The Role of Fisheries Licensing in European Environmental Management

James Brown
Andrew Farmer

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Kate Bevins
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Cristina Alvarez (IPAE, Madrid)

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Institute for European Environmental Policy (IEEP)
28 Queen Anne's Gate
London SW1H 9AB

Tel +44 (0)20-77 99 22 44
Fax: +44 (0)20-77 99 26 00
Email central@ieeplondon.org.uk
Website www.ieep.org.uk

Contents

Boxes

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Glossary of Acronyms

AFMA	Australian Fisheries Management Authority
BAP	Bycatch Action Plans
CEFAS	Centre for Environment, Fisheries and Aquaculture Science
CFP	Common Fisheries Policy
DEFRA	Department for Environment, Food and Rural Affairs
ETP	Eastern Tropical Pacific
EU	European Union
EC	European Community
FAO	United Nations Food and Agriculture Organisation
IEEP	Institute for European Environmental Policy
IPPC	Integrated pollution prevention and control
IATTC	Inter-American Tropical Tuna Commission
ICES	International Council for the Exploration of the Seas
IDCP	International Dolphin Conservation Programme
OECD	Organisation for Economic Co-operation and Development
SFC	Sea Fisheries Committee
SAC	Special Areas of Conservation
SPA	Special Protection Areas
SFR	Statutory fishing right
TAC	Total allowable catch
UK	United Kingdom
VMS	Vessel Monitoring Systems

1

Introduction

Fish stocks and the marine environment are under increasing pressure throughout the world. An estimated 28 per cent of world fish stocks are considered to be overexploited or significantly depleted, with 47 per cent exploited close to their maximum sustainable limits (FAO, 2002). In the case of the North East Atlantic, only 18 per cent of the 113 fish stocks assessed by the International Council for the Exploration of the Seas (ICES) in 2001 were inside safe biological limits (ICES, 2003). One of the major reasons for the global decline in fish stocks is fishing.

Fishing also has other significant impacts on the wider marine environment. These include bycatch of species such as birds, mammals and turtles, disturbance of the seabed and killing of benthic organisms. Both the direct catching of fish and environmental impacts arising from fishing affect the functioning and processes of marine ecosystems. Wider environmental pressures include oil pollution, generation of litter and energy use.

Because of the vulnerability of fisheries to over exploitation, and the wider environmental impacts of fishing practices, there is a need to manage both the level and nature of fishing. However, the fishing industry is already heavily regulated. In meeting the challenge of achieving sustainable fisheries exploitation, there is also a need for effective yet 'light' regulation. This includes building upon existing institutions and regulatory systems, and developing standards that are locally appropriate and easily enforced.

A range of approaches is taken to managing fishing activities, including binding input (eg vessel size) and output (eg quotas) restrictions and voluntary measures. The licensing of fishing activities is a tool commonly

used in fisheries management around the world. The objectives of licensing schemes, also known as permits or concessions, vary. They include limiting access for stock conservation purposes and providing a mechanism for revenue generation. There is, however, little documented evidence of the use of licensing in meeting wider environmental objectives. This is despite the fact that measures tailored to individual fisheries or operators can be administered through licensing conditions in a simplified yet effective way.

The debate on appropriate regulatory systems is particularly relevant within the European Union (EU) context. The 2002 review of the Common Fisheries Policy (CFP) resulted in new framework legislation, which requires EU fisheries to be managed using an ecosystem-based approach and providing for sustainable environmental conditions. With this new legal framework in place, there are now questions of how to meet these and other new commitments.

The purpose of this report is to demonstrate the potential for using fisheries licensing schemes for environmental purposes in the EU. It is built on the analysis of the current and potential use of a range of licensing systems. Information was collected through interviews with national and local fisheries departments and licence administrators. The report comes at a time when a number of EU Member States, including Ireland, the Netherlands and several Accession Countries, are reforming their licensing systems in order to meet fleet management requirements under the CFP.

Section 2 begins by providing an overview of EU licensing systems, in terms of the legal framework, objectives and the underlying rationale for licensing. The framework for environmental management in the EU is described, together with the potential role of licensing in environmental management in Section 3. Examples of good practice are provided from the management systems of the Commonwealth Fisheries of Australia in Section 4, together the use of licences in environmental management in other sectors. Section 5 demonstrates the potential role of licensing in strategic fisheries management planning. Section 6 concludes the analysis and provides recommendations for future use of licences in managing the environmental impacts of fisheries under the CFP. Although the report mainly focuses on the EU, the concepts and conclusions are largely applicable to fisheries in other countries as well.

2

EU Fishing Vessel Licensing Systems

2.1 Licensing legal framework

Legislation for fishing vessel licensing in the EU sits within the Common Fisheries Policy (CFP), the overarching framework for the management of fisheries, marketing, processing and structural development in the EU. Under the CFP, all European Community fishing vessels are required to have fishing licences in order to catch, retain on board, transfer or land fish (Regulation 3690/1993). These licensing systems relate to the Community vessel register that forms the basis of fleet capacity management. It is a minimum requirement that licences include information on the type of vessel and main gear types, engine power, length, tonnage and fleet segments.

The responsibility for issuing licences lies with the flag Member State. It must ensure that information on the identification, technical characteristics and equipment of each vessel flying its flag is accurate, and that it corresponds to the information contained in the Community register. The licences of vessels temporarily immobilised, or permanently withdrawn from fishing activities, should also be suspended.

In addition to these generic EU wide vessel licensing requirements, Member States and the Commission also issue 'special fishing permits' to regulate access and fishing in specific areas and fisheries (Regulation 1627/94). Such permits can be issued to EU vessels in Community waters and on the high seas, and non-EU vessels operating in Community waters. At a minimum, permits should specify the periods during which certain areas and stocks may be fished and the gears that may be used. There is

also room for further conditions to be applied. Special permits also form the basis of information systems for monitoring the vessels and gears used in these fisheries.

2.2 Current EU licensing objectives

Under the CFP there is no explicit objective for the national licensing systems Member States are required to have in place. That said, licensing requirements relate to the fleet register and so imply that the objective is to limit fleet capacity and enhance control and regulation of the fleet. As licensing systems sit within the broader CFP framework it could be argued that the main objectives of the CFP apply to licensing. These objectives include limiting the environmental impacts of fishing, application of the precautionary approach and providing for sustainable environmental conditions. What is certain is that, while licence systems primarily serve the needs of fleet management, Member States can use licence systems for additional purposes within the scope of the CFP objectives.

All Member States have national licensing schemes in place to meet fleet management requirements, with some having additional licence schemes for specific fisheries. These may be administered centrally or by regional management bodies. The purposes of EU national and regional licence systems are highlighted here, reflecting interview responses.

Stock conservation

The most common reason for using both national and local licensing systems is for stock conservation. Indeed, stock conservation was generally the overall management objective, and licences were used for the purposes of restricting effort, access or catch to meet this end.

Fleet management

National licensing schemes are a requirement under the CFP for the purposes of monitoring and implementing fleet management rules. The purpose of limiting fleet capacity is to bring fishing effort into line with the available resources, ie stock conservation and economic management. Fleet capacity is limited by sector in terms of total vessel size (gross register tonnes) and engine power (Kilowatts). Licences specify these two variables at a vessel level and so form the basis for ensuring capacity does not exceed specific limits.

Economic management tool

Licences are used as a basis for charging the fishing industry. This can be with a view to generating revenue, for management purposes or otherwise, or for regulating the number of operators by using charging as a demand management tool. Charging for licences increases the cost of fishing, and so reduces the incentive to enter the fishery. Fishing effort can therefore be limited without necessarily limiting licence numbers directly. Policies on charging for licences vary within as well as between

countries. In the UK for example, the Wash cockle and mussel fishery in the east of the country charges for licences. Revenue is used to cover the cost of management and impact assessments. Eel fishing licences and recreational licences also attract a charge, which is used to cover habitat restoration and management. In the case of UK national commercial licences however, no charges are made.

Restricted access and limited entry

Licences in the EU are almost exclusively used to limit entry into a fishery. Indeed, licences are the most common tools used for restricting access to fisheries (Townsend, 1990). Where they are issued, licence numbers are limited. Licences may also be used to restrict access to fishing grounds through the imposition of conditions on individual licences. Again, this is often done on the basis of resource conservation, as is the case in Ireland where restrictions may be placed on areas and species that may be fished and the fishing methods that may be used. Area restrictions can also effectively act as a resource allocation system, as fisheries productivity varies by area.

Resource allocation and quota management

In addition to controlling access to fishing grounds, access to resources can be managed by linking licence systems to quota systems. Quotas for fish stocks can be tied to a licence, specifying the total amount of fish that may be caught in a given time period, such as a day, week, month, season or year. This approach to quota management is used in some fleet segments in France and the UK.

Gear regulation

The fishing gear that licence holders may use is often controlled, and again for a range of reasons. EU Member States are required to manage fleets according to segments, which are partly defined according to gear use. Gear restrictions attached to licences can be used to stop vessels moving between segments. Gear restrictions can also be used to try and control fishing effort, such as limitations on trawl size. The impacts of fishing on non-target stocks and the environment can also be managed by placing restrictions on gear use. An example of this might be limited dredge weight and size, and areas where such dredges may be used, as in the UK licences.

Area and resource allocation, and gear restrictions can all be applied selectively to certain fleet segments. While stock conservation may be a major objective, such restrictions are at times imposed for reasons such as managing gear conflicts, as in the case of Guernsey, part of the UK Channel Islands. Licences may also be issued to fishermen operating locally for purposes of securing regional employment and local benefits from a fishery, or to provide them with preferential operating conditions. This can also be beneficial for management, as local operators tend to have a more direct and long-term interest in fisheries and their conservation.

The way in which licences are administered will depend on management objectives. Where maximising revenue generation is the primary goal, it may not be desirable to limit the number of licences issued. Where effort management is the main purpose however, introducing charges for licences may not be considered necessary, as in the case of the UK. Limiting the number of licences raises often-difficult questions of how they should be allocated, especially if the numbers of operators are to be reduced.

While the primary purpose of the licensing schemes is stock conservation, limited licensing systems alone do not effectively prevent biological overfishing. This is because any gains in stock productivity arising from restricted entry typically gives rise to higher catches and profits. Together with increasing prices or lowering costs of inputs, licensed operators respond by expanding their fishing effort through 'capital stuffing'. This includes increasing vessel size or power in order to increase efficiency. Even where these are controlled through licensing, unregulated inputs are simply substituted, such as the use of fishing time. Because of this, traditional management measures such as quotas and gear limitations are often employed (OECD 1997). Similarly, licensing schemes alone cannot be expected to reduce the environmental impacts of fishing activities and additional regulation is often required.

3

Environmental Regulation through Licensing

3.1 Legal and policy framework

The European Community (EC) Treaty provides the legal basis of the CFP. Article 6 of the Treaty states that environmental requirements be integrated into the definition and implementation of other policies. As noted, the CFP framework objectives (Article 2, Regulation 2371/2002) include limiting the environmental impacts of fishing, application of the precautionary approach and eco-system based management, and providing for sustainable environmental conditions. While fisheries management is taken forward under the CFP, Member States are able to apply management measures to their own vessels for conservation and management purposes (Regulation 2371/2002 and 850/98). Such measures must supplement or go beyond the minimum requirements laid down in Community legislation. Member States may also take non-discriminatory emergency conservation measures in their own waters for the protection of living aquatic resources or the marine ecosystem.

3.2 Delivering ecosystem based management – benefits of licence conditions

Given the need to manage and protect the marine environment as part of fisheries management, managers have a variety of tools at their disposal. Measures may include bycatch limits, gear and vessel controls, and closed seasons and areas. Whatever type of intervention is used, consideration has to be given to how it should be administered. A common approach is to use some form of regulation, be it at an international, regional, national or local level. These regulations may themselves be region, country or fishery specific. Controls can also be placed on individual

operators if deemed necessary. Depending on the legal context a regulation may alternatively be termed a law, statutory instrument, resolution, directive, bylaw, etc. Economic and market based instruments can also be used to manipulate the financial incentives that operators face and so steer their behaviour in a chosen direction. A 'softer' approach to legislation may also be taken through the development of codes of conduct and voluntary agreements.

Whatever the route chosen, controls can be introduced by attaching conditions to licences rather than through laws. The immediate benefit of this approach is that fishery and vessel specific controls can be set. This is an approach commonly used by the countries sampled, although only to a limited extent in the delivery of environmental management. Nonetheless, lessons can be learnt from the use of conditions for other purposes, such as quota management. In particular, these lessons can illustrate the advantages and disadvantages of using licence conditions as opposed to broader regulations.

Reaffirmation of environmental standards

CFP regulations are directly applicable in the Member States. As they are directly applicable and legally binding it is therefore not usually necessary to translate them into national law. Despite this, restrictions are sometimes tied into licence conditions as a reiteration of regulations, as in the UK for example (see Box 1).

Explicitly detailing regulations in licences ensures that licence holders are aware of the rules. The use of licences for this purpose need not be limited to conservation or environmental management purposes but could also be used to ensure vessel owners are aware of safety requirements, which is a significant problem in some countries. Reiterating existing legislation or regulations as licence conditions can also provide authorities with a choice of penalties and legal channels through which to enforce and prosecute the breaking of these specific measures.

Potential disadvantages of this are that licences may be considered too voluminous for fishermen to understand and that it can increase the administrative burden accompanying the updating or modification of regulations. The first concern relates more to the wider body of controls rather than the fact that they are reflected in licences. Indeed, this may be an argument *for* reflecting relevant rules in licences.

Administrative ease and transparency

While practice varies between countries, licence conditions can be administratively easier to introduce than regulations. Civil servants can typically write conditions into licences, whereas legislation requires approval from the legislator. In the UK, licence conditions do not require

consultation procedures or industry impact assessments as in the case of legislation. While this provides significant benefits for introducing short-term or emergency measures, these factors mean that licence conditions are often not favoured for long-term management unless reflecting objectives or measures agreed through more participatory and democratic means.

Where controls relate to large numbers of operators, it may be more administratively burdensome to use licence conditions rather than regulations. Again, this depends on the legal context. Although Scotland uses the same licences as the rest of the UK, the entire licence has to be reissued whenever individual conditions are modified and not just the relevant page(s)where the changes have occurred.

Box 1 Conditions or Statutory Instruments? – the case of the UK

In the UK, the Department for Environment, Food and Rural Affairs (DEFRA) issues several types of commercial licences permitting vessels to fish in certain areas subject to restrictions under the Sea Fish (Conservation) Act 1967. This Act empowers Ministers to make statutory instruments to temporarily or permanently impose controls. These can limit the landing size and carriage of fish, regulate gear, license fishing vessels, restrict fishing, and prohibit landing of fish caught in certain areas.

Further to this underlying Act, environmental protection is clearly recognised and legislated for. The Sea Fisheries (Wildlife Conservation) Act 1992 requires all fisheries managers to have regard to the conservation of marine flora and fauna, and the Environment Act (1995) extends the 1967 Act to enable fishing restrictions to be imposed for marine environmental purposes. In granting a fishing vessel licence, Ministers can therefore apply licence conditions that do not relate directly to fishing, but could impose conditions to restrict fishing for the protection of the wider environment.

Conditions attached to most commercial fishing licences include logbook and crew nationality requirements, requirements for an economic link between the vessel and the UK, transhipment, and landing and enforcement controls. Licences are also used for quota management purposes, so include restrictions on fish stocks that may be fished together with quota limits and permitted bycatch limits. Environmental conditions include restrictions on dredge use in certain areas and a prohibition on driftnetting for tuna.

While restrictions are placed on licences, there is a preference to use legislation to establish environmental controls. Licence conditions are therefore based on requirements set elsewhere. The driftnet ban, for example, is laid down in Community law (Regulation 894/97, as

amended by Regulation 1239/98). Including it in the licence serves the purpose of ensuring licence holders are aware of these measures and provides the authorities with a choice of legal channels through which to enforce and prosecute the breaking of these specific regulations. They do not introduce new obligations on operators.

Vessels fishing under foreign regulatory systems

Specific regulations will usually have to be respected by vessels fishing in the waters of foreign countries. It will often be necessary to transpose these regulations into national law in order to make them directly applicable to these operators. The alternative is to impose these controls through licence conditions because they can be more readily established and modified than regulations. This approach is applied in the case of Spanish vessels operating in the Eastern Tropical Pacific (see Box 2), and UK vessels fishing in the waters of Norway, Iceland and the Faeroes. In the case of Spain, controls are specifically detailed in the licences, while the UK simply includes a licence condition that third country regulations, including quotas and closed seasons, must be respected.

Box 2 Spanish vessels in the Eastern Tropical Pacific

The Department of Agriculture, Fisheries and Food in Spain does not generally include environmental controls in the fishing licences it issues. Rather, obligations to achieve sustainable development (Act 3/2001, Art. 2) are met through legislation. The exception to this is the licences issued for the five tuna purse-seiners operating in the Eastern Tropical Pacific (ETP). This fishery is renowned for the association between dolphin and yellowfin tuna, creating a high risk of dolphin bycatch. Because of the presence of these vessels, the EC has signed the International Dolphin Conservation Programme (IDCP), established under the Inter-American Tropical Tuna Commission (IATTC), and is provisionally implementing the Programme.

The IDCP imposes quite specific conditions on vessels legally operating within the fishery, which are often modified more than once a year. To fulfil the environmental protection requirements, conditions are placed on the licences (special fishing permits under Regulation 1627/94). These include the presence of onboard observers, avoiding damage to dolphins, prohibiting the transhipment of tuna caught together with damaged dolphins, and separate storage of 'dolphin-safe' and 'non-dolphin safe' tuna. These conditions are common to all the Spanish vessels. This approach is preferred over developing national legislation because the licences can be renewed annually, and easily modified in the light of any changes in the tuna stocks, or international or EU agreements.

Devolved management, and fishery and vessel specific control

One of the key advantages of using licence conditions is that controls can be set on specific fisheries and/or operators. This can be done by both central and devolved authorities, as is the case in Spain, France and the UK. While there are few examples of conditions being used for environmental purposes in these countries, locally appropriate controls such as quotas and closed areas are administered in this way. Discrete fisheries with few vessels, such as distant water fisheries, are particularly well suited to such an approach (see Box 3).

Box 3 Netherlands Permit Scheme

Because of the need for improved monitoring of fleet capacity in order to meet EU fleet management requirements, the Netherlands introduced a new commercial permit system on 1 March 2003. The permits are used to manage capacity by fleet segment:

- Pelagic vessels (includes distant water vessels);
- <12m static gear;
- <12m trawling gear;
- > 221 kW beam trawlers;
- < 221 kW beam trawlers;
- shrimp trawlers; and
- shellfish vessels.

Although permits specify allowed gears, as defined by the fleet segment, there are no explicit environmental requirements attached to the permits. Rather, environmental standards are set through regulations.

Nonetheless, the distant water fleets are an example of a fishery well suited to vessel specific controls set through permit conditions. The fishery operating off the coast of Mauritania, for example, encounters specific sea mammal and turtle bycatch problems. Because it is a discreet fishery prosecuted by only Dutch vessels, bycatch mitigation measures could be simply introduced through permit conditions.

4

Lessons from other Countries and Sectors

4.1 Australian Commonwealth fisheries

Fishing vessel licences (statutory fishing rights (SFRs) and fishing permits[i]) in Australian Commonwealth managed fisheries can be subject to conditions. A specific Schedule on permits is used to assign conditions relating to an individual's fishing operations. Where possible, the Australian Fisheries Management Authority (AFMA) streamlines conditions to ensure consistency within each fishery. While legislation (ie directions and/or regulations) are the preferred approach to applying controls to operators holding SFRs, conditions may be applied directly to the SFR if they cannot be legislated. The advantage of this is that while the setting and amending of regulations is difficult as it requires senior and sometimes political approval, conditions on SFRs may be changed at the discretion of AFMA management.

In addition to specifying fishing gear, target species, catch limits and areas of water that may be fished, conditions may also include specific environmental restrictions (AFMA, 2003). Examples include bycatch mitigation measures such as night setting of hooks to avoid seabird interactions, and protection of spawning grounds through closing areas. The fishery Bycatch Action Plans (BAPs) can also be implemented through conditions (Box 4).

Box 4 Australian Gillnet, Hook and Trap fishery

Licence conditions are used to implement actions within the Gillnet, Hook and Trap fishery Bycatch Action Plan (BAP). Conditions include:

- mesh size limits;
- prohibition of shark finning;
- observer requirements; and
- mandatory use of tori poles when setting automatic baiting equipment.

The South East Trawl fishery BAP also includes commitments to reduce seal bycatch; a requirement to fit seal exclusion devices may be introduced as a licence condition in the future.

4.2 Licences in pollution control and mineral, forestry and agriculture sectors

The use of licences (also called permits) is widespread in other sectors. The oldest types of licences have been in the regulation of aspects of industrial activity, but these have progressively been extended, to cover further activities and to extend their depth and breadth of scope.

The following boxes describe three types of licence. Box 5 concerns permissions for mineral extraction in the UK and, Box 6, forestry in Australia. Both of these activities concern the extraction of resources from the environment (non-renewable and renewable) and do, therefore, bear comparison with fisheries activities. Box 7 describes permits issued under the EU's integrated pollution prevention and control (IPPC) Directive. This regulates industrial activity, and is now probably the most complex type of licence in the EU and illustrates well the types of conditions that can be imposed within a licence. Box 8 illustrates how area specific conditions are applied to farmers through support payment systems.

These, and other, licences contain a number of common elements. These include:

- limitations on specified types of activity so as to protect the environment;
- requirements for monitoring and reporting on compliance;
- possible requirements for monitoring the impacts of the activity in the environment (to examine whether licence conditions achieve what they set out to do); and
- possible requirements on the management of the operation (eg to ensure staff know their responsibilities).

Box 5 UK Minerals Licensing

In order to undertake mineral extraction in the UK, operators are required to have planning permissions, which, in effect, act as *de facto* licences in that they can impose conditions on the mineral extraction activity. Such conditions can include requirements for environmental protection, such as a need to provide screening to reduce noise and dust emissions. It can also set conditions for reinstatement of the land following minerals extraction. Permissions are issued by local authorities and the government stresses that 'particular attention must be paid to the wording of conditions; they must be expressed precisely to avoid ambiguity and any possible misinterpretation'. This is especially important where extraction may continue for many years and ownership may change. The government also provides guidance on the way that the wording of conditions affects enforceability. Thus the conditions should be established in such a way that:

- breaches can be relatively easily detected;
- whether, in the event of a breach, enforcement action is practicable; and
- conditions are best framed in a negative way, unless they are positive conditions at the outset of site development (eg to put up a screen for dust control).

Box 6 Forestry Licences in Australia

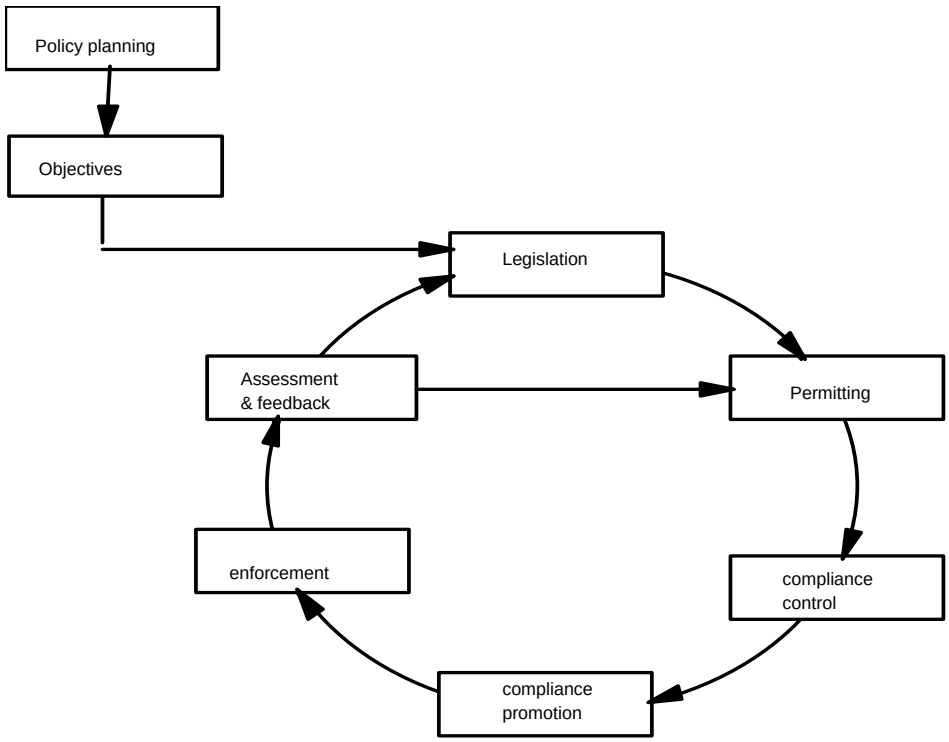
New South Wales is introducing new Integrated Forestry Operations Approvals to replace existing forestry licences. Currently, forestry activity is regulated by a pollution control licence, licences to 'harm or pick' and the Forest Practices Code. Pollution control licences establish requirements on operators to prevent or reduce pollution, such as restricting logging on steep land. The licences to harm or pick impose logging conditions with specific protocols for threatened species with which all logging operations must comply. If these specific conditions are complied with then forestry operations are allowed under law to 'harm or pick' threatened species. These conditions not only include restrictions on disturbance to species through direct logging activity, but also requirements to control pests and weeds that might invade cleared land after felling. The Forest Practices Code sets out detailed measures that can be taken, *inter alia*, to protect the environment.

Monitoring and reporting requirements can be highly variable, especially between licence types. IPPC permits often carry extensive monitoring requirements, especially for pollutants. However, they can also require monitoring in the environment to examine the impacts of activities.

Reporting on compliance to the relevant authority is common across many licence types.

It is also important to note the role of licensing within the regulatory 'cycle' for pollution control (see Figure 1). Considerable effort is now being given to ensuring the feedback of monitoring and inspection information into permit revision (and legislation). This makes these types of licences far more dynamic than might have previously been the case, allowing the regulator to take account of improved understanding of the environment and revised judgements of the effectiveness of the management of the installation.

Figure 1 The regulatory 'cycle' within which many pollution licences operate.



Box 7 Permits under the 1996 EU IPPC Directive (96/61)

Installations covered by the Directive cannot operate without a permit. Installations cover a range of industrial activities, including pig and poultry farms above a certain size. A permit may not be issued unless it can be guaranteed that an installation will meet the requirements of the Directive. Permit holders are required to advise the competent authorities of any changes in their operations, and any substantial modifications must also be made subject to prior authorisation through permitting. Furthermore, competent authorities must reconsider and, if necessary, update permit conditions periodically.

Applications for permits are to describe: the installation and its activities; the materials, substances and energy used or generated; site conditions; emissions from the installation and significant environmental effects; techniques to prevent and reduce emissions; measures for the prevention and recovery of waste; further measures to comply with the basic obligations of operators; and proposed monitoring measures.

All permits must include details of the arrangements made for air, water and land. Emission limit values must be defined for pollutants likely to be emitted in significant quantities, in particular for certain priority pollutants listed in the Directive, and if necessary a permit must prescribe requirements for protection of soil and groundwater and management of waste. In all cases, permits must contain conditions to minimise long-distance and transboundary pollution and to ensure a high level of protection for the environment as a whole. Permits also must contain monitoring requirements and an obligation to provide data to the competent authority, and measures relating to non-normal operations such as accidents.

Box 8 Farmer Support Payments Conditions

Although licences are not used, area specific conditions are applied to farmers through support payments in a way that they may be similarly applied to fishing licences. Across the EU, 'Less Favoured Areas' (mountain areas, areas in danger of abandonment or areas with other specific handicaps as defined in the Rural Development Regulation 1257/1999) have been geographically defined at national level. Farmers in these areas receive Common Agricultural Policy support payments on condition that they adhere to nationally, regionally or locally defined codes of 'Good Farming Practice'.

In France minimum and maximum optimal grazing densities (according to nature conservation criteria) are set at département (ie local) level, according to regional guidelines. Farmers receive a percentage of the support payment according to how closely their grazing density matches the prescribed optimum, decreasing to zero at set limits.

i The main difference between a SFR and a fishing permit is that permits are issued to allow access to fisheries in interim periods where there are no management plans in place.

5

Licensing in the Context of Strategic Management Planning

In addition to the described benefits of using licences to impose conditions on operators, as opposed to using regulations, licensing can also be used beneficially within the wider strategic and spatial planning and management of fisheries. This can be in terms of ensuring that licence conditions are set strategically and also that licensed activities are assessed and allocated in the context of a management plan.

Strategic fisheries management planning is essentially intended to identify and set broad long-term objectives for managing fisheries, followed by more specific targets and management measures to achieve the stated objectives. Through planning, activities and controls can be tailored to specific areas and fisheries instead of applying blanket measures. Plans provide the mechanism through which to ensure integrated and sustainable management of fisheries, and to carry out impact assessments and agree subsequent tradeoffs. They also provide an opportunity to spell out arrangements for implementation, such as describing the respective roles and responsibilities of different stakeholders and the necessary monitoring, research and evaluation arrangements (Coffey and Grieve, 2000). Such assessments are a requirement in Australian Commonwealth fisheries (Box 9). The legal framework for strategic management planning is now in place in the EU, although examples of plan implementation are somewhat limited.

Box 9 Strategic Assessments in Australia

It is a requirement for all Australian Commonwealth managed fisheries to undergo an environmental impact assessment. Assessments must include a comprehensive description of the fishery and its characteristics, including the agency responsible for management of the fishery, species caught, fishing methods, the area fished, the number of operators, and historic and current fishing effort (AFMA, 2003). A detailed description of the environment likely to be affected by the fishery must also be provided. This must identify significant environmental characteristics of the area likely to be affected by the fishery such as marine protected areas, components of biodiversity, threatened and other protected species, a description of seagrass and benthic communities, important features such as coral reefs, seamounts and estuaries.

Assessments must specifically identify elements of the management regime for the fishery that are intended to ensure that the fishery operates in an ecologically sustainable manner. Licensing systems are a key tool in achieving this, both in terms of limiting fishing effort and imposing conditions on operators.

5.1 EU fish stock recovery and management plans

The CFP framework Regulation (2371/2002) provides for the establishment of recovery plans where stocks are outside safe biological limits (Article 5) and management plans (Article 6) to maintain stocks within safe biological limits. Such plans are to set target stock levels as well as targets relating to other living aquatic resources and the marine ecosystem. Effort restrictions and technical measures may also be included. These are specified as potentially including gear restrictions, closed areas and/or seasons, minimum landing sizes and specific measures to reduce the impact of fishing activities on marine ecosystems and non-target species (Article 4(2) (d) – (i)).

Mediterranean Sea

Further to the framework Regulation, there are provisions for the designation of protected areas by Member States in the Mediterranean, where fishing activities can be restricted for biological purposes (Regulation 1626/94). Restrictions include prohibitions on certain gears as well as technical gear controls on those permitted.

A new Regulation has been proposed (COM(2003)589) that would replace Regulation 1626/94. In addition to designating protected areas, Mediterranean Member States would be required to adopt management plans for specific fisheries within their territorial waters and the Council would be able to adopt management plans for fisheries totally or

partially beyond these waters. These management plans could be composed of both effort limitations and technical restrictions.

Fishing vessel licences could play a central role in developing and implementing EU management plans. Fisheries can be strategically managed under management plans through the setting of objectives and subsequent development of strategies. The impact of strategies can be assessed and where necessary access can subsequently be limited and allocated through existing licensing systems. Where appropriate, technical measures can also be introduced through licence conditions. The benefits of using licences in this way are that fishery, area and vessel specific restrictions can be applied through conditions as opposed to setting broad-brush regulations.

5.2 Natura 2000

Member States are required to establish the Natura 2000 network of protected areas consisting of Special Areas of Conservation (SACs) designated under the habitats Directive (92/43), and Special Protection Areas (SPAs) designated under the birds Directive (79/409)[ii]. Species and habitats of Community importance are to be maintained or restored to favourable conservation status. These include a number of marine and coastal habitats, such as shallow inlets and bays, and species such as Atlantic sturgeon (*Acipenser sturio*) and monk seal (*Monachus monachus*). Some of these are given priority status because they are considered to be in the most danger of disappearing.

Box 10 Impact Assessments in the Netherlands

Impact assessments are increasingly being undertaken for fisheries in the Netherlands that fall within SACs, as required under the habitats Directive. An example of this is the shellfisheries in the Wadden Sea. Because undertaking these assessments is a recent requirement, lessons are still being learnt. The outcomes largely concern the amount of shellfish that can be taken and the timing. At present the permits systems do not relate to the assessments either in terms of the number issued or environmental conditions attached.

For Natura 2000 sites, Member States are required to take appropriate steps to avoid deterioration of the habitats concerned and any significant disturbance of those species for which areas have been designated. Plans or projects likely to have an impact on the site are to be subject to environmental assessment. There is no definition of 'projects' or 'plans' but they could in theory include the development of new fisheries or the use of new technology. In particular, this could include conducting assessments prior to issuing group or individual licences, and attaching conditions to reflect the outcome of assessments and the agreed nature conservation objectives. Shellfisheries of the Netherlands (Box 10) and UK

(Box 11) provide examples of such assessments. While not necessarily covered by the habitats Directive, the UK mussel seed fisheries are an example of how individual licences are assessed before being issued (Box 12). Technical and monitoring conditions attached to salmon, trout and eel licences are an example of where licences do not presently, but could in the future, relate to fishery assessments (Box 13).

Box 11 England and Wales Inshore Shellfisheries

Some fisheries in England and Wales that may impact on SACs undergo an impact assessment. Where this has been done, this has been by the local Sea Fishery Committee (SFC) following consultation with the relevant nature conservation agency: English Nature or the Countryside Council for Wales. Part of the reason that all such fisheries are not assessed is that it is not clear whether fisheries and fishing licences are considered to be new 'projects or plans' under the habitats Directive.

An example of where a fishery has been subject to impact assessments is the cockle and mussel fisheries in the Wash Estuary in the east of England. The site is a SAC and is managed by the Eastern Sea Fisheries Committee under the Wash Fishery Order (1992). An annual total allowable catch (TAC) is set for stock conservation purposes, together with a licence scheme to control access. The licences do not themselves undergo an impact assessment. Rather, a stock assessment is conducted for setting the TAC. Using this, a wider environmental assessment is conducted to determine the impact of the fishery on the environment. With direction from English Nature, this includes considering the impact of the fishery on local bird populations and on the sea floor.

The objective of the licensing system is to control access to ensure the sustainable management of the cockle and mussel fisheries. Technical regulations such as a cap on cockle breakage are imposed through bylaws rather than through licences. Conditions are however applied to licences to stipulate permitted gear. While these gear restrictions may benefit the environment, they are ultimately fisheries conservation measures rather than environmental measures.

Box 12 UK Mussel Seed Collection

The collection of wild mussel seed for aquaculture is restricted through licensing for both environmental and health reasons. The areas from which seed may be collected is restricted based on historic exploitation and consultation with stakeholders.

Rather than conduct a physical assessment of the licensed activity, licences are granted at the discretion of DEFRA following consultation with the local Sea Fisheries Committee (SFC) and the Centre for Environment, Fisheries and Aquaculture Science (CEFAS). This provides a mechanism for the views of scientists and local stakeholders to be accounted for and any protests voiced. While there is no formal strategic planning behind the process, licences are generally issued only where seed extraction has historically been conducted and is not considered to be unsustainable, with new licences rarely being issued.

Box 13 Salmon, Trout and Eel Management in England and Wales

Salmon are a listed species under the habitats Directive and as such all salmon rivers in England and Wales have action plans in place and the fisheries are annually assessed. Based on the outcome of these assessments, fisheries may be closed or additional controls set. Assessments are undertaken by the Environment Agency together with English Nature and the Countryside Council for Wales. While the outcome of the assessments may determine whether the fisheries are opened, the number of licences and conditions attached do not directly relate to the assessment.

A condition attached to both eel and migratory salmon and trout licences is that catch returns must be sent to the Environment Agency, the issuing authority. This requirement is set as a licence condition to ensure that fishermen are aware of their obligations. Eel licences also specify the number and size of nets and traps that may be used.

[ii] see Haigh (2003).

6

Conclusions and Recommendations

The primary purpose of fishing licence systems in the EU is fleet management. As required under EU legislation, all Member States have in place licensing systems that form the basis of national vessel registers. Licences and permits are also used for broader reasons. These include resource allocation and quota management, restricted access and limited entry, and translating legal obligations into conditions applying to individual operators.

Licences can also be used as an environmental management instrument. This may involve attaching environmental conditions to licences and using licences within the context of strategic management planning and impact assessments. Although the number of cases of using licences in such ways is apparently limited, the following examples illustrate how licences are used for environmental management purposes in some EU fisheries:

- licence conditions impose cetacean bycatch limits and observer requirements on Spanish vessels operating in the Eastern Tropical Pacific tuna fishery;
- EU driftnet restrictions are reiterated in licence conditions in the UK; and
- UK mussel seed licences are only issued by central government following consultation with scientists and local managers about their environmental impacts.

In contrast to these relatively few examples of conditions being placed on licences for environmental purposes, they are often attached for a range of other reasons. These include resource allocation and stock conservation purposes, such as implementing quota management systems. The

apparent lack of examples may reflect the lack of environmental standards and controls applicable to fishing activities, or the limited use of voluntary agreements to reduce environmental pressures. Nonetheless, conclusions can be drawn from experience in the application of other types of licence conditions in EU fisheries, as well as experience in Australia, both in fisheries and other sectors. Examples of the broader application of conditions to licences include:

- implementation of bycatch action plans in some Australian fisheries eg observer requirements;
- setting biodiversity protection conditions for forest extraction in New South Wales;
- setting environmental requirements in the UK mineral extraction industry; and
- defining optimal livestock grazing limits in specified areas, which are accompanied by financial incentives to meet these limits.

These experiences demonstrate that there are a number of potential benefits of using licence conditions for environmental management. These include, but are not limited to, the following points:

- conditions tend to be quickly and easily administered, both in issuing licences and in licence reviews following assessment of compliance;
- applying controls through licence conditions enables fishery and vessel specific controls and hence a mechanism for more locally tailored and integrated management;
- tying data collection requirements to licences can strengthen licences as a basis of improved monitoring; and
- single licences with vessel tailored conditions provide for greater transparency for operators and potentially more appropriate regulations, both according to fishing vessels and the areas, stocks and periods fished.

Individuals could take on licence conditions voluntarily to show commitment to environmental issues. Such conditions would demonstrate to managers, traders, retailers and even consumers a move towards more responsible fishing practices. In principle, such commitments could also be rewarded using market instruments such as ecolabelling or by linking them to government support in a similar way to farm support payments.

The benefits of using licence conditions will, to an extent, depend on the number and nature of the fishing vessels in a given fishery. The enforcement of vessel specific controls tends to be easier in the case of larger vessels, which increasingly have vessel monitoring systems (VMS) and improved catch traceability systems in place. Distinct fisheries characterised by fleets of relatively few yet large vessels, such as distant and deep-water fisheries, are also well placed for vessel and fishery specific controls. The administrative burden of applying fishery and vessel

specific conditions will also be lower in such cases where there are fewer vessels.

While the application of environmental conditions to licences in their own right could provide benefits over non-specific regulation, it is further advantageous for both licence conditions and licences themselves to relate to wider strategic management planning. In addition to assessing fisheries or global quotas as part of strategic management planning, the allocation of individual licences can be also assessed. Again, it is likely to be more appropriate to assess the licences of larger vessels, where their individual impacts are likely to be more significant and the level of administration is lower than for many smaller vessels. The benefits of using licences within the context of management plans are not limited to large-scale fisheries however. Spatial management planning can be particularly beneficial in inshore fisheries which are characterised by vulnerable or biologically important habitats. Through spatial planning, access to vulnerable areas such as SACs can be permitted on the conditions that lower impact gears are used or highly sensitive areas avoided.

Potentially valuable though they could be, it is not intended to suggest that using licences is the solution to all environmental management challenges. Rather, licences are a potentially valuable tool that can be used for more than mere entry limitation. In some cases a broader approach to regulation through specified requirements in legislation may be the most appropriate approach, where common standards or rules are required, for example. In other cases, fishery or vessel specific controls introduced instead of, or in addition to, such laws can be effectively introduced through vessel licences. The most appropriate approach will depend on the context – biological, technical and administrative.

Whatever the specific situation, there is clearly much greater scope for using licences more creatively to help meet the challenges of achieving environmentally sustainable management of European and other fisheries.

It would, therefore, be beneficial for authorities (EU, national and local) to:

- review the extent to which existing regulatory procedures meet the aims of achieving environmentally sustainable fisheries;
- determine where the use of licences for individual vessels could be introduced or extended to include environmental conditions for operation;
- review appropriate mechanisms for monitoring, compliance assessment and licence review to determine procedures that are cost-effective and of low administrative burden; and
- where appropriate, work with stakeholders to introduce licences and/or environmental requirements in licences, indicating how these are to be integrated into other strategic planning or fisheries control regimes.

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Institute for
European
Environmental
Policy

28 Queen Anne's Gate
London SW1H 9AB

Tel: +44 (0)20 7799 2244
Fax: +44 (0)20 7799 2600

central@ieeplondon.org.uk
www.ieep.org.uk

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