used to require **future compliance**. In particular, a RES Compliance Notice, which requires specific steps to be taken within a certain time period to ensure that an offence does not continue or happen again, is available for a number of offences. Other civil sanctions are more specialised such as an Enforcement (Pesticide) Notice to require the safe storage of pesticides. Other options could include adding conditions to a permission to ensure it is carried out correctly in the future, or the withholding of agri-environment scheme payments until a person has come back into compliance. The sanction chosen will depend on the circumstances of the case.

In some circumstances an offence may be so serious that the offender must not be allowed to carry on an activity at all. Appropriate sanctions include stop notices or the revocation of a permission. These sanctions will be used for offences classified as significant and where the impact on the environment is of serious concern.

Follow-up: Financial gain and deterrence

Those causing damage to protected areas may be motivated by financial gain. Where this is the case, Natural England will act to remove this financial gain. It can withhold agri-environment payments or impose RES Variable Monetary Penalties which can include an element for restitution to affected third parties. Where these options are not available Natural England will consider prosecution and raise details of illicit financial gain with the court.

In some case, there is a need to create a deterrent to those who may consider undertaking similar offences. This influences the use of the full range of sanctions that can be applied, including the use of RES Variable Monetary Penalties.

Representations and appeals against sanctions

Those to whom sanctions are applied are able to make representations and appeals against those sanctions. Appeals against RES civil sanctions are heard by the First Tier Tribunal (Environment). This is a specialist body which ensures the public have the opportunity to seek effective redress against Government decisions by the judiciary. Appeals against a Prosecution, SSSI Restoration Order, Injunction or Possession Order are appeals against an order of the court.

Inspection capacity

Staff and expertise

Natural England has a sizeable budget (around £140 million per annum, of which around £810,000 is its legal budget). It employs around 2,250 staff. Many of these staff are locally based and involved in site visits – so may detect damage to sites or be involved in follow-up investigative inspections.

However, these staff and the budget cover many more tasks. Therefore, it is not possible to identify the precise capacity for enforcement work. Public authorities are under significant financial pressure in the UK, so that it is likely that additional problems are faced with delivering the range of Natural England's work. It should be noted that Natural England responded to the House of Commons Public Accounts Committee 2009 report, by stating that it "understands the need to increase its capacity to undertake enforcement particularly given the recent expansion of its enforcement role. Significant steps are underway to move in the right direction." It seems that this is primarily focused on expertise and efficiency.

Examples of enhancing expertise have included training on the Police and Criminal Evidence Act, use of a police secondee for a year and joint investigations and operations with police. Natural England is examining ways to improve its inspection regime such as including minimum requirements in Personal Performance Agreements (PPA). In addition Regional Regulatory and Enforcement Leads have been created in each region to act as "conduits for enforcement knowledge". One aim of this role is to ensure the consistency of risk assessments and inspections. This will be supported by improved training, information sharing and network, together with random quality assurance reviews to check specific cases.

Cost recovery

Natural England is able to recover the costs of enforcement activity with regard to the imposition of sanctions⁵⁵², i.e. it can recover the costs of imposing Prosecutions, Injunctions and

⁵⁵² Natural England. Enforcement Guidance. December 2011

Possession Orders, RES Stop Notices, Compliance Notices, Restoration Notices and Variable Monetary Penalties.

Natural England's policy is to seek to recover the costs of imposing these sanctions in full, unless it identifies extenuating circumstances. The costs to be recovered include the costs of investigating an offence and administering a sanction, as well as any legal or other expert advice. The costs include internal staff time; using external investigators, lawyers, and other experts; and the use of any specialist equipment and advice.

Where the sanction involves court action, i.e. a prosecution, injunction or possession order, in this case Natural England has to apply to the court to recover costs. Where it applies an administrative sanction, it serves its own Enforcement Cost Recovery Notice. This notice includes information on the grounds for imposing the notice, the amount to be paid, how to pay, the payment deadline, rights of appeal and information on the consequences of failure to comply. If the payments arising from an Enforcement Cost Recovery Notice are not made, these debts can be recovered through the civil courts. Those given an Enforcement Cost Recovery Notice are able to appeal against the costs imposed to the Tribunals Service. This can be for any reason.

Inspection review

Transparency

Natural England makes its enforcement policy and results of its application of different sanctions public. For the latter, the authority's website contains downloadable excel files listing the actions taken for individual offences. Indeed under the Environmental Civil Sanctions (England) Order 2010, where a power is conferred on a regulator to impose a civil sanction under the Order in relation to an offence, the regulator **must** from time to time publish the cases in which the civil sanction has been imposed; where the civil sanction is a fixed monetary penalty, the cases in which liability to the penalty has been discharged by payment of the penalty following the notice of intent and without further action being taken; where the civil sanction is a variable monetary penalty, restoration notice or compliance notice, the cases in which a third party undertaking has been accepted; and cases in which an enforcement undertaking has been entered into.

The table on the following pages provides an example of the information available, in this case for prosecutions made. This information provides the reader with knowledge of sanctions applied. However, it is important to note that there are no data on the number of inspections made (as this type of activity might not begin as an 'enforcement' action) nor of analysis of the reasons or drivers for non-compliance.

Natural England also published an annual overview of its enforcement activity⁵⁵³. The most recent annual report covers 1 April 2011 to 31 March 2012. Information relevant to protected areas is provided in the following table.

Table 47. Criminal activity on SSSIs by financial year and sanction

⁵⁵³ Natural England Annual report on Natural England's enforcement activity. 1 April 2011 to 31 March 2012.

Year	Warning letter	Caution	Prosecution
2007-8	84	5	2
2008-9	93	1	2
2009-10	113	3	2
2010-11	92	8	0
2011-12	79	0	4

The annual report also provides a breakdown on offences by culprit (owner, public body or third party), by geography, by habitat and by type of activity causing damage.

Effectiveness

The effectiveness of the enforcement system of Natural England is difficult to judge⁵⁵⁴. In particular, the introduction of the wide range of civil sanctions is very recent and, therefore, are only now being understood by stakeholders and the use of different types of sanctions, classification of offences, etc., is being worked through by the authority.

If one focuses on key outcomes, i.e. the quality of habitat in protected areas, Natural England regularly monitors and reports on this⁵⁵⁵. Thus, since 2003, the proportion of agricultural sites in favourable or recovering condition has increased from 45% to 97%, whilst that for all SSSIs has increased from 57% to just under 97%. However, this is primarily driven by Natural England’s working relationships with farmers, provision of financial support, etc., rather than through enforcement action. Whether the enforcement action taken acts as a deterrent to others, for example, is simply not knowable.

Criticism of its enforcement system is unlikely to be made by Natural England itself. The only published criticism has been produced by the UK Parliament’s House of Commons Public Accounts Committee. This was in July 2009. This made the following conclusion:

“Natural England has failed to use its enforcement powers to take action against landowners and occupiers who persistently refuse to manage land in a way which conserves the SSSI, allowing negotiations to become protracted at a financial and conservation cost. Senior management in Natural England should monitor the action taken to reach agreement on the management of SSSI sites with landowners/occupiers on an exception basis, based on elapsed time against an internally established benchmark. Natural England should pilot the use of a specialist team to enforce the body's powers where negotiations exceed the benchmark.”

However, much of this criticism focuses on the nature of agreements between landowner and the authority, rather than subsequent enforcement action per se. There is no specific requirement to review the inspection system itself. Natural England is itself periodically reviewed by different bodies, where the enforcement work is one element of such a review.

⁵⁵⁴ Natural England. A Hampton Implementation Review Report. July 2009

⁵⁵⁵ Natural England 2012 Spotlight on SSSIs. Working towards the goals of Biodiversity 2020.

Table 48. Reports of prosecutions undertaken by Natural England since 2007.

Site name	County	Offence	Defendant	Habitat	Nature of offence	Environmental impact / harm	Court	Outcome		Restoration Order	Date
								Fine	Costs		
Hawes Water SSSI	Lancashire	Section 28P(1) - Owner	Kenneth Gregory	Lowland calcareous grassland	Unauthorised fertilizer application and erection of a hen house.	Damage to calcareous grassland due to loss of herb rich plants.	Lancaster Magistrates Court	£2,500	£2,500	Yes	Apr-07
Lune Forest SSSI	Durham	Section 28P(1) - Owner	Wemmergill Moor Ltd	Upland blanket bog	Unauthorised activities relating to the construction of a new track, car park and associated drainage, plus damage to another route.	Loss of blanket bog (peatland) vegetation and impact on hydrological function of the blanket bog extending over a much wider area.	Durham Crown Court	£50,000 total (3 offences)	£237,548.99	Yes	Jan-08
Crople How Mire SSSI	Cumbria	Section 28P(1) - Occupier	Paul Matterson	Mire	Unauthorised over-grazing and supplementary feeding.	Damage to basin mire and wet fen habitats.	Barrow in Furness Magistrates Court	£1,200	£4,663.80	Yes	Mar-09
Hayle Estuary & Carrack Gladden SSSI	Cornwall	Section 28P(6A) - Third party	Marlon Adams	Intertidal mudflats and sandflats	Reckless disturbance of a special interest feature of the SSSI.	Disturbance to birds	West Cornwall Magistrates Court	£250	£250 to NE and £15 victim surcharge	No	Mar-09
Dark Peak SSSI	Derbyshire	Section 28P(6A) - Third party	Mohammed Saeed Akram, Mohammed Iqbal Shaikh and Mohammed Yusuf Shaikh	Dry upland heath; upland acid grassland	Reckless damage to special interest features of the SSSI by setting fire to moorland vegetation.	Damage to dry dwarf shrub heath, acid grassland and bracken beds.	Huddersfield Magistrates Court	£85 each (£255 total)	£300 to NE for each (£900 total) and £15 victim surcharge for each (£45 total)	No	May-09

Cam Washes SSSI	Cambridge-shire	Section 28P(1) - Owner	Andrew Lawrence	Wet grassland	Unauthorised construction of track, hardstanding (car park), soil dumping, tree planting and mowing.	Damage to vegetation community; disturbance to waders	Ely Magistrates Court	Conditional discharge	£1,000	Yes	Jun-09
Honister Crag SSSI	Cumbria	Section 28P(1) - Owner	Honister Slate Mine Ltd	Upland scree and ledge	Via Ferrata' and zip wire	Damage to rare upland scree and ledge communities	Workington Magistrates Court	£15,000	£13,190 to NE and £15 victim surcharge	No	Aug-11
River Wensum SSSI	Norfolk	Breach of court under-taking	Basil Todd	Chalk river	Vegetation removal and gravel addition	Damage to riverbank and probable adverse impact on breeding fish	Norwich County Court	28 days prison sentence suspended for 2 years	£6,439	No	Aug-11
Farndale SSSI	North Yorkshire	Section 28P(1) - Occupier	Michael Wood and Yorks Sport Ltd	Woodland	Unauthorised release of pheasants	Damage to ground flora including wild daffodils	York Crown Court	£40,000	£125,000	No	Sep-11
Goyt Valley SSSI	Derbyshire	Section 28P(1) - Owner	Robert Hall	Moorland	Unauthorised ditch work, rush cutting and overgrazing	Damage to dwarf shrub heath, blanket bog and acid grassland habitats	High Peak Magistrates Court	£500	£17,680 to NE and £15 victim surcharge	Yes	Mar-12

Costs of inspections to business

The costs of inspection activity itself by Natural England are met by the budget of the authority, not those being inspected. Costs to those being regulated, therefore, arise from the time spent during inspection visits and follow-up. However, as the latter would occur in the case of non-compliance (as would sanctions), this is not relevant in the context of administrative burden.

The UK has adopted a process for taking forward better regulation principles within the operation of its public authorities. This has included the responsibilities for enforcement actions. In July 2009 the “Hampton Implementation Review Report” on Natural England was published examining how well it was taking forward these principles. With regard the issues relevant to this study, the review made the following findings:

- Natural England clearly understands the need for a risk based and proportionate approach. This is well demonstrated by its published Enforcement Strategy, its Enforcement Policy and the literature issued to staff in order to implement the Policy.
- It is developing its stakeholder management and is implementing a stakeholder database to capture all relevant stakeholder groups.
- Natural England’s remit has to embrace the very different roles of information/advice providers and enforcers. Senior managers have recognised that this requires different skill sets and have expressed the view, supported by their stakeholders, that enforcement is not yet completely embedded within its culture.
- The information sharing protocols currently under discussion should be support to support NE’s enforcement activity, develop stronger links with their enforcement partners and further strengthen its staff’s enforcement skills.
- In relation to reducing the administrative burden on customers, to date, the Wildlife Management and Licensing Team have made customer savings of about £600,000 by critically overhauling some of its regulatory processes and a further about £100,000 savings through other efficiencies.

A particular action to reduce inspection burdens, is the working relationship with the Rural Payments Agency (RPA) (see above). RPA conducts its own inspections and it feeds back information on SSSI consent breaches for Natural England to follow up. By removing the need for two inspections this partnership with RPA reduces the burden of inspections on landowners.

Conclusion

Natural England is a large public authority with many staff ‘on the ground’ able to be involved in enforcement activity. It works closely with other bodies to support its inspection work and has adopted a risk-based approach.

It has only recently been given new powers with regard to civil sanctions which alter the ability of the authority to address offences other than those which would have resulted in prosecution. For these it has developed a detailed enforcement policy, but it is too early to determine whether these new sanctions affect the type of enforcement work undertaken or its effectiveness.

The authority is working to increase the capacity of its staff – specialist and generalist. The capacity of the organisation is under pressure from public budget constraint, but the implications for enforcement are not known.

With regard to best practice, the following can be highlighted:

- An extremely detailed enforcement policy detailing how and when to use different sanctions.
- Close working relationships with a range of other public bodies to deliver much greater inspection information as well as to reduce burdens to land owners.
- Restoration of environmental harm is a primary objective of the enforcement process.
- Full cost recovery of enforcement action in the case of offences.
- Detailed publication of offences committed and responses to these.
- Criminal sanctions are available **AND** used for the few serious cases.

11.6 UK Species Protection

Introduction

This case study examines enforcement of species protection legislation in the UK. There is a significant UK-wide legal and institutional framework for species protection. However, where appropriate some of the case study will focus on England.

Legislative framework

The main legal framework for species protection in the UK is the Wildlife and Countryside Act which covers England, Scotland and Wales, whilst Northern Ireland has its own legislation. In addition, the Nature Conservation Act gives further protection to wildlife in Scotland.

The Act details offences for a variety of species. For the sake of brevity, those relating to protection of birds set out in Part 1 of the Act are described here. All birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, to:

- intentionally kill, injure or take any wild bird
- intentionally take, damage or destroy the nest of any wild bird whilst it is in use or being built
- intentionally take or destroy the egg of any wild bird
- have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act or the Protection of Birds Act 1954
- have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act or the Protection of Birds Act 1954
- use traps or similar items to kill, injure or take wild birds
- have in one's possession or control any bird of a species occurring on Schedule 4 of the Act unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations (see *Schedules*)
- intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

The maximum penalty that can be imposed for an offence under the Wildlife and Countryside Act - in respect of a single bird, nest or egg - is a fine of up to £5,000, and/or six months' imprisonment.

It is, therefore, a criminal offence to intentionally kill a wild bird. However, there are occasions where an individual who is aware of the possibility of potentially adverse consequences arising from their actions but proceeds with the actions in any event commits a criminal offence. In such a situation, the individual is considered to be reckless. There are three elements of an offence that may be considered reckless: conduct; consequence and

circumstance, e.g. shooting a gun or setting a trap. Under the law, the conduct must be intended.

In 2007 amendments were made to the Habitats Regulations aiming better to implement the species protection provisions of the Habitats Directive. Specifically, most of the defences were removed, such as the "incidental result defence" which applied to actions which were the incidental result of an otherwise lawful activity and could not reasonably have been avoided.

The Natural Environment and Rural Communities (NERC) Act 2006 provided enforcement powers for Natural England wildlife inspectors appointed by the Secretary of State. These powers include entering and inspecting premises to ascertain whether certain offences have been committed; to check information or documents provided in support of an application for certain licences; or to check that a licence is held and that any conditions attached to it are being complied with. The Act also provides inspectors with powers to examine specimens, and to take samples in certain circumstances and for specified purposes. These powers are also extended to the Destructive Imported Animals Act 1932, the Conservation of Seals Act 1970, the Deer Act 1991, and the Protection of Badgers Act 1992.

The NERC Act also strengthened police powers under the WCA 1981. Police officers have a power to enter any premises, other than a dwelling, without a warrant where they suspect with reasonable cause that an offence under Part 1 of the WCA has been or is being committed.

However, the environmental audit committee of the House of Commons in 2012 has criticized UK legislation in this area⁵⁵⁶, stating that it is too fragmented and some is out of date. For example, several laws, such as the Night Poaching Act of 1828 and the Game Act of 1831, are archaic, for example, while the main legislation under the Wildlife and Countryside Act 1981 is difficult for non-wildlife specialist lawyers to use. As a result the Law Commission consulted in late 2012⁵⁵⁷ on proposals to reform the legislation. It stated that the 'legal landscape that is out of date, confused and often contradictory' and that 'Much of the older legislation is out of step with modern requirements, and the principal modern Act – the Wildlife and Countryside Act 1981 – has been amended to such a degree that it is difficult for any non-specialists to use'.

The proposals put forward aim to simplify the existing complex framework, placing wildlife law into a single statute. This would cover the species-specific law on the conservation, protection and exploitation of wildlife. A single statute for wildlife management would have benefits. It would allow for increased consistency (where different terms have been used to mean the same thing in different statutes). It would also provide a comprehensive statute for wildlife law. The new law would reduce the current dependency on criminal law, by allowing an appropriate mix of regulatory measures such as guidance, advice and a varied and flexible system of civil sanctions – such as fines and bans.

⁵⁵⁶ Environmental Audit Committee inquiry into Wildlife Crime. October 2012.

⁵⁵⁷ Law Commission. Consultation Paper No 206. Wildlife Law. A Consultation Paper. 2012.

At this stage the consultation has closed, but no new legislative Bill has been proposed.

Institutional framework and partnership/inter-institutional arrangements.

The institutional framework is complex⁵⁵⁸. The principle authorities involved in the enforcement of species protection legislation are:

- The regional police forces across the UK.
- The Nature Conservation Agencies.
- NGOs.

Police forces have Wildlife Crime Units. For example, the Wildlife Crime Unit of the Metropolitan Police is responsible for enforcement of wildlife laws within the London area, and for taking initiatives to prevent wildlife crime. The Unit also provides specialist support and assistance to police officers all over London, and works in partnership with many other agencies, both government and non-government, as well as providing a focal point for enquiries from the public. The Unit is part of the Metropolitan Police's Specialist Crime Directorate, and is made up of a small team of specialist police and civilian staff who have been appointed for their expertise and experience in wildlife matters.

While each police force has responsibilities for wildlife crime, a UK-wide National Wildlife Crime Unit has been established to bring the police actions together. The NWCU takes forward the principles of 'tasking and coordination' is a fundamental element of the National Intelligence Model (NIM) which Police forces in England and Wales are legally obligated, by a code of practice, to adhere to. Tasking and coordination occurs every four months, with one meeting a full strategic meeting.

The NWCU puts together an assessment of wildlife crime in the UK every two years. This is used by the Tasking and Co-ordination Group to set the wildlife crime priorities⁵⁵⁹. The Unit also gathers and analyses wildlife crime information and intelligence and sends it to the agency responsible for investigating it. It also helps those agencies in their investigations. When the UK wildlife crime priorities are agreed a 'priority delivery group' is formed and a plan owner appointed to ensure that tangible progress is made in tackling the priority.

The Environmental Audit Committee in 2004⁵⁶⁰ recommended that a centrally managed, national database which records all incidents of wildlife crime, as well as the details of all successful and unsuccessful prosecutions mounted, be established as a matter of priority. However, this was not implemented, so that NWCU's records are partial. In 2012 the Committee⁵⁶¹ highlighted that 'a comprehensive wildlife crime database would allow the NWCU to identify emerging trends and efficiently target resources with greater accuracy.

⁵⁵⁸ Defra 2005. Wildlife Crime: A guide to the use of forensic and specialist techniques in the investigation of wildlife crime.

⁵⁵⁹ UK TCG Briefing Paper: The purpose and function, of Tasking and Coordination. 2010.

⁵⁶⁰ Environmental Audit Committee inquiry into Wildlife Crime. October 2004. See also: Environmental Audit Committee inquiry into Wildlife Crime. October 2008.

⁵⁶¹ Environmental Audit Committee inquiry into Wildlife Crime. October 2012.

Additionally, a record of prosecutions....drawn from the courts could be used to inform the introduction of sentencing guidelines, the reform of available penalties and the on-going development of wildlife law'. This would require additional funding, which is an issue (see below). The Committee in 2012 received views from stakeholders that more wildlife crimes should be notifiable, but the police noted that additional recording was already an issue of administrative burden for police work and a concern to the public. However, even where crime is recorded, a few police forces do not submit data to NWCUC and the Committee recommended that this deficiency be rectified.

It is important also to stress the role of NGOs in this field. Organisations such as the RSPB and RSPCA have dedicated officers for wildlife crime and they play a major role in enforcement action. For example, the RSPB's has an Investigations Section whose main role is to support the statutory authorities by providing advice, expert witness and investigative help on wild bird crime. These organisations are member funded and prioritise this area of work. This major additional capacity should be recognised.

While each organisation has its own staff and focus, the enforcement of wildlife legislation is undertaken through detailed partnership arrangements. It is, therefore, important to consider these here.

There is co-ordination on wildlife crime across the UK through a number of groups bringing together different bodies responsible for wildlife crime or with a strong interest in the issue – governmental and non-governmental.

The NWCUC works in collaboration with partner agencies such as UK Police forces, the Department for Environment, Food and Rural Affairs (Defra) and the Joint Nature Conservation Committee (JNCC) amongst others for the identification and assessment of the threat. The UK TCG, on behalf of the UK, is responsible for the management of any identified threat. This is done via its tasking and coordinating process.

The Partnership for Action Against Wildlife Crime (PAW) is a multi-agency body comprising representatives of the organisations involved in wildlife law enforcement in the UK⁵⁶². It provides opportunities for statutory and non-Government organisations to work together to combat wildlife crime. PAW UK provides focus for action to tackle wildlife crime. Its mission statement is 'working in partnership to reduce wildlife crime through effective and targeted enforcement, better regulation and improved awareness'. PAW UK's overarching objectives are:

- To facilitate effective enforcement to ensure that wildlife crime is tackled professionally;
- To influence the improvement of wildlife enforcement legislation; and
- To raise awareness of wildlife legislation and the implications of wildlife crime.

Any organisation actively contributing to the PAW objectives can apply to become a member of PAW UK. PAW members support PAW's objectives by:

⁵⁶² PAW. Wildlife Inspectors – Code of Practice and Statement of Service.

- Promoting, supporting and contributing to efforts to enforce wildlife legislation;
- Co-operating with the statutory enforcement authorities by providing advice and information, and by assisting with any other enquires as appropriate;
- Being aware of the legislative controls relating to their activities and complying with them at all times.

PAW members may:

- send a representative to the annual Open Seminar, where PAW's activities are reviewed and ideas for future activities are gathered;
- submit ideas and suggestions to the Secretariat for consideration by the PAW Steering Group, and/or by the Working Groups;
- Put forward for consideration a person from their organisation, with appropriate specialist skills, to serve on any of the Working Groups.

PAW UK's Steering Group sets the overarching objectives for tackling wildlife crime. It encourages, challenges and co-ordinates members' actions to deliver outputs which help meet those objectives. The Steering Group is jointly chaired by the head of Defra's Wildlife Species Conservation Division, and the Wildlife Advisor to the Association of Chief Police Officers. The PAW UK Secretariat is provided by Defra.

The PAW Steering Group consists of representatives of the Police, UK Border Agency, Defra and other Government Departments, and meets twice a year to co-ordinate the Partnership's activities, and to determine its priorities. It sets up Working Groups to take forward work on particular issues as needed, and appoints a co-ordinator to lead each Working Group. Different parts of the UK face different wildlife crime issues so PAW Scotland, PAW Northern Ireland and PAW Cymru look at their specific needs. These groups are subsidiaries of PAW UK and participate actively in its national activities.

To make the enforcement of wildlife law more effective, UK wildlife crime priorities are set every two years by the UK Wildlife Crime Tasking and Co-ordination Group (TCG); also chaired by the Chairmen of the PAW Steering Group. It is responsible for ensuring that progress is made in tackling the priorities. The Working Groups consist of specialist representatives invited to participate by the Co-ordinator, and operate within Terms of Reference agreed by the Steering Group on behalf of the Partnership. Groups are:

- The Forensics Group keeps abreast of developments in this area and works to provide tools to assist enforcers in their investigations. It supports the whole of PAW UK.
- The Publicity Group prepares material to support PAW UK by raising awareness of wildlife crime and promoting wildlife law enforcement in England, Wales and Northern Ireland. PAW Scotland have their own publicity group.
- The Conference and Training Group oversees arrangements for the annual Police Wildlife Crime Officer (PWCO) conference and other training events. It regularly

reviews wildlife enforcement training needs and requirements of the statutory enforcement agencies in England, Wales and Northern Ireland.

The TCG is supported by the Wildlife Law Enforcement Working Group which aims to assist non-government organisations and police in identifying priorities for wildlife law enforcement from a conservation perspective; this group is chaired by the Joint Nature Conservation Committee. Membership includes the Police (ACPO, coordinating, specialist and lead officers), the conservation agencies (CCW, NIEA, JNCC, NE and SNH) dealing with species and sites enforcement issues. The aims of the Wildlife Law Enforcement Working Group (WLEWG) are “to improve effectiveness and joint working between Statutory and Non-Governmental Organisations dealing with wildlife crime in the United Kingdom”. A key aim is to identify enforcement priorities to advise the National Wildlife Crime Unit. In addition, the group discusses ways of preventing, deterring, detecting and prosecuting wildlife crime. Members also share information about the consequences of wildlife crime as well as other relevant matters. The WLEWG reports to the Joint Nature Conservation Committee (JNCC) within the statutory conservation agencies and to the designated lead officer within the Association of Chief Police Officers (ACPO).

At a local level Natural England chairs local wildlife crime networks of those it works in partnership with. It supports these and other agencies in investigating or enforcing any wildlife crime as far as our resources and expertise allows, and in keeping with signed Memorandums of Understanding.

In June 2010 the creation of the National Crime Agency (NCA) was announced, which will become operational in 2013 to strengthen the fight against crime. However, The Home Office has not decided whether or how the NCA will be involved in wildlife crime enforcement, including whether it would take over NCWU’s functions. The Environmental Audit Committee in 2012 heard views that the NCA should not take over NCWU’s functions as there would be a danger of the focus on wildlife crime being lost⁵⁶³. Thus the Committee recommended maintenance of the NWCU.

Inspection planning and process including risk-based approaches

The strategic direction and priorities for enforcement are discussed by the major coordinating groups, such as PAW. The UK has a formal National Harm Reduction Strategy for tackling wildlife crime, which brings together all the relevant statutory agencies. Following a Strategic Assessment of wildlife crime across the UK, wildlife crime priorities have been agreed and are addressed through the Strategy, which has three work streams: Prevention, Intelligence and Enforcement.

The following criteria for the selection of UK priorities for enforcement of crimes of conservation importance have been agreed by the WLEWG.

- The feature of conservation interest is known, or is believed or suspected, to be subject to significant and persistent criminal activity.

⁵⁶³ Environmental Audit Committee inquiry into Wildlife Crime. October 2012.

- Such criminal behaviour may prevent the feature of conservation interest from being maintained at, or recovering to, favourable conservation status or for species occurring in other countries, illegal trade to the UK is at a level which is likely to have a detrimental impact on wild populations of the species.
- Action by enforcement agencies, through prevention, intelligence gathering or detection and prosecution of offences, is necessary to make a significant contribution to overall conservation efforts to maintain the feature at, or enable it to recover to, favourable conservation status.
- The relevant features of conservation interest are also subject to complementary action to enhance their conservation status, such as through species recovery programmes or similar with co-ordinated actions involving a number of partners.

For example, the WLEWG has identified the following priorities for action against wildlife species crime in the UK:

- Raptor persecution (including poisoning, egg theft, chick theft and nest disturbance/destruction) with a focus on golden eagle, goshawk, hen harrier, red kite and white-tailed eagle.
- Freshwater Pearl Mussel collection.
- Bat persecution.
- European eel (over-harvesting and illegal trade)
- Plant collection (e.g. lichens for traditional medicine and moss for hanging baskets)

Natural England issues licences in England for activities potentially affecting protected species. Where such licences are breached Natural England is responsible for taking enforcement action. Where offences against protected species are committed by those without a licence enforcement action is undertaken by the Police and Crown Prosecution Service. In 2010/2011 Natural England processed 9,770 licence applications arising from the provisions contained in the wildlife and habitat legislation which it implements, principally the Wildlife and Countryside Act 1981, the Conservation of Habitats and Species Regulations 2010 and the Protection of Badgers Act 1992.

In order to address emerging threats, the police and NWCUC work closely together using an intelligence-led, risk-based, targeted approach. 'Horizon scanning' is part of the NWCUC's normal practice to help it identify emerging threats, as is strong and close communication between wildlife law enforcement agencies, as well as non-Government organisations. The NWCUC reflect their findings in their Tactical and Strategic Assessments.

Natural England takes a risk-based approach to inspections and uses a standard risk model using likelihood and impact and a high, medium, low assessment. This is supported by generic guidance examples. This is intended to ensure that risks are assessed on a case by case basis supported by experienced staff. With respect to wildlife licences, 10% of 'high risk' licence sites should receive a visit, 5% of 'medium risk' and a small number of low risk. A staff member can also 'flag' a licence for inspection at the time an application is approved

if it is felt that risks are high or specific activities will need inspecting. Visits also take place to investigate potential breaches. For some compliance inspections advance notice cannot be given as evidence of a criminal offence might be lost. For other scheduled visits notice is given.

However, while there are these strategic priorities and some focus on risk-based enforcement, there is concern over the fragmentation of approach – this is examined in more detail below.

A particular issue of species protection concerns invasive alien species. An Invasive Non-Natives Species Strategy Framework for Great Britain was published in 2008. The measures to be undertaken include risk assessment of non-native species to facilitate evidence-based decision making; development of an information portal for non-native species records (NNSIP), including an alerts system for rapid reporting of high priority new arrivals; a rapid response framework between government bodies; communication campaigns aimed at interest groups and the wider public; and an annual stakeholder forum. In 2010 the 'Be Plant Wise' campaign was launched to raise awareness of the damage caused by invasive aquatic plants and to encourage the public to dispose of these plants correctly. This was followed up in 2011 with the 'Stop the Spread' campaign to encourage good practice amongst users of water bodies. Both campaigns are actively supported and promoted by key stakeholders.

To support the investigation of wildlife crime, guidance is produced on various issues. For example, Defra has published very detailed guidance on the use of forensic techniques. This guidance covers:

- **Scenes of crime examinations:** Fingerprints, Fibres, hair and fur, Footwear, tyre and instrument marks, Miscellaneous traces and glass samples.
- **Questioned documents & digital records:** Questioned documents, Video Spectral Comparator (VSC), Electrostatic Document Analyser (ESDA), Digital forensics.
- **Firearms.**
- **DNA Profiling:** Description of DNA Profiling method, Human DNA, The National DNA Database (NDNAD), Linking a suspect to a crime scene, Wildlife DNA, Checking claims of captive breeding, Identifying species, Minimum number of animals, Gender determination.
- **Specimen Identification:** Animal Morphology, Museum Services, Whole specimens, Skeletons, skulls, horns, antlers, tusks and teeth, Other parts and derivatives, Feather identification, Birds' eggs, Plant identification, Vegetative or flower characteristics, Wood anatomy, Traditional Medicines, DNA based methods, Other analytical methods.
- **Wildlife poisoning and pesticide analysis:** The investigation of wildlife poisoning incidents in the UK, Operation of the Wildlife Incident Investigation Scheme (WIIS).
- **Forensic veterinary pathology:** Sourcing Forensic Practitioners, The analysis of samples, Scenes of crime investigation, Welfare and related issues, Firearms injuries, Types of gunshot injury, Shotgun pellets, Low velocity gunshot wounds, High velocity gunshot wounds, Shooting distance, Examination of firearm injuries, Dealing with

recovered bullets, Snares and traps, Wildlife poisoning, Dog bite injuries, Estimation of post-mortem interval.

- **Taxidermy examination:** The use of professional taxidermists, Determination of cause of death, Ageing and provenance, Style of taxidermy presentation, Faking “antique” specimens.
- **Health and safety issues when handling samples and animals:** General precautions, Packaging, labelling and transportation of samples, Transportation guidelines, Additional risks associated with wildlife cases, Personal protective equipment, Zoonoses.
- **Laboratory procedures:** Laboratory selection criteria, Valid Methodology, Quality Assurance Accreditation, Quality Control, Staff Competence, Good forensic practice, General guidelines, Sample Analysis, Witness Statements, Document Disclosure.

Follow-up and use of sanctions

Prosecutors select charges based of the seriousness and extent of the offence. Maximum penalties are usually legislation specific but the court will sentence on the basis of seriousness of the case based on the facts presented. Prosecution will take place where there is sufficient evidence to make conviction likely and where this is the public interest. The Police can consider suitability for a simple caution instead of prosecution if this is warranted.

The Criminal Justice Act 2003 empowers the Crown Prosecution Service to issue a conditional caution, which requires an offender to comply with rehabilitative and/or reparative conditions, as an alternative to prosecution. Before the caution can be given, the offender must admit the offence and consent to the conditions. Prosecutors will offer a conditional caution where it is a proportionate response to the seriousness and the consequences of the offending.

Since 2012 Natural England has had recourse to the use of administrative sanctions. These have largely been applied to habitat offences and are detailed in the case study on habitat protection.

Inspection capacity

Given the fragmented nature of the enforcement system and the fact that officers in the respective authorities may only spend part of their time on wildlife enforcement, it is not possible to determine how many inspectors are available or used. For example, the majority of police forces now have at least one wildlife crime officer, and many forces have several. Most undertake their wildlife duties on top of all their other policing work, but a small number of forces now have a full-time wildlife crime officer.

The NWCUC is funded by a combination of Defra, the Home Office, ACPO, ACPO Scotland, the Scottish Government and the Northern Ireland Environment Agency. However, the funding is modest. Defra and the Home Office each contributed £144,000 in 2011-12 and £136,000 in 2012-13. Furthermore funding is agreed no more than two years ahead. As a result the head of the NWCUC spends time seeking to secure funding ahead.

The Environmental Audit Committee in 2012⁵⁶⁴ concluded that 'NWCU's hand-to-mouth financing is reflected in its fractured administrative arrangements, where its staff are managed by North Wales Police, its website is maintained by Lincolnshire Police and its headquarters is a building owned by a Scottish police force'. Furthermore, the lack of certainty about its longer-term funding 'makes it difficult for the NWCU to recruit, retain and develop specialist staff and has hampered its capacity to monitor the illegal trade in wildlife on the internet by investing in staff and equipment'. For example, to address the growing problem of internet crime the NWCU received funding for an officer to address this. However, as funding was only provided for one year, it found it impossible to attract a recruit to the post.

As a result the Committee recommended that 'the Government reinforces the success of the National Wildlife Crime Unit by implementing long-term funding arrangements to allow it to plan for being even more effective in the future, including enhanced long-term funding to enable it effectively to monitor wildlife crime on the internet'.

Furthermore, the Committee concluded that 'partnerships between the police and NGOs can effectively increase funding for wildlife crime enforcement, and the Home Office should encourage all police forces to consider implementing them. This model might usefully be extended to fund other facets of wildlife crime enforcement, such as the NWCU'.

Under the PAW Forensics Working Group and the TRACE Network, a Forensic Analysis Fund has been established. This is a small fund to which TRACE, Defra, RSPCA and WWF have contributed. Law enforcement agencies may apply to this fund for financial support to fund forensic techniques required to provide evidence in support of a wildlife crime investigation. If an application is successful, the Fund has match-funded the costs of the forensic test.

PAW partners provide both financial and 'in kind' support for wildlife crime awareness raising, capacity building and other activities, for example through providing training, sponsoring wildlife crime awards, publishing publicity and information material including on their websites, and manning the PAW Roadshow trailer.

Most police forces have specialist wildlife crime officers, who handle cases involving wildlife crime and advise other officers. However, they will have other responsibilities such as other environmental crime. However, the Environmental Audit Committee in 2012 highlighted evidence from the former Association of Chief Police Officers lead on wildlife crime: 'Wildlife crime legislation is a labyrinth of fairly old legislation and very complex legislation ... the average cop out there has a rudimentary understanding of that at best, probably based upon a half an hour or an hour's lecture that was given many years ago in a classroom somewhere during their initial training ... I think it would be probably unrealistic....to expect every police officer in the country to have the sort of knowledge of wildlife crime procedure, legislation and so on that the specialists have'.

⁵⁶⁴ Environmental Audit Committee inquiry into Wildlife Crime. October 2012.

Training courses are held bringing together different authorities, such as an annual weekend wildlife crime conference. An important aspect of improving capacity is to raise awareness of wildlife crime within police forces. This is a primary task of PAW and its partners have led awareness raising activities.

Natural England has worked to enhance capacity including training on the Police and Criminal Evidence Act, use of a police secondee for a year and joint investigations and operations with police, and entering into intelligence sharing agreements with the National Wildlife Crime Unit (NWCU). In addition it has created Regional Regulatory and Enforcement leads to consistently deliver protected areas regulation within the regions.

Inspection review

The NWCU contains a partial record of prosecutions, etc. At present it is difficult to access these records. It is only now developing a website: <http://www.north-wales.police.uk/nwcu/home.asp>. How information on outcomes is to be provided is not yet clear.

The enforcement activities of Natural England are made available on an annual basis for each case in a downloadable excel file. Details of this are provided in the case study on habitats protection.

Given the fragmentation of the administrative system for species enforcement, review is problematic. Various agencies have their own review processes, such as Natural England. Furthermore, PAW has reviewed itself and Defra also reviews wildlife crime enforcement. For example, in 2009–10 Defra led a review of PAW to ensure that it remained fit for purpose. Finally, the HoC Environmental Audit Committee has regularly reviewed the issue. Having said this, it is not clear how well reviews seek to link enforcement effectiveness to revised enforcement processes.

Transparency and reporting

It is important to note that some strategic and operational documentation is not publicly available, given that this might be a help to criminal activity. However, much UK documentation is available.

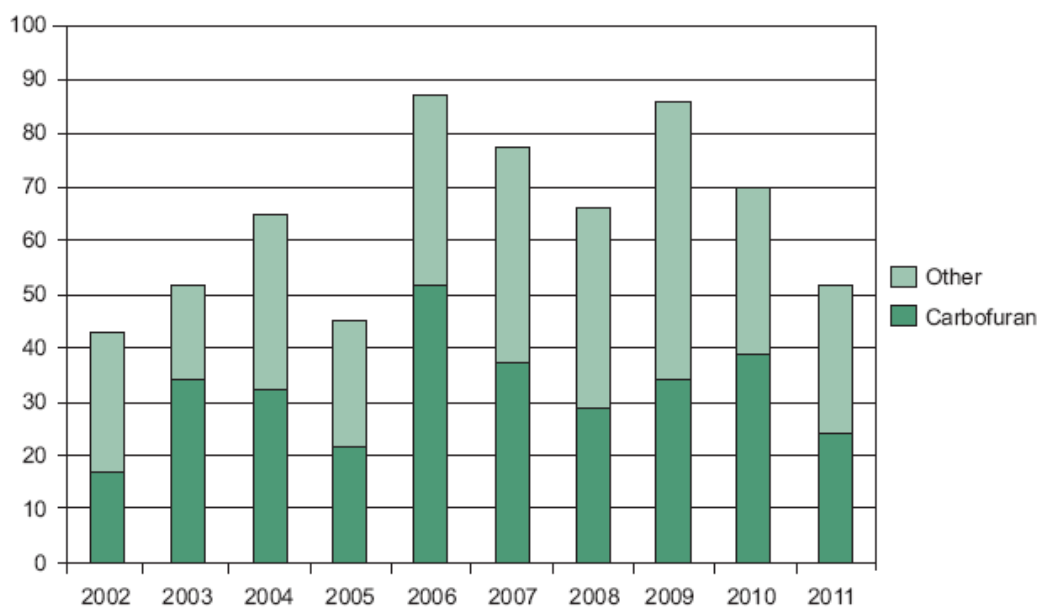
The Home Office is responsible for recording of crime. Most wildlife offences, with the exception of certain offences under section 14 of the WCA (release of non-native species), are not required to be notified to the Home Office for national crime statistics purposes. The Ministry of Justice publishes Court statistics annually. Since April 2007, all police forces have been recording wildlife incidents under the National Standard for Incident Recording (NSIR). The NSIR does not, however, provide a comprehensive record of wildlife crime, but provides an overall picture.

Since April 2007, the NWCU has developed, a database of all incidents of wildlife crime of which they are informed. This includes reports from police forces, UKBA, other Government agencies and non-Government organisations. Non-Government organisations, including the

RSPB, RSPCA and the Bat Conservation Trust, also keep records of wildlife incidents reported to them. As a result, there is some fragmentation of the recording of species protection crime and enforcement activity, so that an overview for analytical or stakeholder purposes is difficult.

An example of reported incidents is provided in the following figure from the 2012 Environmental Audit Committee report on UK wild bird poisonings 2002 to 2011.

Figure 11. Incidents of wild bird poisonings in the UK 2002-2011 (source Environmental Audit Committee)



Effectiveness of the inspection system

The coordination of authorities in the UK is an example of good practice, together with the combination of national dialogue and local action. Furthermore, the involvement of both public authorities and strong NGOs is a further strength.

However, there are considerable shortcomings in wildlife enforcement in the UK and these are summarized below.

Nurse⁵⁶⁵, for example, considers that in the UK there is too much reliance on charities for the investigation of wildlife crime and that the Government has relinquished its responsibility for the detection and policing of wildlife crime to the NGO sector. Investigations rely heavily on the public and volunteers to identify and report crimes, and then investigations by charities such as the RSPCA or RSPB to gather evidence. There are exceptions, such as targeted operations which have helped to dismantle organised criminal

⁵⁶⁵ Nurse, A. 2011. State of current wildlife legislation. Presentation at Symposium 'Protecting Wildlife: A Symposium on Future Policy'.

gangs, but these high-profile prosecutions hide the fact that many offences are never reported, investigated or punished. Nurse concludes that in many police forces, wildlife crime officers deal with incidents on an almost voluntary basis while continuing to handle their day-to-day policing workload, although there are a few full-time wildlife crime officers and a National Wildlife Crime Unit. Wildlife crime was rarely a priority for chief constables or divisional commanders except in a few rare instances.

The Environmental Audit Committee in 2012 received evidence that the Crown Prosecution Service was ineffective at prosecuting wildlife crime, because its prosecutors lacked specialist knowledge and training on conservation law. It, therefore, recommended that 'the CPS should review its performance on prosecuting wildlife crime in England and Wales with a view to either employing specialist wildlife crime prosecutors or introducing specialist wildlife crime training for its generalist prosecutors'.

Most wildlife crimes committed in the UK carry a maximum sentence of £5,000 and/or a six-month custodial sentence. The Association of Chief Police Officers stated to the Environmental Audit Committee in 2012 that 'the penalties that are available for some wildlife crimes appear in some cases not to be dissuasive', but, in contrast, the RSPCA stated that the available penalties were 'generally fit for purpose'. Specifically, the Committee concluded that the deterrent effect of the introduction of custodial sentences in 2001 appears to have dissuaded many people from collecting the eggs of wild birds.

However, the Committee concluded that, based on repeated views of witnesses, 'It is currently impossible definitively to answer the question whether the available penalties for wildlife crime offences are fit for purpose because of inconsistent sentencing by judges and magistrates...due to the lack of any sentencing guidelines for the judiciary and of specific training for magistrates'. Thus it recommended that 'the Government reviews whether the available penalties provide sufficient deterrent effect and work with the Sentencing Council and the Magistrates' Association to introduce sentencing guidelines for the judiciary and training for magistrates in relation to wildlife crime offences'.

Burdens of inspection

The focus on enforcement of species protection is on the detection of criminal activity and enforcement of sanctions. The issue of regulatory burden is, therefore, less relevant as it does not generally involve routine inspection of activities that might be compliant and, therefore, feel subject to a burden, except for some inspections of species licences issued by Natural England. Natural England has sought to address regulatory burdens through its 'Regulatory Improvement Programme'. However, overall, regulatory burden is not effectively an issue in this area.

Conclusions

There are some important good practices in the UK, centred around partnership working. However, reviews of wildlife enforcement have shown significant issues with:

- Reporting and recording of crime incidents – not only an issue of transparency, but also affecting the development of strategies to address crime.
- Long-term funding of organizations affecting their capacity to function.
- Fragmented legislative framework, although this has been subject to review and recommendations for a new legal framework have been proposed.
- Despite the partnership arrangements, the institutional framework is probably too diverse.
- While some trends in offences, e.g. disturbing birds' nests, have shown significant declines, there are serious concerns over the effectiveness of enforcement as a whole.

Finally, an interesting conclusion on wildlife crime in the UK was made by the Chair of the Environmental Audit Committee in 2012 who stated 'Wildlife protection law in the UK is in a mess after being patched up too many times in an effort to keep pace with offending. The law needs to be consolidated and the courts need to be given sentencing guidelines. The Government's good intentions on wildlife crime are being undermined by tangled administrative arrangements and a lack of coherent long-term planning. The Government need to back up the police on the front-line against wildlife crime. We are not recommending that they spend more money; we are recommending that they give specialist wildlife police more long-term funding certainty, so that the police can avoid a hand-to-mouth existence and the splintered arrangements which hamper efforts on the ground.'

11.7 UK: CITES

Introduction

This case study examines the UK enforcement system for CITES. The Regulation focuses on trade in endangered species and, therefore, the systems and institutions in place are largely UK-wide rather than the competence of the devolved administrations. Thus this case study is a UK-wide report.

Legislative framework

The Endangered Species (Import and Export) Act 1976 was the first piece of legislation to implement CITES in the UK. It has been substantially amended and is now largely superseded by the EU Regulations. The Control of Trade in Endangered Species (Enforcement) Regulations 1997 (COTES) now enforce the EU Regulations. This is further supported by the Customs and Excise Management Act 1979 (CEMA).

Under the legislation the UK Border Agency (i.e. customs) (UKBA) has powers to control illegal movements of CITES protected species. The UKBA is responsible for enforcing import and export controls at the UK Border. The UKBA has no enforcement role to play in controlling the movement of species or their parts and derivatives between MS. Any controls on movement of specimens within the EU are enforced by the police under domestic UK law.

Police powers include specific provisions made in legislation such as COTES and also the Wildlife and Countryside Act 1981, as well as through other, wider legislation such as the Proceeds of Crime Act 2002, the Serious Organised Crime and Police Act 2005, the Fraud Act 2006 and the Theft Act 1968.

In the UK CITES fraudsters and smugglers risk up to seven years' imprisonment and/or an unlimited fine.

The UK legislation provides a range of enforcement powers to different bodies, but there are limitations and problems with this⁵⁶⁶. For example, COTES Regulation 5 provides the UK Border Agency (UKBA) with the power to seize items it believes to have been imported unlawfully and to require the owner to show evidence of lawful importation. However, if the police find a similar issue, they do not have a similar power and must rely on UKBA to agree to use its powers, when informed of the problem. Furthermore, Wildlife Inspectors of the Animal Health and Veterinary Laboratory Agency Wildlife Inspectorate have powers under COTES Regulation 9(4) to enter any premises to conduct an inspection, but the police can do so only if they suspect that an offence has been committed and they have obtained a search warrant. Note that for species measures, the Wildlife and Countryside Act 1981 does allow the police to enter any land that is not a dwelling without a search warrant.

⁵⁶⁶ Environmental Investigation Agency. Written evidence submitted to the Environmental Audit Committee. 2012.

There are, therefore, limitations on the powers of the police, which restricts their enforcement powers and which may require additional support from other authorities, resulting in delay, duplication, unnecessary use of resources or, if this is not possible, failure to detect or enforce the law.

COTES Regulation 9(3) requires that a vet be present where samples are taken in CITES cases. However, this requirement is for all samples, including plant material. This is an unnecessary waste of resources.

Concerns have also been raised that UK Regulations do not include sanctions for non-compliance covering the sale of caviar.

Institutional framework

The UK institutional framework for implementation of CITES is based around a management authority, scientific support authorities and enforcement authorities.

The UK CITES Management Authority which includes a Defra policy team. This acts as a liaison internationally (including within the EU) and provides overarching policy on implementation at UK level. Defra also includes a CITES licensing team (within Defra's Animal Health agency) which issues import and export permits and other CITES certificates.

There are two CITES Scientific Authorities which advise the Management Authority on scientific issues including an assessment of whether the proposed trade might have a harmful effect on the conservation of the species in the wild. These are the Joint Nature Conservation Committee (JNCC), for animal species, and the Royal Botanic Gardens, Kew, for plant species.

The UK Enforcement Authorities are the UK Border Agency (UKBA), at ports and airports, and the Police (internally within the UK). Their function is to enforce the CITES regulations and work with, or draw support from, the UK Management and Scientific Authorities.

The UK Border Agency (UKBA) has a dedicated CITES team based at Heathrow Airport which has a UK-wide responsibility for enforcement of the endangered species laws at ports and airports. It has a network of specialist officers called Customs Wildlife and Endangered Species Officers.

UKBA has an operational policy concerning CITES implementation⁵⁶⁷. This states that the main responsibilities of the UKBA are to:

- Maintain and develop the existing enforcement policy framework;
- Evaluate the border enforcement implications of changes to the EU or UK CITES legislation;

⁵⁶⁷ Border Force Operations Manual Customs Guidance Endangered Species- CITES

- Work with Defra and other corporate partners to address arising legislative issues and to confirm illegal trade risks and enforcement priorities to be taken into account in the delivery of agency border controls;
- Promote the effectiveness of the controls by working closely with operational border control officers;
- Represent the agency at CITES national and international meetings;
- Provide up to date guidance on enforcement of CITES customs controls
- Ensure seizure statistics are produced on time for use in UK and international reports
- Provide agency CITES policy input into Parliamentary and other official correspondence; and
- Prepare briefing for the media and other agencies on the agency's role in enforcing CITES controls.

The Heathrow CITES Enforcement Team's main responsibilities are to:

- Profile and target shipments of controlled species, their parts and derivatives that may not have a permit;
- Arrange disposal and re-homing of seized live animals in line with the UK's conservation aims and principles, through their contacts with most of the UK's zoos, wildlife parks and other specialist groups and individuals;
- Maintain links with Animal Health by having a direct link with their computer system (UNICORN), which records all licence applications received by them, and by discussing operational problems with them;
- Liaise with the JNCC and Kew over species identification; and
- Provide advice to border force officers around the country who experience problems when dealing with controlled goods, and to provide them with practical assistance in areas such as Training, identification, investigations, the retrieval of live animals and public relations/media work.

The operational policy also sets out the operational objectives of the scientific authorities. For Kew these are:

- Advising Defra on scientific matters relating to the conservation of endangered plants and their derivatives,
- Advising the Government on the conservation of CITES flora, and carrying out scientific and educational research;
- Providing experts to examine specified imports of flora or their derivatives such as timber; and
- Undertaking temporary homing and assisting in the eventual disposal or re-homing of plant and timber seizures.

For the JNCC these are:

- Advising the Government on the conservation of CITES fauna, and carrying out scientific and educational research;
- Providing experts to examine specified imports of fauna or their derivatives; and

- Helping the agency to assess the appropriate re-homing or disposal options for seizures in line with conservation aims and principles.

Wildlife crime within the UK is undertaken by the regional police forces' Police Wildlife Crime Officer's (PWCOs). In London, the Metropolitan Police has a dedicated Wildlife Crime Unit and a National Wildlife Crime Unit (NWCU) has also been set up (joint-funded by the Home Office and Defra) to coordinate intelligence in order to target enforcement efforts at particular areas of wildlife crime. This role on wildlife crime by individual police forces and the NWCU includes CITES, but also includes species protection. More detail is, therefore, provided in the case study on species protection.

In its 2012 inquiry into wildlife crime, the Environmental Audit Committee received considerable support for the NWCU from a range of different witnesses⁵⁶⁸. The Committee noted that its 2004 report criticised the predecessor organisation to the NWCU for 'expending time and resources on developing intelligence packages for police forces who have no intention of devoting any real resources to the crimes themselves'. In contrast it stated that 'This criticism could not be levelled at the NWCU, which has forged effective working relationships with UK police forces and other national and international enforcement bodies. Recent successful enforcement actions in which it played a key role included ... Operation Ramp, which was an international operation involving 51 countries against the illegal trade in reptiles, in addition to multi-police force operations to tackle poaching and many other operations.'

In addition the UK has established the Partnership for Action Against Wildlife Crime (PAW) which created a forum for government and non-governmental organisations to work together with a common aim of promoting the enforcement of all wildlife conservation legislation in the UK (including CITES-related legislation). More detail is, therefore, provided in the case study on species protection.

Defra's Animal Health and Veterinary Laboratories Agency (AHVLA) Compliance Team, authorises a team of wildlife inspectors. These are a panel of part-time, fee-paid, home based Inspectors located throughout the UK. The role of Wildlife Inspectors is to undertake inspections of customers/stakeholders involved commercially with CITES species and to support law enforcement agencies. These inspectors are recruited mainly for their expertise in species identification. Wildlife inspectors have powers of entry to perform inspections. They also provide specialist assistance in identification of species in support of the Police and UKBA. The Wildlife Inspectors have a code of practice⁵⁶⁹, which details issues such as reporting (see below). The following box provides a copy of the statement of service provided in the code of practice.

Box: Wildlife inspectors' statement of service

Wildlife Inspectors are committed to giving you the best service it can by:

⁵⁶⁸ Environmental Audit Committee inquiry into Wildlife Crime. October 2012.

⁵⁶⁹ Wildlife Inspectors – Code of Practice and Statement of Service

Acting fairly and impartially

We will treat your affairs in strict confidence, within the law; ensure all our activities fall within our legislative remit; be objective.

Communicating effectively with you

We aim to provide accurate and relevant information when communicating with you.

Providing good quality service

We aim to handle your affairs promptly and accurately; be accessible; keep your costs to a minimum; help customers with special needs; be courteous and professional; continually improve our service.

Taking responsibility for our service

We will publish this document; consider your comments and complaints and; monitor our own performance. If you are unhappy with the conduct of a Wildlife Inspector or the Compliance Team, you should in the first instance contact the Chief Wildlife Inspector. If you are dissatisfied with his response, you can refer the matter to the Head of Customer and Stakeholder Services. Following this you may contact your local Member of Parliament and ask for your complaint to be referred to the Parliamentary Ombudsman. [contact details provided] The Compliance Team at AHVLA's offices in Bristol are available during normal office hours to answer questions or to provide specific advice, guidance and support to Wildlife Inspectors and keepers/traders via telephone, facsimile transmission or e-mail.

In considering the institutional framework, it is important to stress the role of NGOs in supporting CITES implementation. NGOs such as TRAFFIC contribute significant resources to supporting enforcement, including being members of particular operational priority initiatives (see below). Some NGOs, such as the RSPB, focus efforts on particular types of controlled species.

The UKBA CITES Enforcement Team states that may seek outside assistance from museums, universities, conservation groups and zoos which have the necessary expertise. NGOs such as WWF, TRAFFIC, RSPB and RSPCA also provide support, for example in assisting in rehoming seized live animals.

Enforcement policy and awareness raising

In June 2011 the Government published "The Natural Choice" a White Paper on the natural environment. It gives the following commitment:

"Recognising the environmental and economic damage that wildlife trafficking can cause domestically and internationally, and its links to other serious international crime, we will continue to play a leading role in tackling wildlife crime at home and on the international stage. We will work with CITES and related programmes, as well as with INTERPOL and EUROPOL and other national enforcement agencies, to share our expertise and strengthen international capability and resolve to combat the threat. We will ensure co-operation across government departments, within the proposed National Crime Agency structure and its Border Police Command, to share resources and expertise. Following the announcement

of our continued financial support for the National Wildlife Crime Unit, we will ensure that it plays an active role on the international stage as well as at home.”

This strategic statement was further supported in August 2011 by the Governments biodiversity strategy: “Biodiversity 2020: A strategy for England’s wildlife and ecosystem services”, which stated “We will reduce wildlife crime by working through the Partnership for Action Against Wildlife Crime (PAW) and by contributing to funding for the National Wildlife Crime Unit for a further two years, from 1 April 2011. We have confirmed new UK wildlife crime priorities for them to target over this period.”

The CITES Priority Delivery Group sets out the priorities for CITES enforcement and is made up of representatives of the police, the head of the National Wildlife Crime Unit, UKBA and Defra. Its objectives are:

- Increasing the amount of targeted compliance activity.
- Increasing the number of intelligence submissions and products.
- Improving the quality of analytical assessments.
- Increase the number of enforcement outcomes.

All the priorities are in line with the national intelligence model so that there must be intelligence to suggest that there is a problem before enforcement action is planned. There are currently four operational CITES priorities: the illicit trade in ivory; reptiles, with a particular focus on tortoises; the illegal trade in raptors; and all forms of traditional medicines, including the use of rhino horn.

For each operational priority there is an enforcement plan. This is based on enforcement action, on education and then compliance checking. Thus ivory is a relatively recent priority which began with a threat assessment and has moved to enforcement action focused on the trade in ivory on the internet. This has already resulted in a number of cases, including some referred to other MS. In contrast the priority on reptiles, Operation Ramp, is concluding as after a period of enforcement activity, traders in the UK are now largely compliant. In this example, the focus on this area of concern has clearly been effective.

There is a large amount of awareness raising activity to support enforcement. Some of this is undertaken by the governmental authorities (UKBA and police) and some by NGOs. Some of the awareness raising activity is targeted at the public, for example:

- Press releases/conferences/media (coverage on TV, etc.).
- Brochures, leaflets, e.g. information on CITES is included in the general information leaflet on banned goods at UK passenger terminals.
- Presentations, e.g. police wildlife crime officers give regular talks to members of the public, presentations to museums.
- Displays, e.g. at museums, ports, airports.
- Telephone hotlines to report concerns.

However, considerable effort is given to awareness raising to those who may be affected by enforcement action, e.g. traders and shop keepers. Indeed, awareness raising is an integral part of an enforcement campaign. For example, alongside inspections and enforcement in work on reptiles and also on traditional Chinese medicine, considerable effort has been given to help traders and shop keepers to understand the issues involved, emphasising their self-interest in compliance.

Inspection planning and process and use of sanctions

All inspections are generated, monitored and controlled by the Compliance Team within an overall risk-based inspection strategy. For example, all UKBA customs examinations of CITES derivatives or live animals are conducted using a risk based system from low to high. In addition UKBA are able to set profiles on a computerised entry clearance system, to automatically select or identify shipments being imported from third countries that are worthy of examination or require document validation, i.e. CITES permits.

The UKBA seizure action policy states that normally, where imports or exports of CITES specimens are without the necessary permits and/or notifications they should be seized. If the importer is present, they should be issued with the standard documentation explaining their right of appeal under CEMA. If not the importer should be sent a Notice of Seizure. If live animals are involved, the CITES Enforcement Team must be contacted, who will arrange to house live animals requiring quarantine either locally or at the Animal Reception Centre (ARC) at Heathrow Airport.

While significant penalties are available for CITES offences, there is significant concern that this are not proportionate to the offences committed and do not act as a sufficient deterrent given the financial benefits of criminal activity. The Environmental Investigation Agency, for example, highlighted the following examples of where convictions resulted in fines far lower than the value of the offence⁵⁷⁰:

- Trevor Lay sold lemurs to the value of £20,000—at court he was fined £1,500 and £950 costs;
- Brynn McDonagh imported £26,000 worth of birds of prey from South Africa to sell on, and received a suspended sentence and £1,000 costs;
- David Brett had Indian Star Tortoises sent to him in the post to the value of £8000 and was given a suspended sentence and £360 costs;
- Heng Low sold arowana fish to the value of £10,000, and was fined £2,000 with £800 costs at court;
- the Renaissance company had £353,000 worth of illegal shahtoosh shawls in stock, and was fined £1,500 at court.

⁵⁷⁰ Environmental Investigation Agency. Written evidence submitted to the Environmental Audit Committee. 2012.

Thus the EIA argued that ‘there is a need to ensure tougher penalties and custodial sentences are addressed consistently throughout the UK and that the penalties available for wildlife crime offences are used to their fullest when such a deterrent is needed’. It considers that while the legislative framework in the UK is sufficient, it is ineffective due to the sanctions imposed. One reason for this is the ‘lack of awareness of the impacts of wildlife crimes on behalf of prosecutors and the judiciary, but also because the judiciary must judge the criminal’s ability to pay a fine, and consider reducing sanctions in response to offender mitigation. Because of this, fines become too low to act as an effective deterrent to repeat and future criminals, particularly those who stand to make considerable profit from illegally traded wildlife.’ Thus ‘The fear of a high judicial penalty is not sufficient on its own to deter offending—the potential offender must perceive there is a certainty of detection, arrest, and a clear belief that the authorities will prosecute. This is currently an unlikely scenario in the UK context. The risk to wildlife offenders is minimal, and the rewards are extremely high when balanced against the chance of getting caught or the likely penalty that would be imposed.’

With regard to inspections from Wildlife Inspectors, those inspected ‘are encouraged to contact AHVLA if they have comments or concerns about any aspect of the inspection process, or if the conduct of the Inspector is considered to fall short of the high professional standards expected’. In the first instance, the Chief Wildlife Inspector will investigate all complaints involving the conduct of Wildlife Inspectors and/or the activities of the Wildlife Inspectors in general.

Inspection capacity

According to the last UK CITES report⁵⁷¹, within the Defra CITES policy team there are 7.5 staff and in the AHVLA Wildlife Licensing and Registration Service there are 30 staff, 22 of which are inspectors. Overall they spend about 85% of their time on CITES work.

The JNCC has five members of staff in total who work on CITES related work, ranging in time inputs from 30-100%. Kew has four staff members working on CITES, two providing 75% input and two providing 50% input.

The staff capacity of the enforcement authorities is difficult to judge and is changing. For example, customs staff are involved in other duties and concern was raised that vacancies with the Heathrow CITES team are not being back filled. Furthermore, within the police forces, officers are involved in other duties, including other wildlife crime issues.

The London Metropolitan Police Service Wildlife Crime Unit has developed an innovative partnership funding arrangement with the World Society for the Protection of Animals (WSPA). In 2011, WSPA provided £100,000 to increase the strength of the unit by one police officer and one member of police staff. Thus such partnerships can directly support the capacity of enforcement institutions.

⁵⁷¹ UK CITES Report 2011.

The NWCU is funded by a combination of Defra, the Home Office, ACPO, ACPO Scotland, the Scottish Government and the Northern Ireland Environment Agency. However, the funding is modest. Defra and the Home Office each contributed £144,000 in 2011-12 and £136,000 in 2012-13. Furthermore funding is agreed no more than two years ahead. As a result the head of the NWCU spends time seeking to secure funding ahead.

The Environmental Audit Committee's 2012 criticism of the funding of NWCU is described in the UK species case study. As a result the Committee recommended that 'the Government reinforces the success of the National Wildlife Crime Unit by implementing long-term funding arrangements to allow it to plan for being even more effective in the future, including enhanced long-term funding to enable it effectively to monitor wildlife crime on the internet'.

Furthermore, the Committee concluded that 'partnerships between the police and NGOs can effectively increase funding for wildlife crime enforcement, and the Home Office should encourage all police forces to consider implementing them. This model might usefully be extended to fund other facets of wildlife crime enforcement, such as the NWCU'.

The specialist skills needed for enforcement are well recognised. The skills of the scientific authorities include botany, ecology, fisheries, forestry, welfare and zoology. Those of the JNCC include sustainable use and production systems and those of Kew include capacity building, artificial propagation, plant trade issues, sustainable use, taxonomy and nomenclature expertise, horticulture, wood anatomy and DNA techniques.

For the enforcement authorities, their basic training (customs or police) provides them with the skills for investigation and seizure. However, they require additional training to be able to understand CITES/wildlife issues specifically. Two wildlife crime foundation courses are run each year for Police officers, which include CITES and EU WTR's, training is provided by a number of agencies including the police, UKBA, AHVLA, JNCC and Kew. At least two week long CITES enforcement courses are run each year by UKBA with students from UKBA and UK police forces. UKBA also run numerous CITES awareness seminars as part of UKBA enforcement officer's basic training and refresher courses for more experienced officers. PAW arranges an annual court training day for police and the crown prosecution service.

Box: examples of training by CITES authorities (from the 2011 UK CITES report)

UK Management Authority and Kew:

- Training was provided by WCMC to the UK MA and RBG Kew on the use of the UNEP-WCMC species database in 2010.

Kew attended the following capacity building events:

- The Central Point of Expertise on Timber (CPET –Timber procurement) at Chatham House,
- Illegal Logging Stakeholder meetings,
- EDIT meeting (Spain),

- Fairwild workshops (Vilm, Germany)

Enforcement authorities:

- UKBA received training from a caviar trader and also on timber recognition from Chichester University.
- Staff of Scientific Authority as part of the UK/China sustainable development dialogue (SDD).
- Chinese MA and SA and enforcement agencies visited the UK (UKMA, UKSAs and enforcement officials) to exchange ideas on best practice for CITES implementation and enforcement. A reciprocal visit was made to China by UK enforcement later in 2010.

Inter-institutional arrangements

At the UK level, there is strong inter-institutional working, as described above in the institutional framework, with joint strategies, priority setting and joint operational programmes.

UK CITES authorities also work closely with other MS and with third countries. This includes intelligence sharing, support for training, workshops, joint operations, etc. Recent examples include:

- NWCU provided analytical support at a tortoise trade workshop in January 2009.
- NWCU involved in a joint operation with Belgium, Spain and the Netherlands.
- UK participation in Operations Ramp and Tram (reptiles and TCMs).
- China and Belgium: seized ivory products and controlled deliveries.
- USA: considerable dialogue concerning permit validity and legislation.
- France: exchange of information concerning agarwood and ivory seizures.
- Netherlands: Joint operation on export of ivory and seizure of live clams.
- EU: all interesting seizures disseminated via EU TWIX alerts.
- Czech Republic: intelligence exchange regarding seized reptiles.
- Nicaragua: intelligence exchange regarding seized reptiles.
- Switzerland: intelligence exchange on traders.

Inspection review and reporting

There is a considerable amount of information collected on CITES enforcement action. For example, for the year 2010–2011 the UKBA seized over 42,000 items coming into the UK. However, there are some issues with recording and availability of data.

CITES offences are a notifiable wildlife crime and are therefore reported to the Home Office for statistical purposes. However, the Home Office has not allocated such offences a specific code, and they are recorded under the general Home Office code '999/99 Other crime or

record only entry not catered for elsewhere'. Therefore, the data collected are not useable. As a result the Environmental Audit Committee recommended that the Home Office should immediately allocate notifiable CITES offences a specific wildlife crime code, in order to provide useful statistics on CITES offences.

The Environmental Investigation Agency, for example, in 2012 submitted a freedom of information request to the Home Office for details of COTES and CEMA convictions, but no response had been received so it was not been possible to make a judgement on whether the Home Office records are an accurate representation of the cases that have taken place.

The Wildlife Inspectors' code of practice (see above) details their reporting obligations. Wildlife Inspectors will make written records in their Notebooks of each and every inspection they carry out, either during the visit itself, or immediately thereafter. An Inspection Report form issued by AHVLA must also be completed during the inspection and the original returned to the Compliance Team as soon as possible after the inspection has been completed.

Review of enforcement action is clearly undertaken, examining effectiveness and guiding future decision making. Furthermore, there is close scrutiny of authorities by NGOs such as TRAFFIC, which are quick to highlight improvements that could be made.

The CITES priority group, in setting priorities for enforcement action, reviews the effectiveness of current priority action. For example, the effectiveness of the current priority enforcement action on reptiles means that this priority is ending. Review is an inherent part of an intelligence-led approach – intelligence is the necessary condition to initiate enforcement action and intelligence allows for understanding of the effectiveness of that action and whether it should continue.

The UK National Wildlife Crime Unit (NWCU) undertakes an annual wildlife crime Strategic Assessment which assesses and describes the current threats posed by criminals involved in all types of wildlife crime. Once wildlife crime priorities have been agreed annual operation plans are drawn up to tackle each priority. The illegal trade in CITES species was identified as a UK wildlife priority in 2009 and 2010.

It is important that reviews of inspection activity examine the wider context of CITES issues and the enforcement process. The Box below provides an example of this. A further example concerns caviar, a number of Wildlife Inspectorate visits that were carried during 2009 and 2010, assessed that compliance levels amongst the major traders is actually quite high. This is reflected in the fact that National Wildlife Crime Unit received very low levels of intelligence about non-compliance. Furthermore, trade associations responded by expressing support. This illustrates the importance of review assessing issues such as the effectiveness of intelligence received and the relationship with stakeholders.

Box: Example of review of inspection findings

Operation TRAM involved the inspection of 30 traditional medicine wholesalers and outlets with the aim of intelligence gather and check compliance as part of the Interpol coordinated

initiative (Dec 2009 – March 2010). An assessment of these inspections was conducted in September 2010. The inspections were aimed at identifying the scale of illegal trade and patterns found that there was a low level criminality involved by individuals smuggling (either in person or by post) small quantities of CITES products. However there did appear to be larger scale organised smuggling by importers mislabelling products or concealing them amongst legal products. Overall the following points were found from the inspections:

- Most premises had some form of CITES products on show.
- Of those found, most were plant based.
- All traders knew that animal products were not allowed.
- Some did not understand that animal products included products such as seahorse.
- Most did not know that there were protected plants.
- Most assumed that if it came from a wholesaler it must be legal.
- Certain products were found showing no CITES ingredients where previous products of the same name had done so.
- Most traders stated that if this was the case the ingredients must have changed.
- Most of the animal products found were personally smuggled in small quantities.

Effectiveness of the inspection system

The UK has a number of best practice aspects in the implementation of CITES, including:

- The intelligence-led approach which focuses resources of enforcement on areas of most concern to meeting the objectives of the Regulation. Given resource limitations this approach seeks to maximum return for governmental spending.
- The dedicated Heathrow CITES team supporting the UKBA across the UK is a major benefit, bringing together expertise not only to support individual enforcement action, but also to use that experience to prioritize future actions.
- Strong working relationships with NGOs, which are involved in developing strategic priorities, contributing to operational programmes and detecting crime.
- The use of targeted programmes, such as on ivory and reptiles, linking enforcement, awareness raising and review of effectiveness.
- There is good specialist knowledge within the enforcement and support bodies as a whole and processes to bring this knowledge to bear.
- There are significant sanctions available in law.

However, there are problems noted with implementation of CITES in the UK, including:

- Constraints on government funding, leading to concerns over the capacity of the CITES team and long-term funding of the NCWU.
- Issues with the recording of crime (see above).
- The application of sanctions by the courts is weak and for some is not likely to act as a deterrent.

Assessing the effectiveness of the detection of the extent of illegal activity can be difficult. However, it is worth noting the comments made by the UKBA in giving evidence to the Environmental Audit Committee. When asked about the extent to which illegal shipments are detected, it was stated 'We do not have any estimates of the extent of deliberate smuggling. People do not report that they have got away with it. [...] The sense I have is that anything that is getting through—that is, if you like, beating our controls—is very small. Part of the reason for saying that is our confidence in the relationships we have with the NWCU and the intelligence framework. I think this works very well.' However, the UKBA made clear that it was acting as an authority to control imports to the borders of the EU and, therefore, the effectiveness of controls in other MS was also important in determining the extent of import of controlled items to the UK. Indeed, the power to seize goods in the UK that were previously illegally imported into another MS are rarely used.

In the enforcement focus on reptiles (see above), Operation Ramp, there has been a concerted effort on enforcement. As a result traders in the UK are now largely compliant. In this example, the focus on this area of concern has clearly been effective. In another example, Operation Charm, an initiative led by the Metropolitan Police Wildlife Crime Unit and involving NGOs, has seized more than 30,000 endangered species items since 1995. More specifically, in London there was the world's largest seizure of rhino horn and, at the time, the world's largest seizure of shahtoosh. There have been many seizures of worked ivory.

The UKBA also considers that its public awareness work has had positive outcomes. For example, regarding the traditional Chinese medicine market there has been a significant effect, so that in London there has been a marked reduction in the presence of endangered species in traditional medicines.

According to TRAFFIC between October 1987 and May 2003 there were a total of 93 cases heard that resulted in a conviction. Since May 2003 a further 55 cases have been recorded - 60% related to birds, 20% to parts and derivatives, 17% to amphibians and reptiles and 3% to plants. The higher proportion of bird cases is partly due to the supporting efforts of the RSPB. Customs prosecuted 30% of the cases, with the Crown Prosecution Service (for the Police) prosecuting 70% of the cases. There has also been increased use of other legislation to support prosecution, such as on fraud and proceeds of crime. However, while this is positive news on the use of sanctions, concerns over the effectiveness of the sanctions applied in the courts (see earlier) threatens the effectiveness of the enforcement system as a whole.

Costs of inspection

There is no information about the costs of routine inspections, e.g. customs inspections or Wildlife Inspectors' visits to traders. It is, therefore, not possible to determine how far these are a burden. No financial charges are made.

The TRAFFIC Study on the Effectiveness of the EC Wildlife Trade Regulations, submitted to the EC in December 2007, concluded that there would be a number of benefits in applying stricter measures. However, the UK was concerned that these recommendations did not

include a detailed cost/benefit analysis of the obligations or whether the cost to Member States' authorities of implementing them is the most efficient use of resources. Thus it commissioned a study from Eftec. This concluded whilst there did not appear to be any short-term cost effective alternatives to the stricter measures, modifications to the regulatory framework could improve its cost-effectiveness, and possible alternative approaches were suggested which may be effective and reduce the costs arising from the stricter measures in the long-term, and thus warrant further exploration.

Conclusions

In conclusion, the UK has a legal and policy framework in which problems and risks of non-compliance related to CITES are identified, including the role of inspections and related controls. There is also extensive targeted information and awareness-raising efforts directed to the general public, traders and others relevant to the implementation of CITES.

The UKBA operates a risk-based approach to all of its work and there are routine and non-routine inspections, including particular campaigns, in-country using police forces, backed-up by specialist expert advice. The Heathrow CITES team is a good practice example, leading efforts across the country.

There is strong co-operation between authorities, with formal co-ordinating mechanisms and collaboration informally, such as joint training. The UK authorities also collaborate with other MS and third countries on CITES, including joint investigations. There is a system for care of seized specimens and, where possible, restoration.

The UK legislation contains a range of significant custodial and financial penalties for offences related to implementation of CITES. However, there is serious concern that the penalties imposed by the courts are small compared to the monetary value of the criminal activity and, therefore, are not dissuasive. Some consider that lack of awareness of the seriousness of the offence by the judiciary is a reason for the application of low penalties.

There is strong awareness raising and efforts on transparency, but while there is effort to report on the numbers of inspections, seizures, penalties, etc., there are problems with the recording of these data, so that there are recommendations for major improvements in this area.