Verifiable standards and public private cooperation in standard setting and enforcement

Seminar report 'Cross compliance in the EU'

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Utrecht, December 2003

CLM 586-2003

Preface____

We would like to thank the members of the Concerted Action and participants who contributed with the collection of background materials to this report:

- Vicki Swales and Harriet Bennett, IEEP, United Kingdom
- Bernhard Osterburg and Heike Nitsch, FAL, Germany
- Lone Kristensen and Jorgen Primdahl, KVL, Denmark
- Romualdas Zemeckis, Institute of Agrarian Economics, Lithuania
- Lenka Camrova, IREAS, Czech Republic
- Abraham Hofhanzl, Ministry of Environment, Czech republic
- Estelle Godart, Ministry of Agriculture, food, fisheries and rural affairs,
 France

Moreover we would like to thank those participants who provided a presentation during the seminar (others than those already mentioned):

- Carlo Malavolta, Regione Emilia-Romagna, Italy
- Andrea Povellato, INEA, Italy
- Frédéric Malterre, Ministry of Agriculture, food, fisheries and rural affairs, France
- George Michalopoulos, Rodax Agro, Greece
- Helle Skjold, Arla Foods, Denmark
- Cindy van den Boom, Milieukeur, the Netherlands
- Hans Brand, Ministry of Agriculture, Nature and Food Quality, the Netherlands

Finally we would like to thank our colleagues Peter Leendertse and Leentje den Boer for providing useful experiences in the Netherlands to complement the analysis presented in this report.

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Summary___

This report is based on a pan-European seminar in Ilpendam, the Netherlands, that was held in September 2003, with additional input from CLM. The seminar was the second of a series of six seminars on cross compliance, funded by DG Research of the European Commission through the Fifth Framework Research Programme.

Member States are obliged to implement cross compliance during 2005. As a result Member States are currently formulating cross-compliance standards and preparing for inspection of farms to be increased to ensure that selected EU legislation (Annex III) and additional national norms (Annex IV) are enforced. In this context, policy makers, academics, environmental NGOs and farmers' groups realise that some important lessons can be learned from private certification schemes. The Ilpendam seminar provided an opportunity for these stakeholders to exchange information and experience on the:

- development and enforcement of verifiable standards in the private sector;
 and
- opportunities and threats for public-private co-operation on standard setting and enforcement.

Why is it important to look at private sector initiatives?

Private certification and assurance schemes are expanding and attracting increasing market shares. Schemes have been developed for different markets: regional, national, European and global. Governments, agricultural organisations, food processing industries and retailers are involved in the development of the schemes. For example the 'Euro Retailer Produce Working Group' (EUREPGAP¹) is being developed by a group of leading retailers in the food market in the EU. Most schemes are product-based but there are also schemes based on a whole-farm approach. Most of the schemes include standards on environmental issues such as soil management, crop nutrition and crop protection. Some private sector schemes have been running for many years.

What can be learned from private certification and assurance schemes?

The first question is how experiences gained from private certification and assurance schemes can help in the development of cross compliance in the European Union. Lessons can be learned from the verifiable standards themselves, from the way verifiable standards are developed, how they are controlled and how the private sector works with farm advice, inspection and sanctions. In an annex two tables are presented, one with verifiable standards on soil management and crop nutrition and one with standards on crop protection.

Standard development in the private sector is based on criteria such as statutory standards, available inspection staff and controllability. Often all relevant stakeholders are involved in the decision making process.

With regard to control procedures the 'internal farm audit' may be a particularly interesting option for statutory cross compliance. The private sector has been developing 'internal farm audits' as a basis for compliance with standards. The inter-

¹ For more information see www.eurep.org.

nal farm audit is a checklist of verifiable standards that farmers have to comply with and are required to fill in before an inspector visits the farm. An 'internal farm audit' could also be used for risk assessment.

Private schemes often work with instruction manuals to increase the level of understanding of the farmers. Most private systems work with sanctions such as warnings and loss of the certificate (temporarily or definite). Some schemes base loss of the certificate on surpassing a ceiling of penalty points. The system of penalty points may be useful for the design of sanctions applied in the case of noncompliance with statutory standards.

Many other lessons that can be drawn about private certification schemes are available from national councils for accreditation, but certification organisations can also be contacted directly for information.

Opportunities for public-private co-operation

We start with the present state of co-operation, we present a vision of models for future co-operation and finally present opportunities for further co-operation.

At present, co-operation between the public and the private sector exists only in terms of the relationship between private sector standards and public law, and various types of co-operation with public bodies. Most private schemes are based on legal standards and include additional private standards beyond legislation. The additional private standards provide a distinctive quality in the market and often include obligations and recommendations.

Private certification schemes co-operate with public bodies in different ways. For example, by requiring advice from public bodies or having representatives from public bodies in an advisory committee or board. In case the certification scheme wishes to be recognised by the state it has to co-operate with a national accreditation council that judges the trustworthiness of certification systems, which are often based on EN 45011². It should be noted that not all private assurance schemes are officially accredited. There are also forms of financial co-operation. For instance, public bodies occasionally co-finance the development of some private schemes.

Two models for future co-operation between public and private sector on standard setting and enforcement can be envisaged: co-operation or separation. A co-operation model is likely if private certificates continue to include standards at statutory level and additional private standards. A separation model is likely if private certificates concentrate entirely on standards beyond statutory level. The following figure illustrates the two models.

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 $^{^{2}}$ A set of general requirements for certification bodies. The equivalent rule at international level is Standard ISO 65.

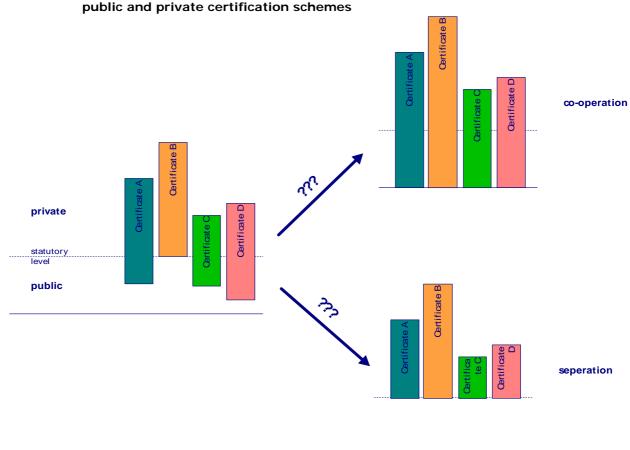


Figure 1 Diagram showing potential co-operation or separation between public and private certification schemes

Source: Hans Brand (pers comm 2003)

Opportunities for further co-operation

The easiest form of public private co-operation on standard setting and enforcement is mutual learning, with the aim to be more efficient and effective in both the public and the private sector. Options for mutual learning are, for example, in the field of development of control procedures (analysis of risk factors, definition of critical issues for inspection, and development of effective inspection methods).

Co-operation could, however, go further, as farmers in certification schemes and dependent on direct income payments (from 'Pillar One' of the Common Agricultural Policy) do not want to risk financial sanctions (public) or damage to the buyers' trust in their private schemes. There is an opportunity for more co-operation on the integration of statutory standards in private schemes and harmonisation of verifiable standards at statutory level. There is also an opportunity for controlling exemptions or reduced control frequency on certified farms in accredited certification schemes.

Areas in need of further investigation

To cope with the increasing diversity of certification and farm assurance schemes it might be useful to establish an EU baseline on integrated farming. The French initiative of 'Agriculture raisonee' can be used as an example of an initiative that could take place at the EU level. Currently the only protected and harmonised assurance scheme in the agricultural sector is organic farming. There is European baseline

legislation for environmental claims (Eco-labels) in the non-food sector. Perhaps $ISO\ 14000^3$ could be used as a baseline for integrated farming in the food sector.

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³ ISO stands for the International Organization for Standardisation, located in Geneva, Switzerland. ISO promotes the development and implementation of voluntary international standards, both for particular products and for environmental management issues. ISO 14000 refers to a series of voluntary standards in the environmental field under development by ISO. Included in the ISO 14000 series are the ISO 14001 EMS Standard and other standards in fields such as environmental auditing, environmental performance evaluation, environmental labelling, and life-cycle assessment. All the ISO standards are developed through a voluntary, consensus-based approach amongst member countries.

1 Introduction_____

This report is based on an international seminar in Ilpendam the Netherlands on verifiable standards and public private cooperation in standard setting and enforcement. The report was further improved by drawing upon the experience of CLM in the field of certification in the Netherlands. The seminar in Ilpendam was part of a Concerted Action financed by the EU and was the second of six seminars on cross compliance as an instrument of agri-environmental policy.

Member States have to implement cross compliance over the next years. This implies that they have to increase inspection of farms to make sure that selected EU legislation (Annex III) and additional national norms (Annex IV) are enforced. In this context policy makers, academics, environmental NGOs and farmers' groups are interested in private certification schemes. The seminar provided a programme for these groups to provide information and exchange experience on:

- Development and enforcement of verifiable standards in the private sector;
- Opportunities and threats for public-private co-operation on standard setting and enforcement.

2 Relevance of private sector schemes____

Why is it important to look at private sector initiatives?⁴

In the context of the introduction of cross compliance linked to EU regulation it is important to take a closer look at the regulation of agricultural production by the private sector. The instruments for the private sector to regulate agricultural production are certification and assurance schemes.

Private schemes cover an increasing part of agricultural production in Europe. For example the Little Red Tractor scheme in the United Kingdom covers between 65% and 90% of output in the main commodity sectors. The Arla Farm scheme that started in October 2003 covers most of the dairy sector in Denmark and Sweden. Danish Crown's Code of practice covers almost all pig producers in Denmark. Qualification Interbew –CNCL covers 50% of cattle farmers in France. MPS covers 5000 growers ornamental flowers and plants worldwide. Benefits for farmers participating in a certification scheme can be to get a better price in the market, to get access to a market (licence to deliver), to learn overall to manage the production process and improve product quality, to get access to a higher market segment, to get a government subsidy and to receive recognition for their efforts in the form of a label⁵.

Private certification schemes have been developed for different markets: regional, national, European and global. Governments, agricultural organisations, food processing industries and retailers are involved in the development of private assurance schemes. For example, EUREPGAP is being developed by a group of leading retailers in the food market in the EU. Most schemes are product-based but there are also schemes based on a whole-farm approach. Most of the schemes include standards on environmental issues such as soil management, crop nutrition and crop protection. The development of cross compliance may benefit from experiences gained with private certification and assurance schemes.

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⁴ Look for more information in Annex 1.

⁵ Many schemes use a label. A label is a standardised image for 'buyers' to recognise the quality guarantee of the certificate.

3 Lessons from private schemes

Governments working towards implementation of cross compliance are interested in the development of:

- unambiguous and verifiable standards that farmers should comply with;
- inspection regimes and clear control points and compliance criteria to be able to prove non-compliance;
- sanctions for non-compliance.

3.1 Verifiable standards

For statutory cross compliance (based on CAP rules) farmers have to comply with unambiguous and verifiable standards. Those standards are developed at Member State level are based on EU statutory requirements and national legislation. Private certification schemes are specialised in developing standards beyond statutory level. In annex 1 tables are provided listing verifiable standards on soil management and crop nutrition and verifiable standards on crop protection.

Verifiable standards are often developed with consideration of the following issues: statutory standards, controllability, Life Cycle Analysis, expected environmental performance, available inspection staff, economic and technical feasibility. Private environmental standards such as, for example, Milieukeur standards in the Netherlands are based on similar criteria.

For private environmental standards a board of experts judge the criteria and reach consensus on the standards. The board of experts usually includes stakeholders such as traders and producers, government, consumers and non-governmental organisations (social and environmental). The standards are revised from time to time. Some schemes revise the standards every year. Other schemes revise the standards after longer time periods or when required.

Communication about the standards is important in private schemes, and is focused on both farmers and consumers. Private schemes often work with instruction manuals to increase the level of understanding amongst farmers, although some schemes go much further. For example, the Leaf (Linking Environment and Farming) Marque demonstrates Integrated Farm Management (IFM) principles through a nationwide network of volunteer Demonstration Farms carrying out IFM and showing other farmers how to adopt it. A programme of visits to each farm goes on throughout the year. These visits are not only for farmers but for anyone interested in how their food is produced. Leaf Marque produced a wide range of technical information on IFM and organises workshops, discussion forums and field days⁶. All these tools were designed to help farmers understand the principles of IFM and how to put it into practice on their own farms. Moreover Leaf Marque has produced a self-help CD ROM, audio cassette and work booklet to help farmers and stakeholders with communication skills and know how to bridge the gap between farming and the public.

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⁶ For more information consult the Leaf Marque website www.leafuk.org.

3.2 Inspection procedures and practices

Governments are interested in clear control points and compliance criteria to be able to prove non-compliance with statutory requirements. The tables listing verifiable standards in annex 1 also include control points and compliance criteria.

Sometimes the control is based on the standard itself but often there is indirect evidence for compliance. Fact-finding is often based on documentation and registrations at farm level.

Documentation can include a range of issues. For example Leaf Marque audit the following documents: farm environmental policy, regularly updated business plan with environmental integration, communication with local community, policy statement of responsibility to end consumer, integrated production and marketing plan, nutrient management plan (NMP), livestock farm waste management plan (integrated with NMP), soil analysis, long-term rotation plan, crop protection policy, written advice from statutory body on recommended pesticide mixing area for the site, procedure and notification process for dealing with spillages of pesticides, evidence of maintenance of crop sprayers, professional advice on pollution control strategies, waste minimalisation exercise, monitoring of quality of ditches and watercourses, maps of drainage schemes for fields and yards, energy efficiency audit, water audit.

Some schemes are developing a 'self audit' as part of the required documentation. The self audit is a checklist of verifiable standards that farmers should comply with. Farmers are required to fill it in before an inspector visits the farm. A self-audit may be an interesting option for statutory cross compliance controlling. If all farms receiving direct payments were required to implement a 'self audit' it could also be used for risk assessment. Some schemes require input-output accounts, for example on nutrient balance (NPK) or environmental impact of pesticide use. This can be seen as a kind of self-audit on environmental performance.

Registrations can include records on for example pesticide purchases, pesticide applications, fertiliser, manure and sludge applications, training records for fertiliser and pesticide application operators, harvest and crop storage, crop rotation, field history, origin of seed materials, water irrigation, origin of veterinary products, nature of animal health treatments.

3.3 Certification procedures and practices

Governments are interested in certification procedures and practices that justify a sanction in the form of a reduction of direct income payment. Generally speaking, private certification and assurance schemes are developed with the aim to put a distinctive quality in the market. The market position depends on trust of the buyers in that distinctive quality. Most schemes are based on certification of individual farms (whole farm approach) or farm products. In Greece the scheme AGRO 2-1 is based on group certification because of the considered advantages with regard to crop rotations, harmonisation of product quality and sufficient marketable size of production volume of a group.

Organisations involved in inspection

Many schemes co-operate with a number of inspection bodies. For example Little Red Tractor co-operates with five inspection services. The scheme Céréales de

France co-operate with formal inspection bodies but combines it with a form of internal control by a group of farmers. The Greek scheme AGRO 2-1 also includes a form of self-auditing within the group of farms complementing formal inspections on a sample of farms. Moreover an agronomist is quality manager for the whole group, and has decision-making power on the production methods applied on the farms. A Greek farmer who does not properly inform the quality manager about the practices he is planning, risks to lose his licence to deliver.

Timing and frequency of controls

Many schemes carry out on the spot checks at all farms every year. Other schemes check the farms every two or three years. Private schemes such as the Little Red Tractor scheme in the UK, Danish Quality scheme, Cereales de France and EUREP-GAP annually inspect 100% of the participating farms. Other schemes apply random samples ranging between 6% (Qualification Interbev-CNCL), 30% (MPS ornamental plants and flowers) and 60% (SISPO integrated system of fruit growing in the Czech Republic). See Annex 1 for more information. The schemes without regular inspections use criteria for on the spot inspection such as at random, risk based on yearly records or extreme data.

Sanctions used in case of non-compliance

Most private systems work with sanctions such as warnings and loss of the certificate (temporarily or permanently). Some schemes base loss of the certificate on surpassing a ceiling of penalty points.

For example the Qualita Controllata (QC) label in Emilia Romagna (Italy) has three levels of sanctions depending on the number and gravity level of non compliance, type of concessionaire and type of product.

- Minor non compliance: simple warning;
- Serious and repeated breach: 6 to 24 months suspension of the use of logo until compliance is shown;
- Breach of sanitary national regulations, fraud, misleading advertising, unauthorized use of the logo, evident obstacle to external control procedures: 2 to 5 years suspension of the use of logo.

Governments have a system to recognise certification schemes: a national accreditation council. Not all private certification and assurance schemes are accredited.

4 Opportunities for public-private cooperation

We start with the present state of co-operation, then we present a vision on models for future co-operation and finally we present opportunities for further co-operation.

4.1 Present state of co-operation

At present, co-operation exists on the relations of private sector standards to public law and in different types of co-operation with public bodies. Most private schemes are based on legal standards and include additional private standards beyond legislation. The additional private standards provide a distinctive quality in the market and often include obligations and recommendations. The private standards are often based on legal standards in other countries, which can be the case with schemes developed to get access to international markets (European or global). The Swedish/Danish scheme Arla Foods is an assurance scheme in the dairy sector developed to satisfy the requirements of different buyers globally. The Danish Quality scheme in the pig sector is developed specifically to comply with UK legislation.

Private certification schemes co-operate with public bodies in different ways. For example, by requiring advice from public bodies or having representatives from public bodies in an advisory structure or board. If the certification scheme wishes to be recognised nationally it has to co-operate with a nationally recognised accreditation body. The national accreditation body approves a certification system on the basis of the written standards (technical standards, inspection procedures, certification rules) and verifies implementation of those standards. Not all private assurance schemes are officially accredited.

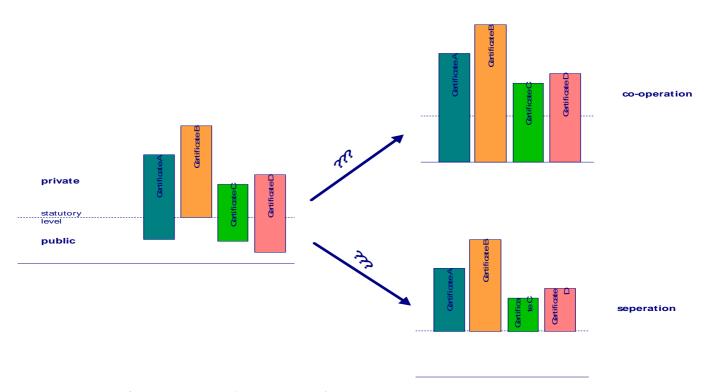
There are also forms of financial co-operation. Public bodies co-finance the development of some private schemes. This happened, for example, with the development of Milieukeur in the Netherlands⁷. Some private schemes qualify for governmental support programmes. This is the case with many organic schemes but also with the scheme 'Cereales de France'.

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⁷ For further information see www.milieukeur.nl.

4.2 Vision for models of future co-operation

Two models of future co-operation between the public and private sector on standard setting and enforcement can be envisaged: co-operation or separation. A co-operation model is likely if private certificates continue to include standards at statutory level and additional private standards. A separation model is likely if private certificates concentrate entirely on standards beyond statutory level. The following figure illustrates the two models.



Source: presentation Hans Brand

4.3 Opportunities for public-private co-operation

In the case the co-operation model will be followed, potential opportunities for more co-operation are:

- eligibility for public funding;
- harmonisation of verifiable standards;
- controlling exemptions;
- co-operation of inspection services (public and private);
- specific standards, beyond legislation, paid by public bodies.

Each of these opportunities will be discussed below.

4.3.1 Eligibility for public funding

With the introduction of obligatory cross compliance from 2005 farmers receiving direct income support (pillar 1) are confronted with new eligibility criteria, i.e. compliance with statutory requirements.

Based on the Regulation 1782/2003 Member States may introduce a special farm advice facility on legal compliance in the rural development programme. Farmers participating in a private certification scheme or farm assurance scheme will be interested to know if the assurance standards exceed statutory requirements or not. In a co-operation model statutory requirements would provide a baseline, so certification and assurance schemes would exceed those requirements. This would help farmers. Governments could push as well for co-operation, for example through the national accreditation body.

4.3.2 Harmonisation of verifiable standards

Farmers would benefit most from harmonisation of verifiable standards, because they would need only one farm audit system for accounting for compliance with standards (public and private). Of course private certification organisations would still require compliance to more standards, but the quality of the harmonised standards would be higher. Unambiguous standards, with clear control points would enable farmers to create their own farm audit, based on registrations. If the farm audit was digitalised a computer could select and print automatic specified reports for public controlling organisations and private certification organisations. This could increase efficiency in inspection and certification. Farmers have a clear interest in lower inspection and certification costs as they pay directly or indirectly.

We consider there to be two main obstacles:

- 1. Other economic interests. There is tension between the benefits of either harmonisation or diversification. Private certification systems are not interested in forms of co-operation with the government that may jeopardise the trust of market players in the distinctive quality of the private system. Inspection bodies and certification organisations as well as consultancy firms in the field of inspection and certification earn a lot of money in the present situation. They may have little interest in harmonisation or increased efficiency in inspection and certification.
- 2. Diversity of certification schemes. This issue should be considered at different scale levels. Firstly, at the national level the question for governments is with whom to co-operate? Governments have difficulties coping with the diversity of (competing) certification schemes, private standards, inspection procedures and so on. France, in particular, has hundreds of private certification and farm assurance schemes. France is the first country to introduce a set of standards and inspection rules as a bottom-line for recognition by and co-operation with the government. It is called 'Agriculture raisonee'. Private schemes below that governmental standard will not taken seriously by the French government. At the seminar it was still unclear how 'Agriculture raisonee' will relate to the implementation of cross compliance by the French government.

Secondly, at the international level the issue for internationally oriented certification organisations is which governmental standards they should take into account. If products are traded internationally, it does not make sense to co-operate with just one country. For instance, the standards of the dairy food processor Arla Foods are based on Danish and Swedish legislation but also take into account standards from buyers worldwide. Retailers with quality assurance schemes have little interest in co-operation with 'single' national governments because they purchase food from a large number of countries and want to buy food at the lowest price.

Thirdly, at the farm level the question for farmers is with whom they want to cooperate. To sell their produce to different buyers they sometimes need to produce the same crop under different standards and certification systems. For farmers, choosing the right certification system becomes a strategic choice to gain a licence to deliver in an increasingly competitive market.

4.3.3 Controlling exemptions

Member states are obliged to develop an enforcement system for cross compliance based on 1% administrative and on the spot inspections. In the Netherlands legal compliance is actually checked on less than 1% of the farms, and this may be the case in other member states as well. Government bodies are looking for ways to use the scarce control capacity more effectively and efficiently. To be most effective, control capacity is focused on intensive farms receiving support payments in the first pillar, with a high risk of non-compliance.

In this context the question arises if there could be controlling exemptions for farms in accredited private schemes. Farms that have been inspected by private inspectors may not need to be inspected again by governmental inspectors. For the public sector this may work under the condition that private systems can provide a guarantee that their participating farmers comply with legal standards.

Can the private sector provide that guarantee, in theory and in practice?

We consider four issues:

- 1. Interest of the private sector to provide such a guarantee. Based on what was said under the heading 'eligibility for public funding' farmers participating in private schemes are likely to be willing to inform the statutory cross compliance inspection body about their participation in private schemes. But of course they need to be convinced themselves that the private scheme ensures legal compliance. In that case they risk nothing and they may gain a reduced inspection frequency or even control exemption. On the other hand, in competitive markets (in which statutory requirements are not always complied with) sharing of information with governmental bodies may not be welcomed by the private sector.
- 2. The frequency of farm inspections. Most farmers participating in private schemes are more often inspected by private inspectors than by public inspection bodies. Many farms are inspected regularly (every one, two or three years).
- 3. The way in which compliance with legal standards is checked. An accredited certification scheme that includes statutory standards as part of the scheme standards should in principle ensure compliance with the whole standard. In practice, this issue is solved in different. In Greece, private certification systems risk losing their accreditation if public inspection bodies prove that private inspection bodies do not properly inspect legal compliance. In the Netherlands the farmers have to declare that they comply with the legal standards, and private inspectors are not required to inspect legal compliance. They focus their inspections on the private standards beyond legislation.
- 4. The sanctions applied in case of non compliance with legal standards. This needs further study. Most private systems work with sanctions such as warnings and loss of the certificate (temporarily or permanently). Some schemes base loss of the certificate on surpassing a ceiling of penalty points. We assume that non-

compliance with legal standards will be included as penalty point in any sanction system.

Based on these four issues, the preliminary conclusion is that the private sector could in theory provide a guarantee that participating farmers comply with legal standards.

But could the private sector perhaps not always provide that guarantee in practice? We consider four issues:

- 1. Privacy legislation. Farmers can authorise private certification bodies to inform governmental bodies about their legal compliance. But without their authorisation, private certification organisations are not allowed to inform governmental bodies about legal compliance or non-compliance. Governmental inspection services need a court order to request inspection files from private inspection bodies, which they will get if there are good reasons for suspicion. Farmers may have various reasons for non-authorisation. In Italy privacy legislation does not protect farmers. The certification bodies are allowed to inform the governmental bodies about legal infractions without any authorisation from the farmers.
- 2. Issues mis-match. Although most private schemes fully cover government legislation, private certification and assurance schemes hardly elaborate further on environmental and animal welfare issues. The central issue in many private schemes is food safety. Private schemes are reluctant to include 'externalities' such environmental and animal welfare norms beyond legislation, as they create additional costs for the farmers who are not compensated by additional income or higher product prices. The point is that the compliance guarantee may be weak if a private scheme does not give much attention to an issue that is of interest for the government (e.g. because it is a cross compliance condition in annex III to Regulation 1782/2003).
- 3. Area mis-match. Most certification systems apply a product approach that does not fully satisfy governments because legislation covers the whole farm and not just certified fields. Governments get no guarantee of legal compliance in non-certified fields.
- 4. Economic interests. If private inspectors were asked to inspect legal compliance alongside inspection of additional private standards, the question is raised who is paying for the legal compliance check. Farmers usually pay for private inspection, but not for government inspection. If the public and the private sector want to cooperate, this issue will need to be negotiated.

4.3.4 Co-operation of inspection services (public and private)

Public inspection bodies may wish to have easier access to inspection reports from individual farmers ordered by private certification schemes, but privacy legislation protects the farmers against this practice and there are further obstacles. We consider three issues:

1. Fundamentally different approach. Public enforcement of statutory standards is based on mistrust of the government with regard to farmers and other parties. Governmental inspection bodies are very much focused on fraud and inspectors are 'detectives'. With this approach, co-operation with the private sector is meant to increase the rate of 'detected fraud'. Private certification is based on trust between involved parties joining the system on a voluntary basis. The inspectors carry out standard inspections with less focus on fraud. Private inspectors do not consider

themselves as 'detectives'. Although there is still reluctance in the private sector to be 'policeman' for statutory standards, the two approaches (cultures) are getting closer to each other. Private schemes get more focused on non-compliance with the increase of risk factors that potentially jeopardise the trustworthiness of the schemes. On the other hand, governmental inspections are increasingly based on data provided by farmers, not all of which are verifiable.

- 2. Dependencies. The certification organisation has formal sanctioning power. The sanctioning power is used based on the inspection report. An inspector therefore has delegated sanctioning power. This puts the inspector in a delicate position towards a farmer. The job of an inspector is fact finding, preferably hard facts. But inspection is objective and subjective. It is especially difficult for an inspector to write down 'does not comply' in the inspection report resulting in a sanction, if the farmer also has sources of power that can be used against the inspector. One source of power farmers may have in a competitive inspection market is the right to choose the inspection organisation. A farmer not satisfied with the inspection report may decide to contract another inspection organisation that is less strict. A second source of power may be financial power on inspectors who have double functions. An inspector who is also a veterinarian risks losing a client for their second function if the inspection report is too strict. Other sources of power may be the power of reference to others, knowledge, information, money (bribe) or use of violence (intimidation). With unambiguous standards and smart inspection procedures some dependency issues may be reduced.
- 3. It is unlikely farmers will give authorisation. Under current privacy legislation farmers would have to authorise public inspection bodies to have easy access to inspection reports. It is unlikely this will happen. We mention three reasons for non-compliance with (some) of the standards. Firstly, the standards do not correspond with the production method applied. The farmer may need to comply with higher environmental norms and does not have the 'know how'. Secondly, the standards do not suit the (crop) production. For example in some small crops (fruits and vegetables), use of pesticides is not allowed because the effective pesticides are not registered for use in those crops. Thirdly, farmers may not take the standards seriously enough. For example, because they are unaware of the reason for existence of the standard.

Co-operation on farm files is not a real opportunity. Co-operation between public inspection bodies and private inspection organisations is much easier on methodological issues such as the analysis of risk factors, the definition of critical issues for inspection, and the development of effective inspection methods.

4.3.5 Specific standards, beyond legislation, paid by public bodies

A co-operation opportunity going beyond the scope of statutory requirements and cross compliance (in pillar 1), enters the field of public services (in pillar 2). Private certification systems may want to include specific standards for which public bodies are prepared to pay. For example: high standards with regard to water pollution in water retention areas paid for by (public) water companies.

5 Conclusions

5.1 Lessons learned

Governments developing cross compliance have an opportunity to learn from initiatives in the private sector. Lessons can be learned from the way verifiable standards are developed, how they are controlled and how the private sector works with farm advice and sanctions. Many of these lessons are available in national councils for accreditation, which judge the trustworthiness of certification systems (often) based on EN 45011. But policy makers are also advised to contact certification organisations directly.

With regard to control procedures the 'internal farm audit' may be an interesting option for cross compliance. The private sector is developing 'internal farm audits' as a basis for compliance with the standards. The internal farm audit is a check-list of verifiable standards that farmers have to comply with. Farmers are required to fill it in before an inspector visits the farm. For cross compliance an 'internal farm audit' could be used for risk assessment by public control bodies.

Public private co-operation on standard setting and enforcement, in its easiest form is to stimulate mutual learning, with the aim to be more efficient and effective in the public and private sector. With regard to control procedures options for mutual learning are analysis of risk factors, the definition of critical issues for inspection, and the development of effective inspection methods.

But co-operation can go further, because farmers in certification schemes and dependent on direct income payments (pillar 1 and 2) do not want to risk financial sanctions (public) and decreasing trust in their private schemes in the market. There is opportunity for more co-operation on full integration of statutory standards in private schemes and harmonisation of verifiable standards at statutory level. There is less opportunity for co-operation above statutory level because private schemes distinguish themselves from other schemes in what they offer above statutory level. There is also an opportunity for controlling exemptions or reduced control frequency at certified farms in accredited certification schemes. An interesting new opportunity (beyond the scope of statutory standards) is potential co-operation of public bodies with private certification organisations on specific agri-environment services.

5.2 Areas in need of further investigation

The indiscriminate use of images of "environmentally friendly" associated with the characteristics of farm products is jeopardising consumer faith in serious efforts made by farmers for integrated farming. To cope with the increasing diversity of certification and farm assurance schemes it might be useful to establish an EU baseline on integrated farming. The French initiative of 'Agriculture raisonee' can be used as an example of an initiative that could take place at the EU level. Currently the only protected and harmonised assurance scheme in the agricultural sector is organic farming. There is European baseline legislation for environmental claims

(Eco-labels) in the non-food sector. Perhaps ISO 14000⁸ could be used as a base-line for integrated farming in the food sector.

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⁸ ISO stands for the International Organization for Standardisation, located in Geneva, Switzerland. ISO promotes the development and implementation of voluntary international standards, both for particular products and for environmental management issues. ISO 14000 refers to a series of voluntary standards in the environmental field under development by ISO. Included in the ISO 14000 series are the ISO 14001 EMS Standard and other standards in fields such as environmental auditing, environmental performance evaluation, environmental labelling, and life-cycle assessment. All the ISO standards are developed through a voluntary, consensus-based approach amongst member countries.

References_____

Background reports per country (available from www.clm.nl)

Czech Republic

Denmark

France

Germany

Lithuania

The Netherlands

United Kingdom

Presentations during the seminar (available from www.clm.nl)

Boom, Cindy van der. Milieukeur in the Netherlands.

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Malterre, Frédéric. Agriculture raisonée: the French standard for integrated farming.

Nitsch, Heike and Bernhard Osterburg. Verifiable standards for control of good farming practice.

Michalopoulos, George. Greece: verifiable standards and public-private co-operation

Skjold, Helle. The Arla farm.

Annex 1 Background document_

As a preparation for the Ilpendam seminar a background document was prepared based on information collected by project partners. In this annex the information collected by the partners is summarised in overview tables. The following annexes will present the information provided by each of the project partners, in a summarised form. The full information provided per country is available at the www.clm.nl, More information on individual schemes can be found on relevant websites presented in the last table.

1 Key questions for the Ilpendam seminar

The key questions of the seminar in Ilpendam were the following:

- 1. What is the actual relevance and future potential of private assurance schemes in Europe (farmers up-take/participation, benefits for farmers and the environment, scale, scope)?
- 2. What is the present state of co-operation between the public and the private sector on standard setting (e.g. relation to public law, type of co-operation with public bodies)?
- 3. What are visions for models of future co-operation between the public and the private sector on standard setting?
- 4. What role can cross-compliance play alongside private assurance schemes?
- 5. How does the private sector develop standards and verifiable standards (levels of requirements, type of requirements)?
- 6. What is the relation of private sector standards with public law (e.g. European standards)?
- 7. What are the standards used by the private sector related to manure and fertilisers, pesticides and food safety?
- 8. What are verifiable standards? How are the standards made verifiable?
- 9. What is the present state of co-operation between the public and the private sector on enforcement of standards (e.g. type of co-operation with public bodies)?
- 10. How are verifiable standards controlled in practice (based on the standard itself or otherwise)?
- 11. What exactly do control bodies and inspection organisations control (e.g. required registration, documentation, indicators, input-output accounting systems)?
- 12. If control is based on a checklist or indicators, how do these relate to the environmental or food safety objectives?
- 13. How do private assurance schemes organise verification and compliance monitoring of verifiable standards (e.g. organisations involved, type of controls, timing and frequency of controls, criteria for on the spot inspection)?
- 14. What is the optimum amount of verifiable standards to ensure a balance between the resources invested in controlling compliance with GAP and monitoring its effectiveness?
- 15. What type of sanctions are used in case of non-compliance?

The overview tables on the following pages provide some answers on some of these keyquestions.

2 Relevance and potential of private schemes

Key-question: What is the actual relevance and future potential of private assurance schemes in Europe?

The following table shows the actual participation of farmers in the private certification and assurance schemes in Europe, as well as benefits for farmers, scale and scope of the schemes

United King-	Participation	Benefits for farmers	Scale	Scope
Little Red Tractor scheme	78,000 members Between 65% and 90% of output in the main commodity sectors	Customer reas- surance	National	550 product lines whole farm and off-farm approach Ten assurance schemes covering: cereals, oilseeds and pulses, fruit, vegetables and salads, beef and lamb, dairy products, chicken, pork and integrated schemes
Leaf Marque (Linking Envi- ronment and Farming)	In UK: 1500 members and 70 registered to become member Similar projects in D, F, E, I, DK, Gr and Ire (EISA).	Reassurance for the consumer.	National	Fruit vegetables and salads. Beef, lamb, pork chicken, dairy and cereals will follow.
Germany	Participation	Benefits for farmers	Scale	Scope
QS Quality and Safety	31.946 farms (8/2003); about 50% of pigs in Ger- many are kept according to QS criteria	Customer reas- surance (Prices are not generally higher)	National	Meat (pig, beef, poultry)
Neuland	~ 230 (9/2003)	Customer reas- surance, Market advan- tages	National	Whole farm ap- proach, meat
USL	184 farms (9/2002)	Increased efficiency, Market advantages	National	Whole farm approach; description and analysis of the environmental state and sustainability of farms
Denmark	Participation	Benefits for farmers	Scale	Scope

Г	T	1		T
Danish Quality	1400 producers	Top up payment	Europe, in	Pig meat
scheme- the UK		of 0.06Euro/kg	particular	
Contract		pigmeat	export to	
			the UK	
Danish Quality	Almost all of	Market access	Global	Pigmeat
scheme- Danish	the 12000 pig	world wide		
Crown's Code of	producers			
practice				
The Arla Farm	Danish and	Licence to deliver	Global	Dairy products
	Swedish dairy	to Arla Foods		
	farmers starting			
	1 October 2003.			
Danish organic	3700 farms,	Premium price,	Europe	Whole farm approach
agriculture	175.000 ha	access to agri-	Laropo	Whole farm approach
scheme	farmland	environment		
Scrience	Tarrillariu	payments		
France	Darticipation	Benefits for	Scale	Scope
riance	Participation	farmers	Scale	Scope
Oualification	30,000 cattle	Customer reas-	National	Whole farm approach
Interbev-CNCL	farmers (50%	surance	. vacionai	Beef meat
michaev Greek	of total)	Premium price		Bool mout
	or total)	for beef with a		
		Label or a CCP		
Cereales de	22,000 farmers	Customer reas-	National	Products: wheat,
France	·		National	· ·
France	(69 groups)	surance		durum wheat, maize,
Draduation rai	17 000 produc	Market access	National	barley.
Production rai-	17,000 produc-		National	Potato and potato
sonnee de	ers, 22,500 ha,	world wide		farming system
pomme de terre	one third of	Improvement of		
de conservation	fresh potato	production meth-		
	production	ods		
Qualiterre	1500 farmers	Possibly entrance	Regional:	Whole farm approach
		condition for	North of	
		product certifica-	France:	
		tion schemes	Picardie,	
			Aisne,	
			Somme	
The Nether-	Participation	Benefits for	Scale	Scope
lands	2000	farmers	Clabal	Dunadi vak langa d
EUREPGAP	3000 More than 2000	Licence to deliver	Global National	Product based: nota
Food safety	INDIE MAN 2000	Licence to deliver	เงลเเบกสเ	Product based: pota-
certificate arable				toes, sugar beet and
production VVA	E000 worldwid	Contan income	Clobel	cereals
MPS ornamental	5000 worldwide	Sector image,	Global	Whole farm and crop
flowers and		customer reas-		approach: Ornamen-
plants		surance, market		tal flowers and plants
NAUL I	100	access	NI-A!-	M/I16
Milieukeur	120	Customer reas-	National	Whole farm or prod-
		surance		uct approach (choice
Italy	Dortioination	Popofito for	Sools	of the farmer)
Italy	Participation	Benefits for farmers	Scale	Scope
Emilia Romagna	30 farm coop-	Product differen-	Regional	Over 50 crops and
Qualità Control-	eratives and 20	tiations, cus-	Regional	animal products
Zuanta Contitoi-	STULLIVES UTILL ZU	dadono, cas-	1	ariirriai products

r	1	T	T	
lata (QC)	single farms, mainly in fruit and vegetables and tomato for industrial proc- essing	tomer (mainly great distribution organisations) reassurance, regional collective promotion, lower production costs, improvement of company organization, help to access to CAP integrated production (IP), AE payments, sometimes premium price (i.e. for strawberries)		(vegetables and salads, fruit, cereals, meat, mushrooms, fresh eggs, honey, wheaten bread)
Czech Republic	Participation	Benefits for	Scale	Scope
		farmers		
Bio ecological	473 farms	Premium price,	National	Whole farm approach
agriculture		access to public		
scheme		payments		
Integrated pro-	52 farmers	Market access	National	Whole farm approach
duction of		and premium		
grapes and wine		price		
SISPO Inte-	50 farmers,	Customer reas-	National	Whole farm approach
grated system of	4000 ha	surance		
fruit growing	25	NA-ulaska a a a a	Clabal	Mile alla farma arran i
EMS Environ-	35 companies	Market access	Global	Whole farm approach
mental man-				
agement system	Double in a blance	Damasita san	Caala	Coons
Lithuania	Participation	Benefits for	Scale	Scope
Organic agricul	490 in 2002	farmers Facier market	national	Diants animals and
Organic agricul- ture scheme	and fast growth	Easier market access, premium	Hational	Plants , animals and wild products
ture scrience	and rast growth	price		wild products
	l	Price		

3 Present state op public-private co-operation

Key-question: What is the present state of co-operation between the public and the private sector on standard setting?

The following table shows the state of co-operation of private certification and assurance schemes in Europe with governments, focusing on the relation to public law and the type of co-operation with public bodies.

United Kingdom	Relation to public law	Type of co-operation with public	
		bodies	
Little Red Tractor	Beyond legal standards	Standards of public bodies and oth-	
scheme		ers are integrated	
Leaf Marque	International standards ISO	Use Defra standards in place.	
(Linking Environ-	guide 65	Require advice from statutory bodies	
ment and Farm-	European standard EN 45011	in standards development	

ing)		
Germany	Relation to public law	Type of co-operation with public bodies
QS Quality and Safety	Law and beyond legal standards (e.g. pigs and poultry: monitoring of salmonellae) No use of antibiotics in feed (for pigs and beef only prohibited during mast)	Accredited scheme Audit contains checks for compliance with national legislation (e.g. fertilis- ing law)
Neuland	Beyond legislation	No formal co-operation
USL	Good farming practice standards (National law) and beyond legal standards	No formal co-operation
Denmark	Relation to public law	Type of co-operation with public bodies
Danish Quality scheme- the UK Contract	UK and DK law and beyond UK legal standards	
Danish Quality scheme- Danish Crown's Code	Danish law is listed in an annex but is not part of the scheme.	
The Arla Farm	DK and S law and Arla standards beyond legal standards	
Danish organic agriculture scheme	Organic standards beyond legis- lation	Danish state control
France	Relation to public law	Type of co-operation with public bodies
Qualification In- terbev-CNCL	Law and beyond legal standards	Audits of legal compliance Accredited scheme
Cereales de France	Law and beyond legal standards	Accredited scheme Financial support under rural development programme
Production raison- nee de pomme de terre de conserva- tion	Law and beyond legal standards	Accredited scheme MoA involved in technical committee on standard development
Qualiterre	Law and beyond legal standards	Accredited scheme
The Netherlands	Relation to public law	Type of co-operation with public bodies
EUREPGAP	Law and beyond legal standards	Accredited scheme
Food safety cer- tificate arable production VVA	Law and beyond legal standards	
MPS ornamental flowers and plants	Law	Accredited scheme
Milieukeur	Law and beyond legal standards	Accredited scheme
Italy	Relation to public law	Type of co-operation with public bodies
Emilia Romagna Qualità Control-	Beyond legal standards (manda- tory requirements for agronomic	Independent certification bodies (CB) accredited by national accredi-

lata (QC)	practices and post harvest treatments) and on the same level of legal standards (plant protection products residue level are accepted at statutory level). National legislation is not part of	tation body in compliance with stan- dard EN 45011
Czech Republic	the scheme: it's implicit Relation to public law	Type of co-operation with public bodies
Ecological agricul- ture scheme	Czech law 242/2000	Promotion campaigns for bio products
Integrated pro- duction of grapes and wine	Beyond legal standards	Promotion campaigns
SISPO Integrated system of fruit growing	Beyond legal standards	Promotion campaigns
EMS Environ- mental manage- ment system	Law and beyond legal standards	Communication to business partners (not to the public)
Lithuania	Relation to public law	Type of co-operation with public bodies
Organic agricul- ture scheme	Law and organic standards be- yond legal standards	Public bodies participate in EKOA- GROS board

4 Verifiable standards in the field of soil management and crop nutrition

Key-question: What are verifiable standards? How are the standards made verifiable?

The following table shows the standards and the verification methods for private certification and assurance schemes in Europe, with regard to soil management and crop nutrition.

Issues	Verifiable standards with regard to Soil Management & Crop Nutrition	Private certification and assurance schemes
Qualified per- sonnel and advi- sor	Must be able to prove that a FACTS qualified agronomist was used for crop nutrition advice. Growers or their advisers must be able to demonstrate competence and knowledge.	Leaf Marque (Linking Environment and Farming) UK EUREPGAP, NL
	Evidence is provided through existence of a statement of approved/competent advisor or competent operator on the farm	
	Application must be based on professional advice.	VVA Food safety cer- tificate arable produc- tion, NL
	Growers or their advisers must be able to demonstrate competence and knowledge	Emilia Romagna QC, I

		Г
Nutrient management plan including waste and hygiene issues	A Nutrient Management Plan, integrated with the Livestock Farm Waste Management Plan for FYM / slurry and other organic fertilisers e.g. treated sewage sludge must be available for consultation. The plan should be reviewed every year. The plan must take account of NPK and minor nutrient applications.	Leaf Marque (Linking Environment and Farming) UK
	A fertiliser crop plan must be present and used on the farm.	EUREPGAP, NL
	A fertiliser crop plan must be present and used on the farm.	Milieukeur, NL
	No GFT-compost can be used (unless hygiene is proven).	VVA Food safety cer- tificate arable produc- tion, NL
	Compost may be used only when it passes sanitary standards.	Milieukeur, NL
	Cadmium in phosphate fertiliser must be lower than 20 mg cadmium/kg phosphate. The type of fertiliser used must be audited.	Milieukeur, NL
	Nutrient Management Plan that must comply with QC requirements, like maximum input of nutrients per application; techniques to increase the nitrogen use efficiency and to reduce leaching; mineral nitrogen is not applied when plant uptake is very low or on very wet soils; phosphorous and potassium quantities are supplied on the basis of soil analysis and inputs not exceed the amounts taken up by trees (about 50 kg/ha of P2O5 and 150 Kg/ha of K2O).	Emilia Romagna QC, I
Environmental impact assessment	Soil-mapping techniques must be used for developing responses to the identified threats, such as areas prone to compaction, slumping, erosion and leaching.	Leaf Marque (Linking Environment and Farming) UK
	A soil compaction risk analysis must be carried out (including consideration of the quotient of pressure for each operation and each type of soil in relation to the soil humidity derived from the average precipitation).	USL, D
	An erosion risk assessment must be carried out (including consideration of topographic data, soil cover and cultivation techniques for each field).	USL, D
	Self-assessment must include an analysis of the pH-class of soil.	USL, D
	Soil analysis and mapping (types, texture, granulation, PH) of the farm normally required at planting and every 5 years	Emilia Romagna QC, I
Soil organic matter	A general policy to conserve and build up soil organic matter must be implemented. Measures would include incorporation of crop residues and efficient utilisation of other organic materials, where available.	Leaf Marque (Linking Environment and Farming) UK

	Self-assessment must include consideration of the humus balance	USL, D
	Soil organic matter analysis to establish fertilisers doses	Emilia Romagna QC, I
Crop need and soil fertility need	Leaf/soil analysis must be carried out, depending on which is appropriate. Farmers should be aware of soils and crops prone to trace element deficiencies.	Leaf Marque (Linking Environment and Farming) UK
	Soil nitrogen supply to the growing crop must be estimated. Verification is either through checking records of estimated nitrogen supply or measurement of soil mineral nitrogen.	Leaf Marque (Linking Environment and Farming) UK
	Fertilisation must be carried out on the basis of crop-need and soil fertility need. Applied quantities must comply with the fertiliser crop plan. Routine soil analyses must be available for verification.	EUREPGAP, NL
	Documentation must show that a minimum of one N-sample (or other analysis) was carried out to ensure the correct application of fertiliser.	Milieukeur, NL
	Max. of 1.5 manure units (DE)/ha	Neuland, D
	Max. of 3 cuts per year for grassland	Neuland, D
	Maximum manure-fertiliser of 170 kg N and 85 kg P2O5 per year.	Milieukeur, NL
	Restricted nitrogen and phosphate application (different options given).	Milieukeur, NL
	Self-control must ensure that the application of manure is according to GFP.	QS Quality and Safety, D
	Fertilisation is based on crop uptake and soil fertility need	Emilia Romagna QC, I
Crop rotation	Must have a justifiable long-term rotation plan that will identify annual cropping for current year and intentions for future years (ideally 3 years).	Leaf Marque (Linking Environment and Farming) UK
	Max. of 33% maize in system of crop rotation	Neuland, D
	Use of manure in July or August, plus sowing of nitrogen-binding plants or another crop later on in that year.	Milieukeur, NL
	Long-term crop rotation plan (crop rotation of minimum 3 crops in 4 years; reseeding of same crop not permitted, exception for winter cereals in hilly area; limitations in crop frequency)	Emilia Romagna QC, I
Correct application and storage of fertilisers	Field conditions must be assessed prior to operations being carried out to ensure timeliness, correct conditions and the most appropriate equipment and techniques are used. Verbal assurance is acceptable proof.	Leaf Marque (Linking Environment and Farming) UK

	T	
	Calibrated and well functioning fertiliser	EUREPGAP, NL
	spraying equipment must be used. Calibra-	
	tion records, maintenance records or in-	
	voices of spare parts must be available on	
	request	
	Calibrated and well functioning fertiliser	VVA Food safety cer-
	spraying equipment must be used.	tificate arable produc-
		tion, NL
	Calibrated and well functioning fertiliser	Milieukeur, NL
	spraying equipment must be used. Calibra-	
	tion must be performed at least once every 4	
	years.	
	Fertilisers must be stored appropriately in	EUREPGAP, NL
	covered, clean, dry places that minimise the	·
	risk of contamination of water sources.	
	Self-control must ensure that there is stor-	QS Quality and
	age capacity for slurry for at least 2 months.	Safety, D
	Correct techniques and appropriate equipment	Emilia Romagna QC, I
	are used; fertilisers storage book (purchase and	Errina Komagna 20, 1
	stock); use of calibrated and well functioning	
	fertiliser spraying equipment	
Registrations of	All cultivations and field operations must be	Leaf Marque (Linking
soil manage-	recorded. On large farms with small fields	Environment and
1	1	
ment and crop	grouping is acceptable.	Farming) UK
nutrition	Records of both inorganic and organic fertil-	Leaf Marque (Linking
	iser applications must be kept on a field	Environment and
	basis, to confirm that the Nutrient Manage-	Farming) UK
	ment Plan has been followed. Field records	
	should show evidence that all nutrient appli-	
	cations have been applied in the right	
	amounts, in the right place and at the right	
	time.	
	Soil management and crop nutrition must be	EUREPGAP, NL
	registered (location, date, type, quantity,	
	method, operator). Registration is audited	
	annually.	
	Soil management and crop nutrition must be	Milieukeur, NL
	registered (location, date, type, quantity,	
	method, operator) on the whole farm. Regis-	
	tration is audited annually.	
	Fertiliser application must be registered	VVA Food safety cer-
	weekly. Complete registration has to be	tificate arable produc-
	handed in before the crop is delivered for	tion, NL
	processing.	
	Fertiliser application must be registered (law	MPS ornamental flow-
	since 2003).	ers and plants, NL
	Registration is checked (randomly, 30%) and	
	processed via a central database.	
	Documentation on neutral control must be	QS Quality and
	available for self-control.	Safety, D
	Registration of soil management (including	Emilia Romagna QC, I
	water management) and crop nutrition (loca-	
	tion, date, type, quantity, method, operator)	
L	non, date, type, quantity, method, operator)	

Input-output	For self-control documentation of nutrient	QS Quality and
accounts	balance must be carried out.	Safety, D
	Criteria for self-assessment: N-balance	USL, D
	(farmgate)	
	(optimum between 0 and 20 kg N/ha·a; tol-	
	erable range between -50 kg N/ha a and	
	+30 or 50 kg N/ha a, dependent on loca-	
	tion).	
	Criteria for self-assessment: P- and K-	USL, D
	balance (dependent on reserves in soil; op-	
	timum balance lies at 0; tolerable range	
	between -15 and +15 kg P/ha a and -50 and	
	+50 kg K/ha a for soil with average P and K	
	reserves)	
	Records of stocks of fertilisers must be kept	EUREPGAP, NL
	up to date and available.	
	Purchase and stock of fertilisers must be	Milieukeur, NL
	registered.	
	Audited annually.	
	Standards for self-control (checklist): Record	QS Quality and
	of utilisation of manure leaving the farm.	Safety, D
	Environmental scores are given, based on	MPS ornamental flow-
	registration (of pesticides, fertilisers, energy,	ers and plants, NL
	disposal of waste, water recirculation) the	
	participant is put in a category of environ-	
	mental impact/success.	
	Documentation of nutrient balance and	Emilia Romagna QC, I
	registration of stock of fertilisers	

5 Verifiable standards in the field of crop protection

Key-question: What are verifiable standards? How are the standards made verifiable?

The following table shows the standards and the verification methods for private certification and assurance schemes in Europe, with regard to crop protection.

Issues	Verifiable standards with regard to crop protection	Private certification and assurance schemes
Qualified per- sonnel and advi- sor	Staff or contractors must be trained in the identification of pest, disease and crop disorders. Training records are checked.	Leaf Marque (Linking Environment and Farming), UK
	A BASIS registered agronomist must be used for crop protection advice.	Leaf Marque (Linking Environment and Farming), UK
	Managers and operators should be continually trained (every three years) in the proper use of pesticides. BASIS registration and now the National Register of Sprayer Operators all exist to enable users to show continuous professional development (CPD).	Leaf Marque (Linking Environment and Farming), UK

	Growers or their advisers must be able to demonstrate competence and knowledge	Milieukeur, NL
	Growers or their advisers must be able to	EUREPGAP, NL
	demonstrate competence and knowledge.	
	Growers or their advisers must be able to demonstrate competence and knowledge	Emilia Romagna QC, I
Crop protection plan	A planned and documented crop protection policy must be available, including evidence of selection of varieties resistant to pest and diseases, cultivations, product selection, appropriate dosing and a resistance strategy.	Leaf Marque (Linking Environment and Farming), UK
	A crop protection plan must be available.	Milieukeur, NL
	Use of methods of integrated plant protection (list of 9 requirements).	USL, D
	Crop protection plan must be available including evidence of doses, surfaces, time of applications, use of methods of integrated plant protection, only active ingredients included into QC list.	Emilia Romagna QC, I
Monitoring systems	Where crop protection chemicals will be used, there must be a system for monitoring and recording pests (including vertebrate), disease, weed levels and beneficial predatory insects. Thresholds must be used e.g. for blight record weather, warnings e.g. for moth traps for peas.	Leaf Marque (Linking Environment and Farming), UK
	A documented procedure to ensure that harvest intervals are observed must be available. Plans must identify proposed harvest date and the first permissible harvest date after pesticide application.	Leaf Marque (Linking Environment and Farming), UK
Environmental impact assessment and notification process	The environmental impact of all crop protection practices, including chemical, mechanical and cultural, must be considered in the crop protection policy. Records of justification with spray records or monitoring records must be available. Use of decision support systems, advice tools and other precision farming techniques is required.	Leaf Marque (Linking Environment and Farming), UK
	Must have a documented procedure and notification process that is displayed to alert relevant authorities for dealing with spillages of pesticides.	Leaf Marque (Linking Environment and Farming), UK
	When possible treatments are based on fore-casting models; justification of pesticides treatments and advise of mechanical weed control. Minimum use of glyphosate, gluphosinate-ammonium and gluphosinate-trimesio, only permitted as a basic product with restriction.	Emilia Romagna QC, I

	T	1
Crop need and	Steps must be taken to minimise damage to	Leaf Marque (Linking
ecosystem need	beneficial organisms and wildlife, and re-	Environment and
	corded. Evidence includes consideration of	Farming), UK
	natural predators, buffer zones, minimal	
	cultivations and use of environmental infor-	
	mation sheets (when launched).	
	On arable land pesticides must be used in	Neuland, D
	accordance with "conditions for water pro-	
	tection".	
	No use of pesticides on grassland.	Neuland, D
	Intensity of plant protection (€/ha a) in rela-	USL, D
	tion to the regional guidance level for each	
	crop must be between 30% below and 20%	
	above the regional standard.	
	Strategies to avoid pest resistance to herbi-	Leaf Marque (Linking
	cides, fungicides, and insecticides must be	Environment and
	available in the crop protection policy.	Farming), UK
	Environmentally damaging pesticides must	Milieukeur, NL
	be registered, used minimally, stocks con-	
	trolled and residues analysed.	
	Chemical soil-cleaning cannot be used.	Milieukeur, NL
	Mechanical weeding of ditches, waterways	Milieukeur, NL
	and talud must be used (herbicides are not	
	allowed, although there is an exemption for	
	some problem weeds.)	
	The amounts used must be restricted (e.g.	Milieukeur, NL
	for seed potatoes maximum 12 kg/ha)	
	Crop rotation must be used, or justification	EUREPGAP, NL
	for an exemption showed.	
	Intensity of plant protection in compliance with	Emilia Romagna QC, I
	crop plan and QC obligations and suggestions	
	for specific crop; use of selective active ingredi-	
	ents; selection of varieties resistant to pest and	
	diseases, selection of rootstocks, choice of	
	plantation site and plantation system.	
Correct applica-	Pesticide use, infestation levels and pesticide	Leaf Marque (Linking
tion and mixing	type have to be considered. Spray records	Environment and
of pesticides	for evidence of appropriate dosing must be	Farming), UK
	available.	
	Pesticides must be used only when needed	VVA Food safety cer-
		tificate arable produc-
		tion NL
	Must be aware of restrictions on pesticide	EUREPGAP, NL
	use.	
	Compliance is proven through the registra-	
	tion of applications.	
	Sprayers should be tested annually by a	Leaf Marque (Linking
	nationally recognised scheme such as the	Environment and
	National Sprayer Test Scheme and records	Farming), UK
	kept of the tests.	

	Precautions to ensure pesticide use is limited	Leaf Marque (Linking
	to the area in which it is required must be	Environment and
	undertaken. Acceptable methods include:	Farming), UK
	precision farming techniques, correct spray-	
	ing conditions, using low drift techniques,	
	sprayer choice and spray nozzle choice.	
	Use of low-drift nozzles is obligatory.	Milieukeur, NL
	Minimal use of pesticides and use of IMP-	EUREPGAP, NL
	techniques where technically feasible and	
	economically viable.	
	Calibrated and well functioning spray equip-	EUREPGAP, NL
	ment must be used. Calibration records are	
	audited annually. Maintenance records or	
	invoices of spare parts must be available on	
	request.	
	Pesticide application by aeroplane or helicopter is not allowed.	Milieukeur, NL
	Spray mix must be calculated, taking into	EUREPGAP, NL
	account: velocity of application, surface area	LONE! ON , IVE
	and pressure.	
	Wherever chemical mixing occurs, the site	Leaf Marque (Linking
	must give protection to the environment and	Environment and
	surface water. Yard drains, slope and prox-	Farming), UK
	imity to watercourses or very permeable	rammig), ok
	ground in groundwater protection zones	
	must be considered.	
	Where run-off from mixing areas is not con-	Leaf Marque (Linking
	tained, must seek advice from your envi-	Environment and
	ronment agency and obtain written	Farming), UK
	confirmation.	ruming), ox
	Use of appropriate dosing of pesticide based on	Emilia Romagna QC, I
	crop protection plan, growing conditions, infes-	Zirima itorriagila L oy i
	tation levels and pesticide type; precision of	
	techniques, accurate applications, correct con-	
	ditions of spray nozzles, calculation of pesti-	
	cides mix based on velocity of application, sur-	
	face area and pressure.	
Disposal of	Empty pesticide containers must be disposed	EUREPGAP, NL
waste materials	of in a way to avoid exposure to humans or	,
	contamination of the environment.	
Registrations of	Used pesticides must be registered (crop	EUREPGAP, NL
pesticide appli-	name, location, date, name of pesticide,	
cation	operator, justification, technical authorisa-	
	tion, quantity, method, first harvestable	
	date).	
	Only appropriate pesticides can be used.	EUREPGAP, NL
	Written justification of all pesticide inputs	,
	(target and intervention thresholds) must be	
	documented.	
	Chemicals used for sterilisation of substrate	EUREPGAP, NL
	must be registered (type, method, date,	
	operator).	
	υμ αισιοίο.	

	Justification of use for pesticides and mechanical weed cultivations must be recorded.	Leaf Marque (Linking Environment and
	Decision support systems, advice tools and	Farming), UK
	other precision farming techniques should be	
	used.	
	A current list of pesticides that are registered	EUREPGAP, NL
	for use on the crops should available on the	
	farm	
	Used pesticides should be registered daily.	VVA Food safety cer-
	Complete registration has to be handed in	tificate arable produc-
	before the crop is delivered for processing.	tion NL
	Registration of pesticide application (crop	Emilia Romagna QC, I
	name, location, date, name of pesticide, operator, justification, quantity, surfaces, method,	
	first harvestable date and pesticide storage	
	book (purchase and stock)	
Input-output	Categories of environmental score are as-	MPS ornamental flow-
accounts	signed, based on registration (pesticides,	ers and plants,
	fertilisers, energy, disposal of waste, water	NLMPS ornamental
	recirculation).	flowers and plants, NL
	Pesticides in stock must be registered. Cate-	Milieukeur, NLMPS
	gories of environmental score are assigned,	ornamental flowers
	based on registration of pesticides, fertilis-	and plants, NL
	ers, energy, disposal of waste, water recircu-	
	lation.	
	Registration of purchases of pesticides must	Milieukeur, NLMilieu-
	be available.	keur, NL
	Fault-points are attributed for using envi-	Milieukeur, NL
	ronmentally harmful pesticides (eg. in potato growing: glufosinaat-ammonium, lambda-	
	cyhalothrin, pirimicarb, flutolanil, man-	
	cozeb/cymoxanil, diuat, metoxuron, metal-	
	dehyde).	
	Pesticide storage book	Emilia Romagna QC, I

6 Organisation of control

Key-question: How do private assurance schemes organise verification and compliance monitoring of verifiable standards?

Te following table shows some aspects of the organisation of control of private certification and assurance schemes in Europe such as the type of controls, timing and frequency of controls and criteria for on the spot inspection.

United Kingdom	Type of controls	Frequency of farm	Criteria for farm
		inspections	inspection
Little Red Tractor scheme	On-farm inspection visit	Annual, 100% of the farms	All farms
Leaf Marque (Linking Envi- ronment and	On-farm inspection visit	Annual, 100% of the farms	All farms

Farming)			
Germany	Type of controls	Frequency of farm inspections	Criteria for farm inspection
QS quality and Safety	Entrance audit and classi- fication into one of three categories of QS- standards		All farms
	For members:		
	Self-control: Checklist for farmer	Every 3 months; For beef additional monthly random sam- ple controls for correct marking of animals and stock register	All farms
	2. System control: Farm audits with check- list; audits by accredited control institutions (pool of control bodies recog- nized by QS); checking of compliance with require- ments for production, documentation and inter- nal self-control and measures taken for cor- rection of shortcomings	3 groups according to QS-standard: Beef: Every 12, 9 or 6 months; Additional random sample controls for correct marking of animals and stock register 1,2 or 3 times a year Pig and poultry: Once per 1, 2 or 3 years. In case of suspicion additional controls.	All farms Frequency according to risk- assessment
	3. Control of QS scheme: System control is con- trolled by the QS com- pany itself or by inde- pendent control institutions		
Neuland	Farm audit	Twice a year	All farms
USL	Self-assessment by farmers (checklist)	Yearly	All farms
	Farm audit by VDLUFA (certification body); Analysis of data to find out if farmers stay within tolerance range of each criteria (VDLUFA)	Yearly	All farms
	Control checks on data collection and analysis are carried out on a random base		Random based spot checks
Denmark	Type of controls	Frequency of farm inspections	Criteria for farm inspection
Danish Quality scheme- the UK Contract	Farm audit	Annual, 100% of the farms	All farms
Danish Quality scheme- Danish	Farm audits and inspection of meat in the	Random samples on farms	?

Crown's Code of	slaughterhouse		
practice The Arla Farm	Entrance audit	100% entrance audit	All farms at the
тпе апа ғатт	Farm audit	100% entrance audit	start-up of the
Danish organic agriculture scheme	Farm audit	?	?
France	Type of controls	Frequency of farm inspections	Criteria for farm inspection
Qualification Interbev-CNCL	Entrance audit	100% entrance audit annual: 6% sample	?
Cereales de France	Intern control system by group of farmers Extern control	Annual 100% of farmers Annual 100% of groups of farmers Annual individual farmers:?	Risk analysis based on inspection of documentation
Production rai- sonnee de pomme de terre de conservation	Administrative based on self-audit, farm audits	Annual 33% of farmers Annual 100% of potato traders	
Qualiterre	?	?	?
The Nether-	Type of controls	Frequency of farm	Criteria for farm
lands	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	inspections	inspection
EUREPGAP	Farm audit	Annual 100% of farmers	All farms
Food safety cer- tificate arable production VVA	Farm audit	Annual 100% of farmers	All farms
MPS ornamental flowers and plants	Farm audit	Annual 30% of farmers	Random sample
Milieukeur	Farm audit	Annual, 100% of farmers	All farms
Italy	Type of controls	Frequency of farm	Criteria for farm
Emilia Romagna Qualità Control- lata (QC)	Farm audit Association self control plan	inspections one or two a year, frequency depends on type of organization (single farms and associations) and on number of products branded QC	inspection 100% QC joined organizations; in associations inspections affect the product contribution establishment and a random sample (5% of members or 3% if members are over 100).
Czech Republic	Type of controls	Frequency of farm inspections	Criteria for farm inspection
Bio ecological agriculture scheme	Farm audit, announced in advance	Annual, 100% of farmers	All farms

Integrated pro-	Farm audit	Annual, 100% of	All farms
duction of grapes		farmers	
and wine			
SISPO Integrated	Farm audit, announced in	Annual, 60% of farm-	Random sample
system of fruit	advance	ers	
growing			
EMS Environ-	Administrative, farm	Annual, 100% of firms	All firms
mental manage-	audit		
ment system			
Lithuania	Type of controls	Frequency of farm	Criteria for farm
		inspections	inspection
Organic agricul-	Administrative, farm	Annual, 100% of farms	Risk analysis: data
ture scheme	audit	and 10% a second	and records are
		time	unclear or extreme

7 Type of sanctions in case of non-compliance

Key-question: What type of sanctions are used in case of non-compliance?

The following table shows the type of sanctions used in private certification and assurance schemes in Europe.

United Kingdom	Type of sanctions
Little Red Tractor scheme	
Leaf Marque (Linking Envi-	Suspension from full status and cannot use logo until non-
ronment and Farming)	conformance are cleared
Germany	Type of sanctions
QS Quality and Safety	First audit: Non entrance. A second audit is possible
	For members: 1. Warning, no punishment for shortcomings
	that can be solved quickly. 2. Penalty for breach of contract.
	3. Exclusion from the scheme in case of serious or repeated
	breach.
Neuland	Warning (minor non-compliance) or exclusion from scheme
	in case of severe breach.
USL	Exclusion from the scheme
Denmark	Type of sanctions
Danish Quality scheme- the	?
UK Contract	
Danish Quality scheme- Dan-	Warning and exclusion
ish Crown's Code of practice	
The Arla Farm	In case of severe deficiencies, a time limit for correction will
	be agreed upon, and if the time limit is not met, sanctions
	may be released
Danish organic agriculture	?
scheme	
France	Type of sanctions
Qualification Interbev-CNCL	Measurement of penalty points. A time limit to respect
	the requirements. Above 100 penalty points: exclusion.
Cereales de France	Sanctions include exclusion from the scheme. Rules de-
	cided by Arvalis
Production raisonnee de	First audit: non-entrance
pomme de terre de conser-	
vation	

Qualiterre	Measurement of penalty points. Above a certain number of
Quanterre	points exclusion from the scheme
The Netherlands	Type of sanctions
EUREPGAP	Warning, exclusion of the scheme until compliance is shown
Food safety certificate arable	Exclusion of the scheme and loss licence to deliver to proc-
production VVA	essing industry (intentionally)
MPS ornamental flowers and	Warning, exclusion of the scheme
plants	Training, character of the continu
Milieukeur	Warning, exclusion of the scheme
Italy	Type of sanctions
Emilia Romagna Qualità Controllata (QC)	Depend on: number and gravity level of non compliance, type of concessionaire and type of product. Minor non compliance: simple warning Serious and repeated breach: 6 to 24 months suspension of the use of logo until compliance is shown Breach of sanitary national regulations, fraud, misleading advertising, unauthorized use of the logo, evident obstacle to external control procedures: 2 to 5 years suspension of the use of logo.
Czech Republic	Type of sanctions
Bio ecological agriculture scheme	Warning, exclusion of the scheme
Integrated production of	Exclusion of the scheme (and the right to use the logo) until
grapes and wine	compliance is shown.
SISPO Integrated system of	Warning, exclusion of the scheme
fruit growing	
EMS Environmental manage- ment system	Warning, exclusion of the scheme
Lithuania	Type of sanctions
Organic agriculture scheme	Warning, financial penalty, temporal exclusion, permanent exclusion

8 Contact details for the schemes

The following table shows the contact details for the private certification and assurance schemes in Europe.

Schemes	Contact details
Little Red Tractor scheme	www.littleredtractor.org.uk
Leaf Marque (Linking Environment and Farming)	www.leafuk.org
QS Quality and Safety	<u>www.q-s.info</u>
Neuland	www.neuland-fleisch.de
USL	www.usl.uni-bonn.de
Danish Quality scheme- the UK Contract	www.danskeslagterier.dk
Danish Quality scheme- Danish Crown's Code of	www.danishcrown.dk
practice	
The Arla Farm	www.arlafoods.dk
Danish organic agriculture scheme	www.ecoweb.dk
Qualification Interbev-CNCL	www.interbev.asso.fr
Cereales de France	
Production raisonnee de pomme de terre de	www.agrifood-forum.net

conservation	
Qualiterre	www.indre-et-
	loire.chambagri.fr/BP/Qualiterre/
EUREPGAP	www.eurep.org
Food safety certificate arable production VVA	www.hpa/main/akkerbouw
MPS ornamental flowers and plants	www.st-mps.nl
Milieukeur	www.milieukeur.nl
Czech Biological agriculture scheme	www.kez.cz
Integrated production of grapes and wine	
SISPO Integrated system of fruit growing	www.zemcheba.cz
EMS Environmental management system	
Lithuanian organic agriculture scheme	www.on.lt/hgov.htm