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Study to analyse differences in costs of implementing EU policy

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Study to analyse differences in costs of implementing EU policy

A project under DG Environment's Framework contract for economic analysis ENV.F.1/FRA/2010/0044

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IVM Institute for Environmental Studies



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Executive Summary

Introduction

This study assesses if there are differences in the costs of implementation of EU environmental law across Member States. Identifying differences can show where there is scope for best practice to be adopted to cut costs.

This study is relevant for the Regulatory Fitness and Performance Programme (REFIT)¹. A critical issue in the context of REFIT is to identify the extent to which costs arising from the implementation of EU law arise directly from that law (and thus apply to all those affected) and the extent to which they arise from the decisions of MS in how the EU law is to be implemented. Identifying these differences is critical if decisions for simplification arising from REFIT are to lead to changes on the ground for businesses and individuals.

Differences in the costs of implementation of EU environmental law are also a risk to implementation and present unnecessary burdens on individuals and businesses potentially affecting their competitiveness.

The focus is on administrative costs (procedures to follow, monitoring, reporting, delays, 'hassle', etc.) as they are easier to compare on a like-for-like basis than technical compliance costs (e.g. installing new water treatment equipment).

This project included a literature review followed by four case studies to frame the collection and analysis of new primary data on administrative costs. These were:

- Permitting under the Industrial Emissions Directive
- Implementation of the Strategic Environmental Assessment Directive
- Time for decision making under the Habitats Directive
- Costs of producer responsibility schemes under the End of Life Vehicles Directive

Literature review

There has so far been relatively little attention paid to differences in administrative costs between Member States, let alone the reasons for these. One study² concluded "There is little information on whether the cost of achieving a given environmental target is higher in some Member States than in others. One of the main explanations is that ex-post recording of costs and apportionment of the recorded costs to specific policies is very difficult. It is therefore not done in any systematic manner across the EU. Where there is information, it is often difficult to compare because the environmental targets vary or because other factors might explain differences (geography, industrial structure etc)."

For many areas of environmental policy, there has been little quantified data on the size of costs and even less on whether there are differences between Member States. Only in limited cases were the reasons for differences in costs identifiable. Some examples of cost differences include:

• the Commission's Administrative Burden Reduction Programme included an overall measurement of 'green tape'. It found that this made up around 1% of the total red tape from EU law, but that there were consistently differences between Member States. Around 20% to 30% of the costs appeared to be because of differences in implementation.

¹ COM(2012)746

² http://ec.europa.eu/environment/enveco/economics policv/pdf/scoping studv2009.pdf

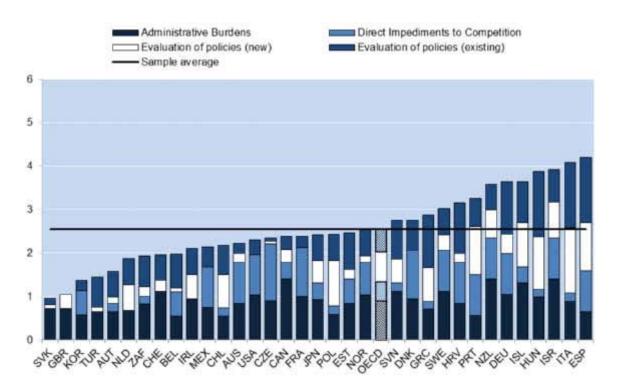
- Photovoltaic The European project PV LEGAL quantified those legaladministrative barriers that currently affect the planning and deployment of photovoltaic (PV) systems across Europe. They differ markedly, for a similar project the project development process in Germany averaged 90 weeks whilst it was 220 weeks in Spain; 4 times as many man-hours were required to comply with administrative requirements in Spain as in Germany and costs were directly affected.
- The OECD is rare in having tried to go beyond administrative burden in assessing the differences in environmental policy. It examined the competition friendliness aspect of environmental policies for OECD Member Countries through an indicator of burdens on the economy due to environmental policies (BEEP), which would be an overall indicator of the cost level. They found significant variance, but the results also show that low burden could be associated with stringent or ambitious policies (implying that extra costs do not translate into a better environment).

The literature review went policy area by policy area and summarised the types of administrative activities that could lead to costs. Even though, for the most part, cost information is not available for these activities, this is useful in highlighting the very large flexibility open to Member States. This flexibility is important because Member States must apply administrative practices in very different administrative, industrial and geographical contexts. As a result, it is to be expected that some differences in administrative costs arise. Examples found in the literature review included:

- Access to Environmental Information Directive wide variations between Member States in the level of requests made to public bodies for information (in part affected by the proactive provision of information) directly affects the administrative costs of the directive.
- Environmental Impact Assessment Directive under this process there are significant differences between countries. The average duration of the process in the Member States varies between 4.75 and 27 months, and the average direct cost to developers varies between less than 4,000 and 200,000 EUR per project. The scale and nature of each project, of course, varies.
- Wide variations in fees per item of waste electrical and electronic equipment paid by producers across the Member States (which can vary considerably, but differ between type of product as well as Member State).
- Fees charged to producers for household packaging under the Packaging and Packaging Waste Directive vary from €14 per tonne in the UK to €200 per tonne in Austria.

Figure 1. Indicators of burdens on the economy due to environmental policies

(**BEEP**)³ Note that the vertical axis is an arbitrary scale highlighting where there is increasing burden to entry and to competition.



Case study 1: Permitting under the Industrial Emissions Directive

The Industrial Emissions Directive (IED) requires all industrial activities covered by the directive to have a permit detailing the emissions of pollutants that are allowed to that installation. This case study looks at the costs (for business and for the responsible/competent authorities) related to the obligation for the operator of an installation to hold a permit. The focus is on three specific industry sectors: surface treatment of metals and plastics; disposal or recovery of hazardous waste; and intensive rearing of poultry or pigs. Data have been collected on cases of IED permit procedures in five selected Member States (IE, NL, PL, ES, UK), both from competent authorities and companies (permit applicants).

The results of the case study provide evidence of the order of magnitude as well as the spread in IED permit costs. There are large differences in the amount of time and money that authorities and companies spend on IED permitting, not only between Member States and sectors, but also within a single sector in one MS. For example, industry respondents indicated costs ranged from &25,000 to &100,000 for the permitting processes. The costs to administrations are lower but also vary, e.g. &2,500-&2,500 per permit as an average.

Examples of the annual cost of IED permitting for authorities in Slovenia (EUR 457,000 for 130 permits, i.e. EUR 3,500 per permit) and Spain (La Rioja: EUR 50,000 for 20 permits, i.e. EUR 2,500 per permit). In Malta, it was estimated that two full time equivalents at the environmental authority are dedicated to permitting.

³ Koźluk, T. 2014. The Indicators of the Economic Burdens of Environmental Policy Design – Results from the OECD Questionnaire. OECD Economics Department Working Papers No. 1178. http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP(2014)74&docLanguage=En

The case specific questionnaires revealed substantial variation in the amount of time spent by authorities on IED permit procedures. In Spain (Andalusia), the estimated average number of person days needed for a permit varied from 39 (poultry and pigs) to 64 (surface treatment and hazardous waste). In the Netherlands the case specific numbers varied between 10 and 42 (surface treatment). For Poland, only one estimate was available: 14 person days for a permit in the category poultry and pigs. Several authorities (including the UK Environment Agency) indicated that it was not possible to specify the amount of time spent on individual permits.

To a large extent, these differences will be related to the complexity of the installation and its environmental impact, and to the extent to which the activity for which a permit is requested is a controversial one. These are factors that cannot be influenced. However, the case study also suggested some factors affecting costs that would benefit from scrutiny:

- Consultations between the applicant and the authorities preceding the formal application seem to reduce costs. Such consultations are themselves time consuming and the impact on the total cost and duration of the procedure should therefore not be overestimated, but they increase the likelihood that the formal application can be accepted and processed by the authorities without the need for additional information requests.
- Time lengths differ: The case study found the length of the permitting procedure could vary from 2 months to 27 months. A maximum duration of the permit procedure may put pressure on the authorities and provide certainty for the applicant. Some MS, including NL, RO and UK, already apply such maximum terms. Clearly, provisions would have to be made for cases in which the exceedance is beyond the authorities' control.

Case study 2: Implementing the Strategic Environmental Assessment (SEA) Directive

The Strategic Environmental Assessment (SEA) Directive is a structured decision-making process, aiming to ensure that environmental sustainability concerns are fully considered within plans and programmes, before their adoption.

Costs associated with implementation of the Strategic Environmental Assessment (SEA Directive) were assessed through consultation with competent authorities in different Member States. To overcome the lack of detailed cost data relating to expenditure on SEA, a 'value of time' approach was developed that identified the absolute and relative resource allocation to different stages of implementing the Directive. Within the detailed case studies submitted by Member States, overall expenditure on SEA was broadly similar, at $\in 62,776$ per average plan or programme. The range in costs between the MS examined is remarkably small. The totals range from $\in 60,001$ to $\in 68,539$. This is despite the different contexts of the MS and the differences in distribution of the costs between public administrative costs and consultant costs. So, in Finland all costs are to the public administrative and in Hungary almost all costs are to consultants. This is perhaps surprising given the wide variation in how the Directive is transposed into national and sub-national legislation, as well as different levels of reliance on public and private resources. In general, consultation activities consumed the most resources and expenditure.

Examples of best practice highlighted the core importance of proportionality in executing an effective SEA; early consideration of the scope and direction of the SEA analysis (through more detailed screening processes) can help reduce the time needed for more costly consultation activities.

Case study 3: Habitats Directive decision making

The Habitats Directive (Directive 92/43/EEC, henceforth 'HD') was adopted in 1992 and seeks to protect the EU's most important habitats and species. A major requirement of the legislation involves the creation of the Natura 2000 network of protected areas (which combines Special Areas of Conservation [SACs] designated under the Habitats Directive and Special Protection Areas [SPAs] designated under the Birds Directive). Whilst there have been a number of reviews exploring issues associated with implementation of the Directive, there has been a limited amount of research relating to the actual costs associated with its implementation.

One area of costs generated by implementing the Directive relates to obligations under Article 6.3 which requires 'an appropriate assessment to be undertaken of any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon'. This imposes costs on developers as a result of time, fees and delays in permitting processes for such plans or projects⁴.

One issue related to this that can be readily compared across MS is the time taken for project or plan permitting decisions by competent authorities under Article 6.3. This can affect project or plan applicants such as land owners and developers. Delays in permitting are widely cited as imposing costs on businesses, because they tend to require increased time inputs and professional fees, delay revenues and therefore increase financing costs, and lead to greater uncertainties for developers.

Case study research with six MS (DK, ES, MT, NL, RO, UK) demonstrated that there is clearly no 'typical' situation that can be drawn on to present an average view of decision making timescales (which can range from just over 100 days to over 3.5 years). All took longer than the timescales suggested in MS guidance or requirements (where this exists). There appears to be limited systematic logging of decision timescales and associated costs across MS. It is recommended that better logging of decision making timescales and associated costs would enhance the ability to comprehensively evaluate such issues in the future.

Key factors identified as influencing the timelines of decision-making included: lack of communication between the applicant and competent authority; a lack of resources/expertise in the competent authority; parallel/integrated EIA/SEA processes; poor quality data and Appropriate Assessments; large/complex/novel project.

Clearly some influencing factors are outside the direct control of the competent authorities or the relevant HD regulation and national legislation. However, a number of best practices have been employed across MS in order to address current and past factors that delay decision making. Best practices were identified that related, at least in part, to all of the key factors affecting timescales identified above. However, a major constraint is the lack of sufficient capacity and skills in some administrations, particularly at local level.

Case study 4: Producer responsibility schemes under the End-of-Life Vehicles (ELV) Directive

The case study on the End-of-Life Vehicles (ELV) Directive requires the creation and operation of producer responsibility schemes in each Member State, which can have costs to businesses and administrations. The Directive requires MS to ensure "adequate availability of collection facilities within the territory". MS have chosen either a facility per number of inhabitants (except in FI as it is not densely populated) or by area. This case study sought information on the administrative costs associated with the creation

⁴ Defra, 2013. Progress on implementation of the Habitats Directive Implementation Review. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/206379/pb13959-progresshdir.pdf (Accessed 21 July 2014)

and running of producer responsibility schemes, and the costs to producers of participating in such schemes, in Germany (DE), the Netherlands (NL), Spain (ES) and Portugal (PT). Regarding the creation of producer responsibility schemes, comparable data was found on the number of collection/treatment/shredder facilities, which ranges from 79 in PT to 535 in ES. Facilities appear either larger or more efficient in PT (1 facility per 1,165 vehicles) and ES (1 facility per 1,286 vehicles) than in FI (1 facility per 431 vehicles) and NL (1 facility per 664 vehicles); facilities in PT and ES may have had more modern techniques from the outset since many were created after the ELV Directive, whereas those in FI and NL are older. Estimated costs for putting in place the necessary Centres for Reception and Decontamination of vehicles were only found for ES (\in 223-284 million in total), and both the time taken to issue the licence for a producer responsibility organisation (PRO) (10 months) and the financial cost of communication activities in the initial set-up phase (\in 10,008 in 2004) were only found for PT.

Identified comparable costs of running producer responsibility schemes can be summarised as follows: the total annual cost of running the ELV management system varies between €150,903 annually in PT and €500,000 in FI as total amounts, while per vehicle the ranges are from €1.98 in PT to €11.31 in NL. Staff costs to PROs per employee are broadly comparable at €59,365 in NL (€2,018,416 for 34 staff) and €48,441 in PT (€142,867 for 3 staff); and the number of audits/inspections undertaken annually ranges from 115 (1.5 per facility) in PT to 818 (2.9 per facility) in NL.

The costs to producers of participating in producer responsibility schemes are estimated to be in the magnitude of high double digit millions of euros for the whole EU car industry. The only comparable cost data found is the fees paid by producers to PROs; in FI producers paid a total of \leq 450,000 (an average of \leq 5,921 per producer) in 2012 (FI has set up a fund where every importer of second hand vehicles to FI has to contribute to a vehicles recycling fund), in NL producers paid \leq 23,311,481 in 2011 (number of producers not known), and in PT producers paid \leq 130,354 (an average of \leq 3,430 per producer) in 2013. Annual fees based on the size of producer are between 3.1 and 4.5 times higher in FI than in PT, across all sizes of producer.

Conclusions

Both the literature review and the case studies demonstrate that the EU environmental acquis places a range of obligations on public administrations, businesses and individuals leading to administrative costs. It is important to note that while some costs can be directly determined (e.g. staff time to perform a task, such as an environmental assessment), other costs are more difficult to quantify, but are nevertheless real. A good example of this is the time for decision making (e.g. to issue a permit). Delays and uncertainties are a cost for business ('time is money'), but evidence of an actual Euro value is hard to provide.

There are differences in these costs between countries. So, even where the EU requirements are the same, national choices lead to cost differences for businesses.

Care needs to be taken in interpreting cost differences between Member States. If one simply focuses on the costs of an individual element of an overall administrative process, differences between Member States may be identified. However, limiting analysis to this one point could be misleading. This is most obviously seen in consideration of fees for issuing permits where Member States have adopted different choices on the distribution of the administrative costs of permitting.

The information on costs of implementation is usually not very good, though it varies across the acquis. For some older directives and those that have been subject to review, more cost information is available – such as for EIA, Natura and some of the waste

acquis. However, other areas with significant administrative obligations have much less detailed cost data (as opposed to anecdotal or specific examples of costs).

Even where cost data are available at a general level, the amount of information that allows direct comparison between the MS is negligible in many cases in the literature. There are reasonable data for comparison on issues such as EIA and public access to information and the case studies have generated further information. However, beyond this comparative information in reports is at a proxy level (e.g. number of inspections) and these are difficult to translate to monetary figures as understanding the time taken for activities can be difficult to determine. In contrast there has been more examination of the issues of costs under the CAP and lessons from this may be learned.

Some differences in costs simply reflect different situations in different countries, and is to be expected. Nevertheless, there also seem to be differences in administrative costs between countries for actions that should be broadly comparable. Whilst the data is too poor to provide systematic evidence, there are indications that there is potential to improve efficiency, for example, by adoption of best practice. Understanding why costs vary has proved difficult to get firm conclusions on. Reasons include the following:

- *Degree of implementation:* incomplete implementation affects actual costs, but this would be misleading.
- Options within EU law: many directives contain options for implementation and the choices made by MS affect the resulting costs or the distribution of those costs.
- Integration of administrative tasks at Member State level: integrating administrative functions for more than one directive (seeking synergies, etc.) can result in savings if done correctly.
- Administrative structure: the costs or efficiency of public administrative procedures also reflects the administrative structures in the Member States, in particular where competencies are highly devolved.
- *In-house or contracted-out:* the case studies show wide variation on whether to retain functions in the public administration or contract this out. This has significant implications for understanding costs.
- *Fees:* the distribution of costs, role of cost-recovery, etc., all affect fees and, therefore, this particular cost to businesses.
- *Support to those subject to regulation:* the degree of support give to businesses in understanding its obligations and meeting these can affect costs significantly.

Recommendations

The report makes recommendations to businesses, Member State governments and administrations and the European Commission.

Recommendations to businesses:

• Business associations and larger individual businesses should undertake more indepth reviews of the administrative costs they are subject to in different Member States including the reasons for cost differences and whether these have consequences for businesses. • Businesses operating across more than one Member State should bring together comparative cost information on administrative tasks arising from national application of EU law. Such information would be valuable in reviewing and designing future legislation.

Recommendations to Member State governments and administrations

- Member States should adopt systems to log basic administrative costs of implementing EU law, including logging the time it takes to reach decisions (e.g. issue a permit).
- Member States should undertake studies of the administrative costs of implementing different aspects of individual EU directives and regulations, with a breakdown of data for different tasks, types of cost, etc..
- Member States should adopt support systems (guidance, IT tools, advice, etc.) to aid the regulated community in fulfilling its administrative obligations so aiding efficiency both for business and public administrations. This is particularly important for SMEs.
- Member States administrations should learn from each other about levels and causes of administrative costs in implementing the environmental acquis and best practices in reducing those costs.

Recommendations to the European Commission

- The Commission should further analyse administrative costs and reasons for differences as different policy fields are reviewed, etc.
- The Commission should encourage business stakeholders to come forward with examples of information on differences in costs across Member States along with ideas for harmonising/reducing those costs.
- The Commission should undertake the collection and sharing of best practice in reducing administrative costs in relation to specific tasks required in EU environmental law, thus moving beyond current best practice on administrative efficiency generally.
- The Commission must ensure that the drafting of legislative proposals does not preclude the opportunity afforded to Member States of simplifying or streamlining their own administrative implementation at national level.

Introduction

Background

The purpose of EU environmental law is to protect the environment and to ensure the operation of the single market contributing to a 'level playing field'. The implementation of EU environmental law will result in both costs and benefits to public administrations, businesses and individuals.

The costs of implementing EU environmental law will vary across the MS, thus potentially affecting the 'level playing field'. In some cases this is because of the uneven distribution of the issue addressed by the law (e.g. designation of nitrate vulnerable zones) and differences in the technical compliance costs due to preconditions in the MS (due to different geographical conditions, industrial structures etc). However, differences also arise because of the choices made by MS in implementing the law, administrative arrangements (pre-existing or new), procedures adopted, attitude of officials, etc. Such differences in costs could result in barriers to delivering the objective of a level playing field for businesses and citizens of the EU.

The objective of this report is to provide the Commission with a review of the differences in the costs of implementation of EU environmental law in the MS based on existing literature and new data from cases studies. The study focuses on administrative costs (procedures to follow, monitoring, reporting, delays, 'hassle', etc.) rather than technical compliance costs (e.g. installing new water treatment equipment).

The results of this study are relevant to the Commission's Regulatory Fitness and Performance Programme (REFIT)⁵, which takes forward the strategic objectives of smart regulation. The initial screening exercise by the Commission (SWD(2013)401) emphasised the need for smarter approaches to regulation, reducing the costs and increasing the benefits in delivering the objectives of regulation, such as those arising from EU environmental law. One issue is to identify the extent to which administrative costs arising from the implementation of EU law arise directly from that law (and thus apply to all those affected) and the extent to which they arise from the decisions of MS in how the EU law is to be implemented. Identifying these differences is critical for understanding how the cost-effectiveness of implementation can be improved.

Structure of the report

This report is structured as follows. The first section provides a short summary of a literature review focussed on the administrative costs arising from the environmental acquis (the main review being provided in an annex to this report). This is structured according to the different themes of the acquis (air, water, etc.). The second part of the report contains the results of the case study analysis of data on selected administrative tasks for four selected directives – the Strategic Environmental Assessment Directive, the Habitats Directive, the Industrial Emissions Directive and the End-of-Life Vehicles Directive. The final section of the report presents some overall conclusions of the work.

Types of costs

It is important to stress that the costs examined in this study are largely administrative and similarly related costs. For many years (such as following accession of Portugal and Spain and during the accession processes leading to the enlargements of 2004, 2007

⁵ COM(2012)746 and COM (2014) 368

and 2013) the focus on the costs of implementing the acquis has been on the technical costs, such as costs of upgrading treatment for urban waste water or drinking water or the costs for industry of the 1996 IPPC Directive (now the Industrial Emissions Directive – IED). More recently there has been considerable debate on the costs to developers of directives such as the Habitats Directive. In many cases such technical costs are driven by conditions in a directive (although there may be technical options to choose between).

However, this study recognises that it is not only technical costs that arise from EU environmental law – there are administrative costs to business, individuals and public administrations. These costs may be of various types. The rationale for focusing on them is that they can be compared on a broadly like-for-like basis. This is often not the case for technical costs, which are often a function of industry structure, geography etc.

There are costs for public administrations in the MS. These administrations may be central government, regional/local government or other public bodies and agencies. Costs will include 'start-up' costs as legislation begins to be implemented (which might include capacity building, training, new staff, IT systems etc) and recurring costs, such as may arise with permit handling, inspections, monitoring, reporting, communicating with stakeholders, associated research, etc. Note that in this project we are not including the very specific cost of legal transposition.

Immediate costs to public administrations may be passed on to private entities (businesses and individuals) through fees and charges. Policies on cost recovery or charging vary between the MS so the costs arising on private entities will vary between MS. However, the overall cost of a directive might be the same – the difference may be the distribution in the cost, not its absolute amount.

There are many reasons why administrative costs may vary between MS, including their institutional structure and starting point, the effort devoted to the subject (generally smaller in smaller administrations and where the "target" sector is less significant), the scale, distribution and complexity of the sector/activities being regulated.

Transaction costs to business from regulatory requirements of the EU environmental acquis may arise from a variety of different sources. Businesses may take time to become familiar with legislation and the specific obligations required of their activities. They may need to apply for permits, undertake assessments, be subject to inspection, undertake monitoring, report on their activities, etc. These all take time (hence a staff cost), but business may also need to invest in training, etc., to have the capacity to perform such activities. Alternatively, business may pay for others to perform these regulatory activities for them (e.g. paying consultants to develop permit applications).

There are, therefore, many different types of administrative costs arising from the acquis and these costs fall, variously, on public bodies and on business. However, in many cases the extent of the cost will vary depending on the nature of the public administration in the MS, the choices that administration makes and the expertise in business. At a basic level, staff time costs will vary simply because of the differences in salaries between MS. Businesses in MS with a history of regulation may have greater prior expertise than those without such a history. Smaller businesses are likely to be at a disadvantage to larger businesses. However, choices made by public administrations are important in affecting costs. Forms to complete, time to make decisions, charges applied, etc. – these are MS decisions and will vary from country to country.

In conclusion, the EU environmental acquis generates costs for public administrations and businesses. The key issue is that some costs from implementing the acquis may arise from the decisions made by MS in applying the law and, therefore, such costs would be expected to vary across the EU.

European Commission Administrative Burden reduction Programme

The Action Programme for Reducing Administrative Burdens in the EU⁶ defines and provides some tools and standard approaches on assessing administrative burdens, such as EU Standard Cost Model and it provides a number of good practices.

As part of the Programme, costs were measured for almost 50 of the main Information obligations in the environmental policy field: the IPPC Directive, shipments of waste Regulation, the WEEE Directive, End of Life Vehicles Directive, and the Seveso Directive. At a later stage other Directives, such as Biocides, were also measured.

The programme produced measurements and data for the different Information Obligations based on measurements in different Member States. It shows that EU environmental policy is responsible for only 1 per cent of the administrative costs coming from all EU policies, estimated at \in 1.18 billion per annum (most recently reported in the Final Report of the Stoiber Group⁷).

The analysis concluded that "a very significant proportion of administrative burdens appear to be the result of inefficient and public and private administrative practices (between 30 and 40%)" (COM (2009)16). COM(2009)544 also noted that 32% of the EU wide administrative burden results from "goldplating" by Member States: "It is estimated that 32% of administrative burdens of EU origin are the result of the decision of some Member States to go beyond what is required by EU legislation (goldplating) and of the inefficiency in their administrative procedures".

OECD analysis of environmental policies

The OECD⁸ has identified a number of specific features of environmental policies that may affect economic outcomes:

- Dynamic efficiency (or depth) the extent to which a policy instrument gives continued incentives to search for cheaper abatement options (e.g. via innovation).
- *Flexibility* the extent to which the policy leaves room for the firm (or consumer) to choose how to reach the environmental objective, less prescriptive policy interventions being better suited to accommodate new ideas, innovation and technology adoption.
- *Predictability* the consistency, credibility and clarity of the current and future policy signal can affect investment, innovation and eventually productivity growth. Certainty on future pricing of a particular externality provides stronger incentives to adopt long-term abatement strategies.
- The *competition-friendliness* aspects of environmental policies are less often recognised, but are potentially as important for overall economic outcomes as other product market regulations, such as those prevailing in network sectors or services. Competition is a key engine of growth and minimising the distortions stemming from the design and implementation of environmental policies can improve both economic and environmental outcomes. Lower barriers to entry and competition encourage innovation, adoption of cleaner technologies and entry of environmentally-friendly business models.

⁶ http://ec.europa.eu/dgs/secretariat_general/admin_burden/index_en.htm

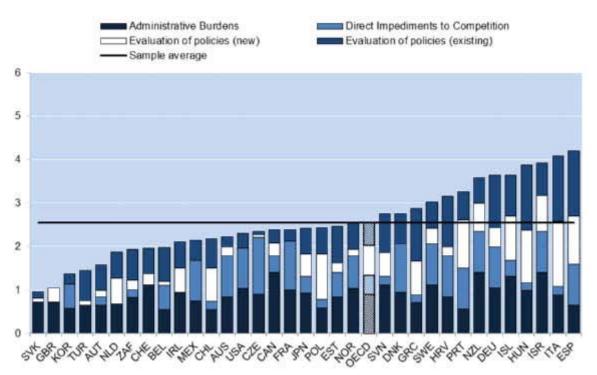
⁷ High Level Group on Administrative Burdens. Final Report. 2014. http://ec.europa.eu/smartregulation/refit/admin_burden/docs/08-10web_ce-brocuttingredtape_en.pdf

⁸ Albrizio et al. (2014), "Do Environmental Policies Matter for Productivity Growth? Insights from New Cross-Country Measures of Environmental Policies", OECD Economics Department Working Paper, forthcoming.

The OECD notes that there is very little existing analysis on current policies and to what degree they differ both in terms of the costs they generate and their impact on growth. The competition friendliness aspect of environmental policies is captured by a new OECD questionnaire-based indicator of burdens on the economy due to environmental policies (BEEP). Examples of common aspects of environmental policies that can provide advantages to incumbent firms include high administrative burdens to new entry; vintage differentiated regulations, where new firms are subject to stricter environmental limits; subsidies or other benefits (e.g. public procurement) for a historical environmental record or improvements (which new firms may not be able to show even if being cleaner than older firms); tax breaks for investments in improving environmental performance (which new firms, that do not yet have profits, may not be able to benefit from) and grandfathering of licenses and permits. Hence, the indicator summarises information on administrative burdens on entry, such as the complexity and design of environmental permit and licensing procedures; the use of environmental regulations that directly impede competition and favour incumbents over new entrants in various ways; and the extent to which economic considerations are (or are not) taken into account when designing, implementing and conducting environmental policies. The results show wide cross-country differences (see figure below).

As the indicator is constructed by the OECD it does not show all EU Member States, but for those that are included there are large differences. These differences occur despite all of the countries operating within the same environmental acquis showing the considerable degree of flexibility (subsidiarity) open to the Member States. It can be expected that these differences would translate into differences in the cost-effectiveness of the implementation of EU law.





Note: Responses are scored and aggregated within each category and among categories. Equal weights are used at each level. The final scale is 0 to 6, where 0 is the most friendly to competition: lowest administrative burdens, least use of policies that directly impede competition (favouring incumbents), and well-established practices of evaluation

of economic effects of environmental policies – both for new policy proposals as well as for the existing policy setup. Source: Albrizio et al. (2014).

Literature Review

Introduction and structure of the literature review

The purpose of the literature review was to gather explicit data and information on the costs of implementation of individual items of EU environmental law to enable a comparison to be made, thus identifying whether, or not, there are differences in costs between Member States (MS), the extent of these differences and the reasons for these differences. The review also considered differences in costs in implementing parts of the agricultural acquis as this includes important environmental objectives and lessons may be learnt from this area of law. Literature from a range of sources was examined, with a focus on where some comparison between MS has been made. The full review of the literature is provided in Annex I to this report. This section provides a short overview of the main findings. This is structured according to the themes of the environmental acquis:

- Horizontal legislation (liability, participation, etc.)
- Impact assessment
- Birds and Habitats Directives
- Water law
- Industrial pollution control law
- Air law
- Waste law
- Chemicals law
- Noise law
- Agriculture

Horizontal legislation

The literature review of horizontal EU environmental law covered:

- Directive 2004/35/EC on environmental liability (ELD);
- Directive 2003/4/EC on public access to environmental information; and
- Directive 2003/35/EC on providing for public participation in respect of drawing up of certain plans and programmes relating to the environment.

Environmental Liability Directive

Under the ELD, subject to certain exceptions, the relevant operator must bear the costs of preventive or remedial actions relating to specified environmental damage. The competent authority has a duty to recover any costs it has incurred in relation to such actions. These include the costs of assessing the damage or threat of damage and the preventive or remedial options, and the administrative, legal and enforcement costs, costs of data collection and other general costs involved in effective implementation of the Directive, including monitoring and supervision, etc. The competent authority has further obligations, which could give rise to additional administrative and technical costs.

A 2013 study showed that some MS designated one or a few competent authorities while others designated several hundred (e.g. Austria, Germany and the UK). It found that the designation of multiple competent authorities is more likely to result in less effective implementation and enforcement of the ELD as more people need to be trained in the necessary skills. Some Member States published guidance and other supporting

documentation to raise awareness about the ELD as well as implementation and enforcement data which have improved the effectiveness of transposing the legislation.⁹

In some MS, authorities do not have sufficient resources to investigate all the cases that are reported to them because the number of notifications and requests is high and there is a lack of resources in public institutions. The Scottish Environmental Protection Agency, for example, gives priority to potential ELD cases, when such arise, over other activities, thereby ensuring that sufficient staff members are available to address notifications/requests.

In conclusion, the availability of data on the implementation of the ELD is incomplete and not consistent between MS so that clear comparisons cannot be made with confidence. The information about administrative costs is very limited. In some countries, there are no additional administrative costs reported while in others – costs go as high as \notin 5 million. For this reason, it is not possible to compare costs across Member States from the existing literature.

A summary of the administrative costs identified by the project through examination of reports from the MS to the Commission is set out in the following table.

MS	Administrative costs
Belgium	In Flanders only: €55,000/year (gross)
Bulgaria	€131,781/year
Estonia	No obligation for reimbursement of assessment costs if liability of the operator could not be established
Greece	Set up a system of administrative ELD implementation involving seven authorities or bodies. Two newly created: the independent coordination office for the implementation of environmental liability (ICOIEL) and committee for the implementation of environmental liability (CIEL). ICOIEL has 6 staff members.
Hungary	No additional administrative costs incurred by the public administration
Ireland	 One person per year for each of the two responsible bodies: EPA (competent authority) and the Department of the Environment Community and Local Government; €2,000 for a river quality assessment
Italy	Indicated as high amount of human and technical resources
Latvia	No information
Lithuania	No information
Netherlands	No information
Portugal	No information
Romania	No additional costs reported as no new administrative structure created
Spain	€5 million in service contracts for tools development in four years, €20,000 per year in staff costs, €684,000-€2 million admin costs of autonomous communities and cities
Sweden	No information
United Kingdom	Educated guess of the costs of these administrative measures in range of 15 full time equivalent staff years for transposition of Directive, supporting materials, staff training and communication activities

Table 1. Overview of costs per Member State

⁹ Bio Intelligence services and S&B (2013) Implementation challenges and obstacles of the Environmental Liability Directive (ELD). Final report for DG Environment, European Commission. May 2013, Brussels.

Sources: Own compilation based on 2013 MS reports and overview table, provided by the European Commission

Public access to environmental information

The Directive has two types of costs. Initial set-up costs can derive from improvements to data collection, storage and retrieval procedures, electronic databases and office facilities. Training on communication and dissemination methods and IT for running the databases, information networks and websites can also lead to initial set-up costs. On-going costs can arise from the 'maintenance' of the information system (including staff cost, consumables etc.), reporting to the public and the European Commission, IT maintenance and updating. The extent of both start-up and ongoing costs will depend on the extent of pre-existing arrangements in each MS.

MS were required to report on their experience in the application of the Directive by February 2009. The Commission's synthesis report indicated that many MS reported that although implementation has resulted in positive impacts, the administrative burden was considered to be very significant.¹⁰ An analysis of the national reports was undertaken in this project, which showed the following types of data on costs were available:

- the number of environmental information requests received by the public authorities,
- number of appeals received under Article 6(1) and 6(2) and
- the charges applied under Article 5.

The number of environmental information requests varies significantly between Member States. For instance, from 1 January 2003 – 1 January 2008 municipal authorities in Vienna received 39 requests, while in Brussels the Info-Environment Service – BIM received almost 26,000 general requests in 2008 alone. At national level, Ireland reported that between 1 May 2007 and 31 December 2008, 323 written requests were received, while Romania recorded 17,193 requests in 2008. Some MS also record the number of visits or hits on official websites where environmental information can be accessed. For instance, the institutional portal of the Portuguese Environment Agency registered an average of 5000 daily hits in 2009.

The number of requests received depends on many factors. Some MS have a long history of the right to access environmental information and thus the public is more aware of it, while others only recently introduced this provision and thus people are less aware of their rights. More information requests are usually received for large-scale projects which influence the state of the environment and/or have an impact on human health. Another important factor is the amount of information available online, thus reducing the need for the public to make requests. The number of requests received will also likely affect costs. Where many requests are routine, it is likely that authorities will have adopted more efficient systems leading to lower per request costs. Thus cost differences can arise from economies of scale.

Public participation in respect of drawing up of certain plans and programmes relating to the environment

Again, there are two types of costs. Initial set-up costs can derive from studies on the scope of the indicated regulations, consultation with relevant administrations, initial training, editing and printing training manuals and leaflets. On-going costs can arise from the provision of staff time and resources (including staff cost, consumables etc.), reporting to the public and the Commission, IT maintenance and updating.

 $^{^{10}}$ EC (2012) Report on the experience gained in the application of Directive 2003/4/EC on Public Access to Environmental Information, COM (2012) 774

No specific implementation cost estimates relating to implementation of the Directive could be found during the literature review. The process to ensure public participation is sometimes perceived to entail considerable costs as the involvement of citizen-groups in decision making is perceived to be more costly than if the decision was made by a single-agency administrator. In addition, such processes can be time-consuming and resource-intensive. However, public participation in terms of public involvement also has added value through transparency, accountability etc that could reduce costs.

Impact assessment

The review of literature of administrative costs focused on two directives:

- The Environmental Impact Assessment Directive 2011/92/EU
- The Strategic Environmental Impact Assessment Directive 2001/42/EC

The EIA Directive

This requires that specified activities are subject to an environmental assessment prior to planning approval by public authorities. The main requirements leading to administrative costs are:

- Screening determining whether project needs to be made subject to an EIA (Art 4);
- Conducting Environmental Impact Assessment (Art 5);
- Ensuring developer supplies the EIA, providing opinions on the information required, and making available relevant information (Art 5);
- Consultation with relevant authorities and public (Art 6) as well as other MS (Art 7);
- Taking account of EIA in development consent procedure (Art 8) and provision of relevant information (Art 9); and
- Establishment and implementation of review procedures (Art 11).

The review found that there are several studies which provide evidence of variability in the costs of implementing the EIA Directive. These indicate that the key variables affecting the costs of implementing the EIA Directive are:

- The number of EIAs required, which are related, for example, to thresholds on the size of projects;
- The number of screenings;
- The proportion of screenings that result in an EIA;
- The duration of the EIA;
- The data requirements and level of detail;
- The extent of consultation; and
- The costs of labour involved in undertaking the EIA.

The recent Impact Assessment of proposed amendment of the EIA Directive made overall estimates of the costs of the EIA Directive in the EU. It found that the costs for developers depend on the size of the project and this represents about 1% of the total project cost. However, a critical issue for developers (with potential significant economic costs) is the time taken to complete the EIA procedure. The literature review (see table below) found considerable variability across the Member States – with the average duration varying from less than 5 months to 27 months. Variability is found in most of the EIA stages.

Member State	Screening	Scoping	Environmental Study	Public Consultation	Final Decision	Total
Austria ¹⁴				1.50		11.00*
Belgium	1.00	1.00	6.3 ¹⁵	1.00	3.00	12.30
Cyprus	1.00	1.00	6.00	1.00	1.50	10.50
Czech Republic	0.50	0.50	3.00	2.50	1.00	7.50
Denmark	3.00	1.00	12.00	2.00	3.00	21.00
Estonia	0.75	1.00	1.00	1.00	1.00	4.75
Finland	1.50	3.00	6.00	2.00	2.00	14.50
France		1.50		4.00	2.00	7.50
Germany		2.50	9.00	2.00		13.50
Greece	1.00	2.00	1.00	2.00	1.00	7.00
Ireland		0.43**				
Latvia	0.75	1.00	2.00	0.75	2.00	6.50
Malta	1.00	0.75	6.00	0.75	2.00	10.50
Poland***	1.00	1.00		0.75	2.00	
Slovakia	1.00	0.50	0.75	0.75	2.00	5.00
Spain****	3.00	3.00	18.00		3.00	27.00
United Kingdom	0.10	0.50	0.75			
Average duration for respondents (months)	1.20	1.29	5.46	1.57	1.96	11.325
				Sum of Average Stage		11.325 months

Table 2. Variation in the duration of the EIA procedure by stage in months fordifferent Member States

Main source: Data collected from EC questionnaires (2009) * Austria: Based on footnote 14, average duration of months was calculated as 11 months (average of 10 and 12 months).

**Based on range of 0.1 – 0.75 months, average was taken (0.425 months) Source: GHK, 2010

The administrative costs estimated as time spent in processing the EIAs results in an overall administrative cost for public authorities of approximately \leq 146 million to \leq 215 million in 2010 for the EU28. Most of the efforts for the authorities are due to the review of environmental information and the final decision-making (89 % of total EIA costs). Case studies show that bigger effort during the scoping stage resulted in relatively less effort during the stage of final decision-making.

While the fixed administrative costs for an EIA represent only a small proportion of project costs (between 0.01 % to 2.37 % in some exceptional cases), administrative burdens have been identified by business and industry as an important problem, as in some cases the way that the EIA is applied may increase the costs of projects considerably. These additional costs may arise from:

- Delays caused when environmental data are not available or when authorities request additional information;
- Disproportionate burdens on SMEs, which may be less able to absorb the fixed costs involved;
- Legal disputes which can involve multiple stakeholders and the public, and generate legal costs and delays; and
- Uneven approaches to implementation of the Directive.

Industry stakeholders have stated that where SMEs are involved in EIAs, the costs are likely to be relatively higher than for larger firms (for example because of a lack of knowledge of the EIA process and inexperience in the use of consultants and

involvement in consultation processes) and potentially disproportionate given the likelihood that SMEs will be involved in smaller projects where the added value in terms of, for example, assisting with project design, is limited.

In conclusion, the literature has reasonable estimates of the overall administrative costs from the EIA Directive and some information is available on the differences in costs between Member States.

The SEA Directive

The SEA Directive requires environmental assessments to be undertaken of plans and programmes required in law and produced by public authorities. The main requirements leading to administrative costs are:

- Screening determining whether SEA is required for plan or programme (Art 3);
- Preparing environmental report (Art 5) authorities;
- Consultation with relevant authorities and public (Art 6) as well as other MS (Art 7);
- Taking account of SEA in preparation of plan or programme (Art 8) and provision of relevant information about how SEA was taken into account (Art 9); and
- Monitoring of environmental effects of plans and programmes (Art 10).

Various studies suggest that whilst findings on SEA are hard to pin down that the requirements of SEA procedures differ widely across MS. Generally, no quantification of costs seems to be available and any observations made are done so without mentioning specific MS.

A review of the application and effectiveness of the SEA Directive (EC, 2009) found that the Directive sets limited requirements for the scope of the environmental report. MS apply different methods for "scoping", as well as for consultation of the authorities concerned. "Scoping" procedures are mostly developed on a case-by-case basis, since most MS do not prescribe specific methods. There are differences between MS with regard to which authority decides the outcome of the "scoping" procedure. This is often the responsibility of the planning authority, after having consulted the environmental authority; in other instances, it is left to the environmental authority. In a few MS, the "scoping" procedure requires consultation of the public, even though this is not an obligation under the Directive.

In terms of the duration of the public consultation, only a few MS have set fixed timeframes. Most MS allow for consultation periods of at least one month, while others decide on a case-by-case basis. These differences can be expected to lead to variations in the time inputs and costs involved, although no quantitative evidence is available on this. No evidence could be found about the levels of costs involved in implementation of the Directive.

While none of the studies mention this explicitly, the Directive imposes requirements primarily on public authorities, who bear most of the direct costs involved in implementation.

Birds and Habitats Directives

Whilst there have been a number of reviews exploring issues associated with implementation of the Directives, there has been a limited amount of research relating to the actual costs associated with implementation. Types of activities under the Habitats Directive (a similar, but shorter list applies to the Birds Directive) leading to costs include:

- Designation of sites as special areas of conservation, by drawing up lists of sites supporting priority species and habitats, submitting these to the Commission, agreeing sites of community importance and designating these as SACs, and resolving disputes where these arise (Art 3-5);
- Establish necessary conservation measures involving management plans and appropriate statutory, administrative or contractual measures (Art 6.1);
- Conducting an appropriate assessment of any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon (Art 6.3);
- Implementing compensatory measures to ensure that the overall coherence of Natura 2000 is protected, where plan or project damaging to a site must be carried out for imperative reasons of overriding public interest (Art 6.4);
- Assessing co-financing requirements necessary to achieve favourable conservation status and working with Commission to prioritise allocation of funding, including development of Prioritised Action Frameworks (Art 8);
- Endeavouring, where necessary, in land-use planning and development policies to encourage the management of features of the landscape which are of major importance for wild fauna and flora, in order to enhance the ecological coherence of the network (Art 10);
- Surveillance of the conservation status of priority habitats and species (Art 11);
- Implementation of species protection measures (Art 12-15) and reporting to Commission on any derogations applied (Art 16);
- Research (Art 18); and
- Species reintroduction, control of IAS, general education (Art 22).

Gantioler et al (2010) ¹¹ estimated the annual cost of implementing the Natura 2000 network at \in 5.7 billion per year in the EU27. This was an estimate of the overall level of financial resources required to implement the network; actual expenditures are believed to be much lower. Information from Member States which gave detailed cost breakdowns suggest that one-off costs of establishing the network account for one third of the overall costs of implementing the network, and recurrent costs two thirds of the total. Recurrent management costs represent 20% of the overall costs of implementing the network, while land management and infrastructure costs account for 80%. The majority of costs relate to habitat management actions, followed by investments in land and infrastructure. The figures demonstrate that the costs of management and administrative activities are substantial, but represent a minority of the overall costs of implementing the network.

The study found significant variations in total costs between Member States, which can only partly be explained by variations in the extent of the network. Higher per hectare costs for smaller Member States suggest that there may be a significant element of fixed costs, irrespective of the size of the network, and that there are likely to be economies

¹¹ Gantioler S., Rayment M., Bassi S., Kettunen M., McConville A., Landgrebe R., Gerdes H., ten Brink P. Costs and Socio-Economic Benefits associated with the Natura 2000 Network. Final report to the European Commission, DG Environment on Contract ENV.B.2/SER/2008/0038. Institute for European Environmental Policy / GHK / Ecologic, Brussels 2010

of scale. In addition, cost estimates were affected by the degree of implementation of the network and associated development of administrative structures as well as the wide variations in labour costs across MS.

Ecosystems Ltd (2013) undertook a review of Article 6.3 of the HD – this requires 'an appropriate assessment (AA) to be undertaken of any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon'. It found that there was great variation between, and even within, MS on how the Article 6.3 permit procedure is applied.

A range of factors that influence how well the AA procedure operates (and related elements e.g. the cost) were identified. However no accurate information or quantifiable data on the costs associated with the Appropriate Assessment procedure under Article 6.3 of the Directive were obtained.

Concerns were raised by economic sectors and NGOs that Authorities may take a long time to respond to the request for a permit (or not reply at all) or may rely too readily of the precautionary principle when reaching their decision on whether to issue the permit or ask for too much information in terms of baseline studies and impact studies.

In this regard, a review¹² in England found that, in the relatively few cases in which problems arise, there can be unwelcome delays and additional costs for developers, uncertainty for local communities and the environment. The implication of the English review is that the costs of implementing the EU legislation can be influenced by national and local processes of administration and delivery.

In conclusion, there is a range of administrative costs arising from implementing the Birds and Habitats Directives, but there is limited information on how these vary across the MS and why. Issues concerned with length of decision making are noted, but there are issues to determine comparability of information.

Water law

The legislation addressed in the review included:

- Water Framework Directive (2000/60/EC) (WFD)
- Groundwater Directive (2006/118/EC) (GWD)
- Nitrates Directive (91/676/EEC) (ND)
- Drinking Water Directive (98/83/EC) (DWD)
- Floods Directive (2007/60/EC) (FD)
- Marine Strategy Framework Directive (2008/56/EC) (MSFD)

Each of these directives gives rise to different administrative obligations and costs on public bodies and affected businesses. It is also important to note that there is a deliberate linking of some administrative activities across some of the directives. This includes the integration of planning (e.g. Floods and Water Framework Directives) and practical linking of the WFD and MSFD. Overall the different administrative obligations are summarised in the table below.

Table 3: Key administrative obligations arising from EU water directives

Type of administrative obligation				
assessment and	preparing	monitoring and	public	
analysis	programmes,	enforcement	participation;	

¹² HM Government (2012) Report of the Habitats and Wild Birds Directives Implementation Review. https://www.gov.uk/government/news/examination-into-how-well-the-habitats-and-birds-directives-are-being-implemented-in-england

Directive		measures etc		consultations
WFD	Characterisation of water bodies; analysis of pressures and impacts and economic analysis (art. 5)	Programmes of measures (art. 11); River Basin Management Plans (art. 13)	Monitoring requirements (art. 8)	Public consultation, including active participation (art. 14)
GWD	Assessment of trends in pollution	Applicationofmeasurestopreventorlimitinputsofofpollutantstogroundwater	Monitoring and reporting	
ND	Designation of Nitrate Vulnerable Zones	Action Programmes; Codes of Good Agricultural Practice		
DWD			Monitoring (art. 4- 6); validation of routine sampling; investigation of non-compliance	
FD	Risk assessment (art. 4 and 5) and hazard/risk maps (art. 6)			Public participation (art. 9.3 and 10)
MSFD	Assessment of current environmental status and determination of Good Environmental Status	Establishment of environmental targets and associated indicators		

Few studies have attempted to estimate the administrative costs of the Water Framework Directive at MS level. The available evidence (see below) suggests there may be substantial differences between MS.

The (limited) available evidence on the Nitrates Directive does not indicate significant differences in administrative costs across MS. However, the Directive leaves MS some freedom in implementation, so it is possible that such differences do exist. There may also be large differences in administrative burden within MS due to the heterogeneity of the target group. The reporting and enforcement costs for the ND are often linked to wider farm reporting and inspection and, therefore, the administrative costs of the CAP due to the cross compliance requirements of Pillar I regarding this directive.

Some specific examples of costs found in the literature include:

- WFD: Estimated annual costs in UK € 10 mln; in NL about € 50 mln:
- WFD: Substantial variation in public participation; active consultations on RBMPs only in a few MS

- ND: Administrative cost in UK for farmers at least € 200 per farm per year and average record keeping cost (dairy sector) in 5 MS estimated at € 150 per farm per year
- DWD: Operating costs in UK of inspection £2.5 million (€ 3.1 mln) per year

Overall, there are relatively few studies of quantified administrative costs arising from the water acquis. This is, perhaps, surprising given the debate on burdens that accompanies discussion on issues such as WFD reporting. However, the 2012 Fitness Check of EU water policy did not find MS or stakeholder concerns over costs and, indeed, a general desire to leave the acquis as it is. In 2014 the EC began the process of organising peer reviews for MS river basin authorities. It is possible that comparing costs and sharing best practice may arise from such a process.

Industrial pollution control law

The legislation addressed in the review included:

- Industrial Emissions Directive (2010/75/EU) (IED)
- Seveso II Directive (96/82/EC)

The administrative practices between the directives overlap as Seveso installations are subject to IPPC, assessments, etc., may be integrated and the same competent authorities may cover both directives. Therefore, the administrative practices needs to be viewed together and are summarised in the table below.

Table 4: Key administrative obligations arising from industrial pollution controldirectives

	Type of action					
Directive	permits, action plans and reporting	monitoring and enforcement	public participation; consultations; information provision			
	Application for a (continuation of a) permit (art. 4, art. 12)	Regular reporting to the competent authority on compliance with permit conditions (art. 62)	· ·			
IED	Reviewing application and granting permit art. 5, art. 14)	Inspection of installations to ensure compliance and check env impacts (art. 16)	Providing information for BAT reference documents (art. 13)			
		Monitoring requirements for operators (art. 23)				
Seveso II	Establishment of a major accident prevention policy (art. 7)	Inspection (art. 18)	Provide public information (art. 13)			
	Prepare and update safety report (art. 9)					
	Establishment of safety management system (art. 9 and Annex III)					
	Establishment of emergency plan (art. 11)					

Estimates on the administrative cost of the environmental acquis in the area of industry are mainly available at EU level, where they have been used to illustrate the cost reduction that could be achieved by replacing the IPPC and other Directives by the IED. This means that comparative analysis of the costs between MS is largely lacking. Evidence from the literature of specific MS costs includes:

IED:

- NL: average per-installation annual administrative burden € 6,425 (ranging from € 1,600 in intensive livestock and greenhouse horticulture to € 35,900 in the heavy chemical industry); annual government burden of the IED (related to IPPC installations) € 5.7 million.
- EU: administrative burden of the IPPC Directive € 270 million (of which information obligations € 220 million, including € 21 million for information obligations that were not directly obliged by the Directive)¹³.
- EU: compared to its predecessors (IPPC Directive and others) the IED was expected to lead to a reduction in unnecessary administrative burden of between €105 and €255 million per year¹⁴.
- EU: administrative burden on businesses because of the information obligation associated with the permit renewal ('reconsideration and updating') process (art. 13 IED) estimated at € 24 million per year in Europe; standardising and simplifying the process could reduce this by 22% or € 5 million per year¹⁵.

Seveso II:

• Process of drawing up and submitting notifications differs per MS; administrative burden of current practice across MS is estimated at € 4 million per year; an online notification platform could reduce this by €1.5 million per year.

Under the IED, cost differences between MS may have been reduced due to more harmonisation (e.g. minimum inspection frequency and criteria), but there are as yet no data available that would enable a comparison of IED administrative costs between MS.

Air law

The literature review examined evidence for administrative costs arising from implementation of the Air Quality Directive (2008/50/EC) (AQD). The key administrative requirements that can give rise costs are:

- Assessment of ambient air quality in all zones and agglomerations (art. 4);
- Establishment of air quality plans in zones or agglomerations where limit or target values are exceeded (art. 23);
- Establishment of short-term action plans in zones or agglomerations where there is a risk that an alert threshold will be exceeded (art. 24); and
- Public information requirements (art. 26).

The literature review found very little information on comparative administrative costs between MS for the AQD. Direct comparison between MS on the Air Quality Directive is

¹³ European Commission (2009). Opinion of the High Level Group. Subject: Administrative burden reduction: priority area ENVIRONMENT http://ec.europa.eu/smartregulation/refit/admin_burden/docs/enterprise/files/hlg_opinion_environment_160409_en.pdf/ ¹⁴ http://ec.europa.eu/environment/air/pollutants/stationary/ippc/ippc_revision.htm/

¹⁵ Capgemini, Deloitte, and Ramboll Management (2009). Detailed recommendation on the Environment Priority Area 'Encourage Member States to consider Administrative Burden implications of reconsidering and updating of permits (02)', EU project on baseline measurement and reduction of administrative costs.

difficult because there is not a common administrative requirement - what the directive requires is an assessment of air quality (which may be simple where no problem exists) and planning put in place for agglomerations where air quality problems occur. However, the extent of the plan will depend on what the problems are. Further communication with stakeholders will also vary for similar reasons. Therefore, direct comparison of administrative costs is extremely problematic. However, while there is evidence¹⁶ for differences in the costs of monitoring between Member States, some of this difference may relate to inclusion of monitoring activity not necessarily required by the AQD.

Waste law

The legislation addressed in the review included:

- Waste Framework Directive 2008/98/EC
- Landfill Directive 1999/31/EC
- WEEE Directive 2002/96/EC
- Packaging Waste Directive 1994/62/EC as amended
- End of Life Directive 2000/53/EC
- Batteries and Accumulators Directive 2006/66/EC
- Waste Shipment Regulation (EC) No 1013/2006
- Mining Waste Directive 2006/21/EC

This legislation gives rise to a large list of different administrative requirements, which can result in costs. The types of requirements include:

- Measures to promote re-use, recycling, etc.
- Planning
- Issuing permits
- Registration procedures
- Notifications
- Public participation
- Monitoring
- Reporting
- Inspections

A considerable amount of information is available on the general costs of waste management in the EU Member States (MS). These costs, however, are usually technical (e.g. compliance with Landfill Directive standards, creation and upgrading of waste and recycling infrastructures) rather than administrative. In addition, such costs cannot be taken as the cost of implementing individual aspects of EU waste legislation, since the MS would have to carry out waste management activities, set up and maintain infrastructure etc even without the presence of EU legislation. Nonetheless, this information illustrates the scale of the challenge facing many MS, and the technical cost challenges provide some useful context for the administrative cost information that is available.

With regards to administrative costs, some information is available, although it is often patchy and not directly comparable between MS. With regards to costs arising from the Waste Framework Directive, information was found on the costs in the EU15 for collection of residual waste and dry recyclables¹⁷, which vary due to differing methods of collection, and the costs of permitting of waste facilities in England and Wales¹⁸. On the

¹⁶ Spangl, W. (2010). Implementing Provisions for Reporting – Resources needed for AQ reporting. EIONET Workshop, Dessau, 14-15.10.2010.

¹⁷ Eunomia, date unknown. Costs for Municipal Waste Management in the EU, http://ec.europa.eu/environment/waste/studies/pdf/eucostwaste.pdf

¹⁸ Environment Agency, 2013. Environmental Permitting Charging Scheme & Guidance, http://cdn.environment-agency.gov.uk/LIT_7697_68c5c4.pdf

Landfill Directive, estimates are available on its implementation cost in Poland and Latvia¹⁹, the cost of checks to assess groundwater quality in the UK (Environment Agency, 2013), and the cost of collecting biowastes in some of the EU15 (Eunomia, date unknown).

Concerning the WEEE, Packaging and Packaging Waste, ELV and Batteries Directives, some information is available on the average fees paid by producers to collective compliance schemes and the cost-effectiveness of such schemes²⁰,²¹; such information is only available for a limited number of MS. Costs/cost-efficiency can vary due to several factors, including population density, collection frequency, effectiveness of material sorting/processing, size of the recycling market, level of competition between compliance schemes, and the amount of transport/collection/recycling costs covered by producer fees. Information was also found on the cost in the UK of registering a new WEEE compliance scheme, and the cost to a batteries producer of registering with the Environment Agency (Environment Agency, 2013). Some information on the administrative costs of the Packaging and Packaging Waste Directive, e.g. initial set-up costs (which can increase costs to industry and administrations) and running costs (generally limited) of packaging schemes, was also found (BIO IS, 2014b), and estimates also exist on the costs of deposit refund systems for metal beverage cans in five MS (Eunomia, 2011). The free take back obligation of the ELV Directive is estimated to vary significantly between MS, resulting in different costs to producers (BIO IS, 2014b).

For the Waste Shipment Regulation, some limited information is available on the number of inspectors, costs related to training/hiring/employing inspectors, creating information databases, and time spent on/financial cost of inspections/sampling²². Little data was found on the cost implications of the Mining Waste Directive; the permit charges to an operator for a mining waste facility in the UK were identified (Environment Agency, 2013) but comparable information for other MS was not found.

Chemicals law

The chemicals acquis is dominated by the REACH Regulation (EC) No 1907/2006 and the Classification, Labelling and Packaging (CLP) Regulation (EC) No 1272/2008. Activities under the regulations that give rise to administrative costs include:

- Registration: obtaining information and creation of dossiers.
- Registration: production of a chemical safety report.
- Registration: administration of submission to ECHA and responding to it.
- Notification of substances (Art. 7).
- Development of risk management measures.
- Data sharing (Title III): application of the provisions, following ECHA guidance.
- Information in the supply chain (Title IV): preparation of a safety data sheet and provision of other relevant data.
- Enforcement.

Some studies have examined the costs to businesses and SMEs. The costs incurred by businesses so far have been mostly linked to registration activities, as pre-registration was less demanding. Additional human resources costs range from EUR 25,000-50 000

¹⁹ REC/Umweltbundesamt, 2008. Handbook on the Implementation of EC Environmental Legislation, http://ec.europa.eu/environment/enlarg/handbook/waste.pdf

²⁰ BIO IS et al (2014a) Development of guidance on Extended Producer Responsibility (EPR) (still ongoing, no link yet available)

²¹ BIO IS et al (2014b) Ex-post evaluation of certain waste stream Directives (still ongoing, no link yet available)

²² BIO IS⁽²⁰¹⁰⁾ Environmental, Social and Economic Impact Assessment of Possible Requirements and Criteria for Waste Shipment Inspections, Controls and On-the-spot Checks, http://ec.europa.eu/environment/waste/shipments/pdf/FinalReport_ENV%2810%29370155.pdf

for a small firm. Many costs are related to the use of consultants, accounting for about 10% of costs for registration.

The CSES reports provide the most recent and most quoted reviews of the cost of implementing REACH. However, they do not provide comparative information from different MS and, therefore, while they highlight the chemicals acquis as important in considering administrative costs within the wider environmental acquis, they do not address the question of divergence between MS as a factor in these costs.

The European Commission published a 'General Report on REACH' in 2013 examining different aspects of implementation, including some cost issues (COM(2013)49, 5.2.2013 and SWD(2013)25, 5.2.2103). Some actions have been undertaken by Member States which may help reduce costs, for example, helpdesks in the MS.

The Commission states there is "a rather wide variation in terms of the average total costs per registration (per substance and per registrant), with the most typical value falling within the range of \leq 50,000-100,000 and 70% in the broader range of \leq 25,000- \leq 250,000. For complex registration dossiers (for instance for substances with numerous uses or forms) the registration costs may go beyond \leq 1 million. Analysis of the drivers of the registration costs reveals that ECHA fees often represent 50% or more of the total costs, especially in the case of simpler substances and smaller firms. In the case of more complicated substances, data collection, costs related to SIEF and consortia (including management and other fees) are the main cost elements, often exceeding \leq 100,000." These differences are not indicative of inefficiency necessarily, as they may well reflect differences in the chemicals themselves. The Commission concludes that Substance Information Exchange Forums (SIEFs) have helped in reducing costs.

While the Commission Report provides an analysis of overall costs and where these most arise in the different parts of REACH implementation, there is little comparative information on the MS.

It is, though, useful to question the level of likely MS divergence. Both REACH and CLP are regulations and, therefore, the divergence that could arise with transposition of directives is not applicable here. Further, many of the issues arising with registration, etc., seem to arise from a common understanding of requirements, not least driven by the guidance, etc., from the ECHA. There are some areas of implementation where MS are likely to diverge, such as on enforcement (as in other areas of the acquis), but no comparative data are available on this.

With regard to inspection an ECHA Forum report²³ found, from questionnaire responses from MS, that from May to December 2009 almost 1,600 companies were inspected in 25 Members States of the EEA. 93% of the inspections were performed to check both the (pre)registration and provisions of the Safety Data Sheets (SDSs) and 7% of the inspections were limited to the SDS provisions. However, while the methodology could potentially generate interesting information on variations between MS, the data are presented as cumulative totals and so do not allow a MS comparison.

Noise law

The noise acquis consists effectively of two types of legislation. There is a series of laws relating to noise limits for products and equipment and also Directive 2002/49/EC relating to ambient noise. It is the latter for which administration costs arise.

²³ Results of the Forum coordinated REACH enforcement project on registration, preregistration and safety data sheets. Project Report of the REACH-EN-FORCE-1 project.

The main tasks which give rise to administrative tasks (which largely fall to public administrations) are:

- The production of strategic noise maps as required by Article 7
- The production of Action Plans as required by Article 8, including measures within those plans
- The provision of information to the public on provisions in the directive, including strategic noise maps, action plans, etc.

The available data are both old and are not comparative. According to recent information from DG ENV²⁴ the cost of noise mapping is today about €0.5 per person and the action plan about €0.15 per person. However, these costs have been the focus for analysis because, for a city of around 100,000 inhabitants, the cost of drafting an action plan will be about €15,000, but the cost of implementing that plan may be about €15 million. Thus the practical costs can be around 1,000 times the administrative costs.

Agriculture

There are costs arising from delivery of the environmental aspects of the CAP Regulations for direct payments (Pillar 1) and for rural development policy measures funded by European Fund for Rural Development (EAFRD) under Pillar 2. Actions for integrating environmental priorities in both pillars of the CAP represent only a subset of the wider policy field.

Under Pillar I, the costs fall either on public administrations, or on farmers and land managers. However, the majority of the actins identified in Pillar 1 and Pillar 2 fall on public administration, whether at EU, national or regional level. The reason is that environmental integration includes a large array of administrative actions by public bodies, such as operationalizing tools and specifying requirements on environmental management on farms.

Public costs of actions that can be directly attributed to environmental integration in CAP are mostly represented by staff time and technical costs (e.g. IT systems, research, external expertise). However, there is little information available on the direct costs to public administrations of these specific requirements. It is likely that such costs are part of budgets allocated to the core work programmes of various government departments. Only a few projects have been carried out at national or regional level that tried to disentangle public costs for environmental integration in agricultural policies from overall running costs of relevant administrative bodies such public costs so far. Quantitative evidence which would be comparable across at least several EU Member States is not available.

There have been costing exercises that addressed an array of impacts on farm economics indirectly linked to environmental performance of farms. However, these studies do not provide information in a directly comparable way reflecting the differences between farms.

The only comprehensive evaluation of cross-compliance, by Alliance Environnement (2008)²⁵, is out of date. However, some of its methodological observations are still valid. It noted that 'the evidence base for the extent of costs is limited', 'few cost estimates have been carried out, with variable results' and that 'costs of using cross compliance for enforcing obligations vary widely across the EU'.

²⁴ DG ENV Pers, Comm.

²⁵ Alliance Environnement (2008) Evaluation of the application of cross/compliance as foreseen under Regulation 1782/2003.

Case study selection

This study also undertook further data collection and analysis of the administrative costs in implementing EU environmental law through a series of case studies.

In selecting the cases, consideration was given to the need that the cases required:

- Legislation that is old enough to have resulted in implementation choices and costs that can be compared.
- The law must have obligations that are specific enough for comparison.
- The situation in the MS must be relatively comparable for implementation comparisons to be made.
- The law must allow some flexibility so that differences in MS implementation can occur.

The following four cases were taken forward:

- 1. The time taken for decision making under the SEA Directive.
- 2. The time for decision making for activities subject to Article 6.3 of the Habitats Directive.
- 3. Costs of the End of Life Vehicle Directive producer responsibility scheme.
- 4. The costs of issuing permits to operators under the IPPC Directive/IED.

The following sections of this report set out the exact scope of each case in more detail, the methods applied, and provide a summary and analysis of the data collected.

Permitting under the Industrial Emissions Directive Case Study

Introduction

This case study deals with permitting under the Industrial Emissions Directive (IED). Its focus is on the administrative costs (for business and for the responsible/competent authorities) that are directly related to the obligation for the operator of an installation to hold a permit as laid down in article 4 of the IED. Monitoring and reporting obligations as well as enforcement are therefore outside the scope of the case.

In order to achieve comparability between Member States, information was collected for the cost of permitting in three specific industry sectors (numbering as in Annex I of the IED):

- 2.6: surface treatment of metals and plastics;
- 5.1: disposal or recovery of hazardous waste;
- 6.6: intensive rearing of poultry or pigs.

For each of these three types of installations data have been collected on cases of IED permit procedures in five selected Member States (Ireland, the Netherlands, Poland, Spain, UK).

For each type of installation, data were collected with respect to:

- administrative cost for the operator of the installation (man-hours of own staff and work contracted out) as reported by the operator;
- administrative cost for the competent authority (man-hours of own staff and work contracted out) as reported by the authority;
- time taken between the start of the permit procedure and the final issuance of the permit as reported by both the operator and the authority.

The third item was included since it is a potentially important burden for companies in terms of business delays and investments that have to be postponed, even if the related monetary damage cannot always be determined exactly.

The permit procedure can either be a procedure for an entirely new permit, or a procedure for a permit update due to a substantial change (art 20 IED) or due to a reconsideration of the permit conditions (art 21 IED). Minor changes to existing permits were left out of consideration.

The administrative costs relate

to those activities that are directly related to the permit procedure, and to the extent that these activities are 'additional', i.e. they would not have been carried out if there were no need for a permit. Included are, for instance:

- the investigations, data collection and reporting needed to meet the information requirements for obtaining the permit;
- (for the operator): writing and submitting the application form;
- (for the authority:) reading the application, checking the information submitted against the legislative framework, writing the (draft) permit;
- formal and informal meetings, consultations, activities related to public information provision and public participation, objections, complaints and legal procedures, to the extent that they are directly related to the permit.

Excluded are, for instance:

- measuring, documentation and reporting obligations that the operator has to meet as part of the permit conditions after he has obtained the permit;
- inspections carried out by the competent authority to check compliance with permit conditions after the permit has been issued.

Surveys and responses

As a first step, a broad-based questionnaire (covering all MS) on core cost issues for permitting was circulated to IMPEL national contact points. The questionnaire used is in Annex A1 to this case. Responses were received from IMPEL members across eight Member States (BG, CZ, IE, MT, RO, SL, SI, ES – La Rioja autonomous community).

Next, surveys for specific cases were done in five Member States (ES, IE,NL, PL, UK). For each of the three installation categories mentioned above a number of installations (usually ten per MS) were randomly selected from the E-PRTR database²⁶ and/or other available sources. For each of these installations, a questionnaire was sent directly to the permit issuing authorities (see Annex A2) and to the operator of the specified installation (see Annex A3).

In order to achieve a high response rate, the questionnaires were kept short, a letter of recommendation from the Commission was added, and reminders were sent. Despite this, overall response rates remained disappointingly low (see the Table below). It would be desirable to have more information. The only route to obtaining information on costs to both administration and businesses is by asking those affected. It is probably necessary to recognise that some will not have data in the format needed for such a study (e.g. distinguishing IPPC/IED permit costs from other environmental management costs).

	2.6 Surface treatment		5.1 Hazardous waste		6.6 Poultry / pigs	
	Authority	Operator	Authority	Operator	Authority	Operator
Spain*	3	0	3	3	3	2
Ireland	0	4	0	0	0	0
Netherlands	6	0	1	0	2	2
Poland	0	1	0	0	2	0
UK	6**	0	34**	0	140**	0

Table 5: Responses in case specific survey

* Responses in Spain were from three different autonomous regions: Andalusia, Basque Country and Castilla-La Mancha.

** For the UK, a single response was received from the Environment Agency, covering all installations in the 3 categories for which they had issued permits.

²⁶ http://prtr.ec.europa.eu.

Results

Time and costs for authorities

In the survey undertaken in this study of IMPEL members, two MS coordinators were able to provide a quantitative estimate of the annual cost of IED permitting for the authorities: Slovenia (EUR 457,000 for 130 permits, i.e. EUR 3,500 per permit)) and Spain (La Rioja: EUR 50,000 for 20 permits, i.e. EUR 2,500 per permit). In both cases, this relates to a mix of new permits and modifications of existing ones.

The case specific questionnaires revealed substantial variation in the amount of time spent by authorities on IED permit procedures. In Spain (Andalusia), the estimated average number of mandays needed for a permit varied from 39 (poultry and pigs) to 64 (surface treatment and hazardous waste). In the Netherlands the case specific numbers varied between 10 and 42 (surface treatment)²⁷. For Poland, only one estimate was available: 14 mandays for a permit in the category poultry and pigs. Several authorities (including the UK Environment Agency) indicated that it was not possible to specify the amount of time spent on individual permits. The variation in time is large across the Member States. The likely factors that affect the time needed for issuing a permit are the complexity of the installation, data availability, public opposition etc.. Such issues vary between individual cases (even within a single sector), as well as between Member States.

According to the EA, for straightforward permit applications the most time consuming steps are checking the information submitted against the legislative framework, for example against BAT, or against relevant air quality or water quality objectives. Likewise, the Polish responding authorities (pigs/poultry cases) stated that the most time consuming activities included the analysis of the application, clarifications and additions, verification of formal and content compliance with the requirements, correspondence with the operator, and drafting of the decision.

In cases where the application is highly contentious, public participation and consultation, as well as legal procedures may be the most time consuming and costly elements of the procedure. This was confirmed by the UK's EA response and by two Dutch cases. In such cases, delays in the procedure also tend to occur. In one Dutch case, the responding authority even suggested that some parties use their right to submit opinions and appeals only to delay and frustrate the procedure.

A common pattern in the responses is that environmental authorities tend to do most of their permitting tasks in-house. Contracting out this kind of work is exceptional, and the amounts involved are relatively small (e.g. in the Netherlands: EUR 2,500 for air quality calculations in a 'poultry and pigs' case; EUR 15,000 in a 'surface treatment' case). The UK Environment Agency stated that prior to 2012 contactors were used, on an occasional basis, to assist the EA's permitting officers (without mentioning amounts). From 2012 onwards contractors have not been used by the EA.

Box: Administrative fees for IED permits

The time that competent authorities spend on IED permits can be seen as a service to the operators / permit applicants. One may argue that the 'polluter pays principle' requires that this service is not supplied for free. Almost all responding Member States levy some kind of administrative fee from the applicant to cover the administrative cost that the authorities incur for an IED permit procedure. The only exception is the Netherlands, where the fees ('leges') for environmental permitting were abolished in

²⁷ In the other categories, the cases were exceptional in the sense that the permit application was cancelled, the permit was refused, or the procedure was already going on for almost 10 years.

1998. One of the reasons for this abolition was the large difference in rates and calculation methods between regional and local permitting authorities. Moreover, the fact that permit fees were also due in cases where a firm invested in environmentally desirable equipment was seen as a disincentive for such 'green' investments.²⁸

In those Member States that do levy permit fees, various systems for determining the level of the fee are used. The following grounds for fee calculation and differentiation were encountered:

- type of application (e.g. for a new permit or a renewal/revision) (BG, CZ, IE, MT, RO, SK, SI, UK);
- level and type of authority (BG);
- category/type of installation (BG, IE, MT, RO, UK);
- size/capacity of the installation (IE);
- value of the investment, fixed assets or project budget (BG, ES).

In most of the responding Member States the levels or limits for the fees (or for the parameters used to calculate the fees) are determined at the central (national) level.

The highest single permit fee that was reported in the installation specific survey was EUR 20,000 (for a surface treatment installation in Ireland), whereas some Member States do not charge a fee.

In addition to a one-off licensing fee, some MS (e.g. MT, UK) also charge an annual fee from a permit holder.

Most IMPEL coordinators were not able to specify to what extent the fees cover the actual administrative cost of IED permitting. Only for Spain (La Rioja) was an estimate given: 50%. However, it is known that the UK EA is under a legal obligation to recover costs from operators. The recovery rate is not determined according to the effort/cost for each permit activity, but on an overall activity basis. Although this means that specific fees are not directly linked to the individual costs that arise to the EA, it does avoid the situation where the regulator could stretch out the administrative process in order to recover higher fees.

Time and costs for permit applicants

In the IMPEL survey, only two MS coordinators were able to provide an estimate of the average costs spent by operators on permit applications. In Ireland, these were reported to lie between EUR 50,000 and 100,000 (based on estimates by industry representatives) and in Slovenia between EUR 25,000 and EUR 35,000. However, the higher end estimates seem particularly high, equivalent to full time activity. This may reflect the recording of environmental activity by some industry rather than time spent specifically on IED. Therefore, care needs to be taken in interpreting these higher end figures.

The time spent as reported by operators themselves was relatively limited in the case of surface treatment (Poland: 1 to 2 mandays) and poultry/pigs (Spain/Andalusia: 6 to 12.5 mandays; Netherlands: 5 mandays²⁹). In the 'hazardous waste' sector applicants seem to spend more time on permit procedures (20 to 62.5 mandays in Spain).

²⁸ Source: Ministerie van VROM (2005), Mogelijkheden en gevolgen van het invoeren van leges. Onderzoek omgevingsvergunning 2005/01. The Hague, July 2005.

²⁹ In another Dutch poultry/pigs permit procedure 'several man-months' had been spent by the applicant, but this was a special case that had lasted already for almost 10 years.

Contracting out IED permit related work appears to be more common among operators than among authorities. All responding operators had spent money on third-party work, with amounts ranging from EUR 3,200 (Poland, surface treatment) to around EUR 50,000 (Spain, hazardous waste³⁰).

Preparing reports (such as EIAs) was mentioned by three operators (in IE, NL and PL) as a particularly expensive and/or time consuming activity. Two operators (in NL and PL) mentioned the preparation of the application itself (and the detailed information requirements) as very time consuming. The Polish respondent (in the surface treatment sector) suggested that in the case of a permit revision a more compact application could be sufficient and would save time and resources.

Duration of the permitting procedure

In the survey among IMPEL coordinators the reported duration of permitting procedures in the three selected sectors (from application to issuing of the permit) was generally estimated at less than a year on average. The shortest duration was reported from Slovakia (3-4 months for new permits; 2-3 months for the renewal of existing ones). The duration may also depend on the complexity and/or on the quality of the application (CZ, MT, RO).

The reported estimates from the Irish IMPEL coordinator, which were case specific, are significantly longer: 12 to 14 months in category 2.6, 27 months in category 5.1, and 21 to 33 months in category 6.6.

The Table below shows the average time taken for a permit procedure in the UK for the three types of installations, as reported by the Environment Agency. A distinction is made between applications made before and after November 2011, when streamlining changes to the EA's permitting procedure took effect.³¹ This demonstrates efforts to reduce the time for administrative decision-making can result in concrete practical outcomes.

Installation type	2.6 Surface treatment			5.1 Hazaro	lous waste		6.6 Poultry / pigs		
Application type	Issuing a new bespoke	Substantial variation**	Normal variation			Normal variation	New bespoke	Substantial variation	Normal variation
before Nov. 2011	193	n.a.	67	313	1031	836	277	88	68
after Nov. 2011	n.a.	n.a.	27*	n.a.	142*	37*	n.a.	71*	41

* Only one observation.

**A substantial variation would arise, for example, with a significant technical change in the installation and would require many parts of the permitting process to be revisited. A normal variation could be administrative in character (e.g. relating to document changes).

³⁰ Again, the 'extreme' Dutch poultry/pigs case is an outlier, with the applicant reporting he had spent at least EUR 250,000 on work contracted out.

³¹ In response to the Penfold review of non planning consents in 2010, the Environment Agency streamlined its permitting procedure, to reduce the time taken from receiving a complete application (duly made) to issuing the permit to less than 91 days, unless the site is highly contentious or the applicant agrees to or requests an extension. These changes took effect in November 2011. According to the Agency, currently more than 95% of all permit applications made are issued within 91 days of the application being deemed valid.

The other MS responding to the case specific survey also showed a wide variety in length of IED permitting procedures (see the Table below). In most cases, the procedure takes at least half a year. Overall, it can be seen that there is considerable variation in the length of the permitting procedure as reported to the study team, both between and within categories of installation within a Member State and between Member States. In most cases the figures can only be taken as illustrative. However, the large amount of data supplied by the UK does provide some clearer picture of trends and differences within that Member State.

	2.6 Surface treatment	5.1 Hazardous waste	6.6 Poultry / pigs
Spain	6 to 16	11 to 59	16 to 47.5
Ireland	9 to 18		
Netherlands	6 to 30	6	4 to 6 *
Poland	6		5

* Excluding the 'outlier' case that lasted for almost 10 years.

With respect to factors that may influence the length of a permit procedure, most responding IMPEL coordinators pointed to some kind of online guidance provided to applicants. In Malta guidance is only given on an ad hoc basis, as the number of cases related to specific sectors is too low to render guidance documents practical. In several MS applications can be submitted electronically, but a number of them (BG, IE, RO, SI) still require submission on paper.

The Andalusian authorities (ES) stated that among the main factors causing delays are a lack of capacity / resources in the competent authority, which leads to a lack of specialization in one particular category/type of installation, and a lack of expertise of technical staff in the competent authority due to personnel rotation. It is interesting to note that in the Netherlands this lack of specialized expertise was supposed to be creation specialist `Environmental overcome by the recent of Services' (Omgevingsdiensten), which support the competent authorities. However, in one NL case obtaining advice from the Omgevingsdienst was mentioned as an important time consuming part of the procedure in itself.

Another potentially important factor causing delays is the incompleteness of the application. Most IMPEL coordinators reported that additional information is requested from the applicant in the majority of (or even all) cases. The exceptions are Slovakia and La Rioja (Spain), where the frequency of 'incomplete' applications was estimated at 40 and 10 percent respectively. The responding authorities in Andalusia (Spain) pointed to the fact that delays in the companies' responses to requests for additional information can be yet another factor adding to the length of the procedure. On the other hand, a Polish respondent (operator) argued that authorities sometimes ask for additional information that is already included in the permit application but is overlooked. Where administrations request additional information or advice to operators in completing applications as it should be expected that some are able to provide a complete application.

The completeness and quality of a permit application can be improved by (informal) meetings and consultations between applicant and authorities, preceding the formal

application.³² This is reported to be common practice in CZ, IE and NL. It should be noted, however, that such consultations are themselves also time consuming and costly, as several (NL) respondents remarked.

Conclusions and recommendations

The responses collected in the IED surveys (among IMPEL contacts, competent authorities and operators/permit applicants in three sectors) give a scattered picture of the time and costs spent on IED permitting procedures and the duration of these procedures. It is difficult to determine the factors influencing this time, costs and duration, and general conclusions are hard to formulate given the relatively small amount of evidence. Nevertheless, it provides interesting information, some patterns emerge and some lessons can be drawn.

There are large differences in the amount of time and money that authorities and companies spend on IED permitting, not only between Member States and sectors, but also within a single sector in one MS. To a large extent, these differences will be related to the complexity of the installation and its environmental impact, and to the extent to which the activity for which a permit is requested is a controversial one. These are factors that cannot be influenced. However, the available evidence suggests that a critical review of rules and requirements may help to reduce the cost and duration of the procedure. Some general recommendations to achieve this could include the following:

- Obviously, unnecessary requirements should be removed. MS where a permit application on paper is still obligatory should ask themselves if this still has added value over and above the option of an online application. Requirements for information that is not essential for the permit should be reconsidered.
- Consultations between the applicant and the authorities preceding the formal application are key. Such consultations are themselves time consuming and the impact on the total cost and duration of the procedure should therefore not be overestimated, but they increase the likelihood that the formal application can be accepted and processed by the authorities without the need for additional information requests.
- Time lengths differ: The case study found the length of the permitting procedure could vary from 2 months to 27 months. A maximum duration of the permit procedure may put pressure on the authorities and provide certainty for the applicant. Some MS, including NL, RO and UK, already apply such maximum terms. Clearly, provisions would have to be made for cases in which the exceedance is beyond the authorities' control.

The present case study clearly only gives a first impression of the diversity in IED permitting cost and time. A broader survey might give a more detailed picture, allowing for firmer conclusions on the specific influencing factors. However, it should take into account the apparently low willingness to cooperate by responding to survey questions, both among authorities and companies. Instead, one might consider the option to monitor and evaluate the specific results of changes in permit procedures aimed at reducing cost and/or time taken, such as those that were introduced in the UK. These experiences might provide valuable lessons for other Member States that would like to streamline their permitting procedures.

³² In one of the NL cases (hazardous waste) the permit application was even withdrawn when it became clear that it would not be acceptable for the water authorities. According to the respondent, this could have been avoided if sufficient consultations had taken place.

Table 8: Information relating to individual (except UK – see below) permit applications for installations in category 2.6: surface treatment

Country (region)	Answers from Company (C) or Authority (A)	New permit (N) or Revision (R)	Time spent on permit procedure (man days)	Amount spent on work contracted out (in EUR)	Fees paid for permit (EUR)	Duration of permit procedure (months)	Most costly and/or time consuming part of the procedure	Remarks by respondent
ES, Andalusia	A	R	64*	0	1165	6		Four main obstacles were identified which lead to an increase in the time taken between
ES, Andalusia	A	N	64*	0	1561	13		the start of the permit procedure and the final issuance of the permit: 1. Lack of
ES, Andalusia	A	N	64*	0	1561	16		capacity / resources in the competent authority, which leads to a lack of specialization in one particular category/type of installation; 2. Lack of expertise of technical staff in the competent authority due to personnel rotation; 3. Incomplete information provided by installations; 4. Delays of installations responding to responsible authority's requests for additional information during procedure.
IE	С		1 man year					
IE	С		6 months	30000	12000	18	Monitoring and detailing all processes on site	
IE	С		960	25000	11000	9	Environmental Impact Assessment Study	
IE	С			66000	7350		Monitoring activities	
NL	A		42	0	none	20	The consultations preceding the formal application require relatively much time and money. This is needed to make the formal procedure run efficiently.	
NL	A		around 15	0	none	6	The actions required to arrive at an 'admissible' permit application (i.e. the submission of complete documents, reports	
NL	А		around 17	0	none	8	etc.)	

Country (region)	Answers from Company (C) or Authority (A)	New permit (N) or Revision (R)	Time spent on permit procedure (man days)	Amount spent on work contracted out (in EUR)	Fees paid for permit (EUR)	Duration of permit procedure (months)	Most costly and/or time consuming part of the procedure	Remarks by respondent
NL	A		38	0	none	26	The most time consuming part was to arrive at a complete and admissible permit application.	
NL	A		30	0	none	18	The process to arrive at an admissible permit application (checking the application and consultations with the applicant)	The poor quality of the application has led to the long duration of the procedure.
NL	A	R	10 to 15	15,000	none	30	The processing of opinions and appeals	This procedure was an exceptionally long and expensive one, since the company was a 'special attention' case.
PL	C	R	1 to 2	3200	355	6	Costly: reports (e.g. EIA, soil contamination report) contracted to external experts Time consuming: drafting of the application for the change of permit (necessity to refer to each single detailed requirement)	 The permit procedure lead time of 3 months plus 6 months of the decision issuing process, makes us not able to follow the market progress and the clients' expectations (not enough time to adapt and change the production profile). We can adapt the profile of our production (types of plating) in a relatively short time, but the procedure of the change in permit extends this time to up to 1 year, when the clients' offers are already expired
								 II) The application's volume is in our case around 120-130 pages plus annexes of nearly 50 pages, after the application is filed, the authority usually requests clarifications and/or additional information, that has been included in the initial application but due to the authority lack of willingness/time it was omitted in the application reading process. The structure of the application should be more compact, transparent for the authorities and faster to prepare for the applicants, who instead of subcontracting, could prepare the application using internal

Country (region)	Answers from Company (C) or Authority (A)	New permit (N) or Revision (R)	Time spent on permit procedure (man days)	Amount spent on work contracted out (in EUR)	Fees paid for permit (EUR)	Duration of permit procedure (months)	Most costly and/or time consuming part of the procedure	Remarks by respondent
								resources in a time and cost efficient way. The change of permit procedure should take up to 1 months starting from the moment when the application was filed.
UK Note the UK supplied data for 39 permits for this category of installation – too numerous to include here	A	Various	The EA does not record the time spent against individual permits or applications	From 2012 onwards contractors have not been used. Prior to 2012 contactors were used, on an occasional basis, to assist the EA's permitting officers.	In accordance with legislation and government requirements, to recover its costs the Environment Agency charges applicants for permitting activities. Details of the charges can be found in the Environmental Permitting Regulation (EPR) Charging Scheme.	Less than 3 in more than 95% of the cases	For straightforward applications the most time consuming steps are checking the information submitted against the legislative framework, for example against BAT, or against relevant air quality or water quality objectives. If the application is highly contentious then the public participation and consultation aspects become the most time consuming and costly activities.	In response to the Penfold review of non planning consents in 2010, the EA streamlined its permitting procedure, to reduce the time taken from receiving a complete application (duly made) to issuing the permit to less than 91 days, unless the site is highly contentious or the applicant agrees to or requests an extension. These changes took effect in November 2011. To reflect this the data file was have split into two parts, applications made before November 2011 and those made afterwards. Currently more than 95% of all permit applications made are issued within 91 days of the application being deemed valid.

Table 9: Information relating to individual (except UK – see below) permit applications for installations in category 5.1: hazardous waste

Country (region)	Answers from Company (C) or Authorit y (A)	New permit (N) or Revision (R)	Time spent on permit procedure (man days)	Amount spent on work contracted out (in EUR)	Fees paid for permit (EUR)	Duration of permit procedure (months)	Most costly and/or time consuming part of the procedure	Remarks by respondent
ES, Andalusia	A	N	64*	0	1561	16		Four main obstacles were identified which lead to an increase in the time taken between the start of the permit procedure and the final issuance of the permit:1. Lack of capacity / resources in the competent authority,
ES, Andalusia	A	N	64*	0	1673	11		which leads to a lack of specialization in one particular category/type of installation; 2. Lack of expertise of technical staff in the competent authority due to
ES, Andalusia	A	N	64*	0	1561	16.5		personnel rotation; 3. Incomplete information provided by installations; 4. Delays of installations responding to responsible authority's requests for additional information during procedure.
ES, Andalusia	С	N	20	10000	1561	16		Requirements for installations are the same for all types of wastes managed
Spain, Basque Country	С	N	62.5	around 50000	none	59		The procedure was too long. The new law does not seem to change that. The cost (in time and money), although important, was foreseen.
ES, Castilla y León	С	N	37.5	6000	1411	24		
NL	A	R	around 12,5	0	none	6		The permit application was withdrawn as it became clear that it was not acceptable for the water quality authorities. There had been insufficient consultations with the authorities before the formal submission of the application, and several things were still unclear. A waste treatment plant is more complicated than a producing installation, since many different rules apply. In general, early consultations with e.g. the chemical industry are better, which ensures a better quality of the permit

Country (region)	Answers from Company (C) or Authorit y (A)	New permit (N) or Revision (R)	Time spent on permit procedure (man days)	Amount spent on work contracted out (in EUR)	Fees paid for permit (EUR)	Duration of permit procedure (months)	Most costly and/or time consuming part of the procedure	Remarks by respondent
UK Note the UK supplied data for 15 permits for this category of installation – too numerous to include here	A	Various	See previous table	See previous table	See previous table.	See previous table	See previous table	See previous table

Table 10: Information relating to individual (except UK – see below) permit applications for installations in category 6.6: pigs and poultry

Country (region)	Answers from Company (C) or Authority (A)	New permit (N) or Revision (R)	Time spent on permit procedure (man days)	Amount spent on work contracted out (in EUR)	Fees paid for permit (EUR)	Duration of permit procedure (months)	Most costly and/or time consuming part of the procedure	Remarks by respondent
ES, Andalusia	A	N	39*	0	780	16		Four main obstacles were identified which lead to an increase in the time taken between the start of the permit procedure and the final issuance of the
ES, Andalusia	A	N	39*	0	780	47.5		permit procedure and the main source of the permit: 1. Lack of capacity / resources in the competent authority, which leads to a lack of specialization in one particular category/type of installation; 2. Lack of expertise of technical staff in
ES, Andalusia	A	N	39*	0	780	47.5		 Installation; 2. Lack of expertise of technical staff in the competent authority due to personnel rotation; 3. Incomplete information provided by installations; 4. Delays of installations responding to responsible authority's requests for additional information during procedure.
ES, Andalusia	С	N	6	6500	780	16		Time and costs depend up to a great extent on whether the installation involved in the procedure is new or old. Old installations usually have facilities,
ES, Andalusia	С	Ν	12.5	13000	780	47.5		wells, etc. built outside the law that need to be legalized during the permit procedure.
NL	A		3 to 4	0	none	4	Obtaining advice from the Environmental Service (Omgevingsdienst)	This procedure related to the cancellation of a permit and might therefore not be representative.
NL	A	N	14 in the first half of 2014; total number unknown	2500 (air quality calculations)	none	more than 96	Replying on opinions and appeals	Some parties use their right to submit opinions and appeals only to delay and frustrate the procedure. Unfortunately this is sanctioned by case law.
NL	С	N	several man months	at least 250000	none	almost 120	EIA procedure and 'reports culture'	
NL	С		5	9000	none	6	The official application, including drawings, adaptations etc., and consultations on these.	
PL	A		14	0	2060 (stamp duty plus registration fee)	5	Time consuming - analysis of the application, clarifications and additions, ensuring public participation.	No subcontracting was necessary - no additional costs involved.

Country (region)	Answers from Company (C) or Authority (A)	New permit (N) or Revision (R)	Time spent on permit procedure (man days)	Amount spent on work contracted out (in EUR)	Fees paid for permit (EUR)	Duration of permit procedure (months)	Most costly and/or time consuming part of the procedure	Remarks by respondent
PL	A		unknown; several employees, several days per month	0	1100 (stamp duty plus registration fee)	5	The most time consuming is verification of formal and content compliance with the requirements, correspondence with the operator (when the application needs to be clarified or supplemented) and drafting of the decision based on the lodged application and the possible additions, that are very often quite numerous.	
UK Note the UK supplied data for 143 permits for this category of installation – too numerous to include here	A	Various	See previous table	See previous table	See previous table	See previous table	See previous table	See previous table

A.1 Questionnaire for IMPEL national co-ordinators

Administrative Costs of Implementing Permitting under IPPC/IED

Introduction

The European Commission (DG Environment) has commissioned a study from IEEP, IVM, ICF and Naider to examine the differences in costs of implementing the EU environmental acquis in the Member States. Implementing the acquis often results in costs to administrations, businesses and individuals. However, the extent of such costs may vary across the MS and it is important to understand this variation in order to help design smarter legislation in the future.

DG ENV has requested the project team to examine a number of specific cases. One of these is the costs arising from permitting under the Industrial Emissions Directive (IED, formerly IPPC). Costs arise to both the permitting administrations (staff time) and businesses (time to prepare a permit, fees, time to issue the permit, etc.). All such costs may vary across the MS. Please note that compliance costs (the costs of meeting certain environmental standards) are not within the scope of our study.

We are, therefore, requesting information via the IMPEL network on these costs and politely ask if you can complete the following questionnaire. It consists of ten questions. We recognise that you may not be able to answer some questions. This is fine, though please indicate that data/information is not available.

We would like to thank you very much for your assistance. The results will be included in the final report to be published by DG ENV (probably in early 2015).

Questions

Permit Fees

Are applicants charged a fee for processing IED permit applications?

Answer:

If Yes, what are those fees? Please indicate if fees vary (e.g. by competent authority, for different categories of installation, new permit or renewal of existing permitl, etc.).

Answer:

Length of time for permitting process

For the following categories of installation (as specified in Annex I of the IED) please can you provide actual examples of the time taken to issue permits (from application to issuing the permit)?

Category 2.6 Surface treatment of metals and plastics

Answer:

Category 5.1 Disposal or recovery of hazardous waste

Answer:

Category 6.6 Intensive rearing of poultry or pigs

Answer:

Permit process

For the permit application process, please comment on the provision of guidance to applicants and the process for submitting permit applications (e.g. can these be submitted online)

Answer:

What proportion of permit applicants are asked to provide additional information before their applications can be processed? (i.e. their initial applications are not `complete').

Answer:

Costs of preparing a permit application

While the costs of preparing permit applications are borne by operators, are you aware of any information (studies, surveys, etc.) in your Member State of the costs operators have spent on preparing permit applications? If so, can you either provide a summary or a link/reference?

Answer:

Costs to the public administration

The permitting process imposes costs on the public administration. Have you any estimates/studies, etc., of the staff time or budget allocated to IED permitting? Please indicate how this relates to the number of permits over the same period.

Answer:

If fees are charged for permits are these set at a level to cover the costs to the administration for the permitting process? If not, what proportion of costs do the fees cover?

Answer:

Please note that for [Member State X] we intend to do a number of in-depth case studies. With respect to the three types of installations mentioned above, we would like to contact the operators and competent authorities who have recently dealt with permit application and issuing procedures. Could you please provide us with some examples of cases in each category? Preferably cases that you consider to be representative, and preferably with contact details for both the competent authority and the operator/permit holder.

Category 2.6 Surface treatment of metals and plastics

Category 5.1 Disposal or recovery of hazardous waste

Thank you for your cooperation!

A.2 Questionnaire for permit issuing authorities

Introduction:

Environmental permit procedures can sometimes be lengthy and cumbersome. We are doing a study for the European Commission on the time and costs related to the application for an environmental permit in different Member States. This study should contribute to smoother and faster permit procedures in the future. You can help us by responding to a few short questions. Thank you very much for your cooperation!

Explanation:

We ask you to recall the procedure that has led to the current environmental permit for the following installation: (specify the name and address of the installation as mentioned in the E-PRTR database). This may have been a procedure for a new permit, or for the revision of an existing permit due to substantial changes in the installation and/or in the permit conditions.

The questions below refer to the activities that are directly related to this permit procedure, such as for instance:

- reading and processing the permit application;
- checking the information submitted against the legislative framework;
- writing the (draft) permit and any related documents;
- formal and informal meetings and consultations;
- activities related to public information provision and public participation, objections, complaints and legal procedures, to the extent that they were directly related to the permit procedure.

Question 1:

What is the total amount of time (in man-hours or man-days) that you and your staff/colleagues have spent on activities directly related to the permit procedure?

If you are unable to specify this precisely, then please indicate the order of magnitude, e.g.: less than half a man-day; around one man-day; two to five man-days etc.

If you have issued more than one environmental permit (e.g. one for air pollution and one for water pollution), please add up the amount of time spent on each of them. If you have issued a permit covering more than just environment (e.g. combined with a building permit), then please estimate the time spent on the environment part.

Question 2:

What is the total amount of money that you have spent on work contracted out that was directly related to the permit procedure?

Question 3:

What is the total amount of fees that the applicant had to pay to obtain the permit?

Question 4:

How much time (in weeks/months/years) has the permit procedure taken from start to finish?

The start could be, for instance, the first contact with the applicant, or the moment that you became aware of the applicant's need for a permit (revision). The finish is the day on which you have issued a valid, incontestable permit.

Question 5:

What in your view was the most time consuming or costly activity in the permitting procedure?

Question 6:

Is there anything else that you think is relevant for us to know with respect to the time and cost of the permit procedure?

A.3 Questionnaire for installation operators

Introduction:

Environmental permit procedures can sometimes be lengthy and cumbersome. We are doing a study for the European Commission on the time and costs related to the application for an environmental permit in different Member States. This study should contribute to smoother and faster permit procedures in the future. You can help us by responding to a few short questions. Thank you very much for your cooperation!

Explanation:

We ask you to recall the procedure that has led to the environmental permit that you currently hold for the following installation: (*specify the name and address of the installation as mentioned in the E-PRTR database*). This may have been a procedure for a new permit, or for the revision of an existing permit due to substantial changes in the installation and/or in the permit conditions.

The questions below refer to the activities that are directly related to this permit procedure, such as for instance:

- the investigations, data collection and reporting that were needed to meet the information requirements for obtaining the permit (**not** the activities that you have to perform as part of your permit obligations, such as measuring and controlling emissions);
- writing and submitting the application form;
- formal and informal meetings and consultations;
- objections, complaints and legal procedures.

Question 1:

What is the total amount of time (in man-hours or man-days) that you and your personnel/colleagues have spent on activities directly related to the permit procedure?

If you are unable to specify this precisely, then please indicate the order of magnitude, e.g.: less than half a man-day; around one man-day; two to five man-days etc.

If you have more than one environmental permit (e.g. one for air pollution and one for water pollution), please add up the amount of time spent on each of them. If you have a permit covering more than just environment (e.g. combined with a building permit), then please estimate the time spent on the environment part.

Question 2:

What is the total amount of money that you have spent on work contracted out that was directly related to the permit procedure?

Question 3:

What is the total amount of fees that you had to pay to the environmental authority to obtain the permit?

Question 4:

How much time (in weeks/months/years) has the permit procedure taken from start to finish?

The start could be, for instance, the first contact with the permit authority, or the moment that you became aware of the need for a permit (revision). The finish is the day on which you have obtained a valid, incontestable permit.

Question 5:

What in your view was the most time consuming or costly activity in the permitting procedure?

Question 6:

Is there anything else that you think is relevant for us to know with respect to the time and cost of the permit procedure?

SEA Directive Case Study

Introduction

This case examines the specific time and cost inputs associated with implementing the Strategic Environmental Assessment (SEA) Directive in EU Member States (MS). Key elements of the study relate to understanding the specific institutional and regulatory arrangements through which the Directive is implemented in national or provincial legislation, and how these and other factors influence the total costs needed to comply with the Directive in practice. Under the Directive, the Commission is called to issue/provide official guidance on *particular issues* – the consultant should be more specific on which ones a guidance is needed. Since 2003 there is COM official guidance on implementation of the SEA Directive.

The SEA Directive and focus of the case study

The Strategic Environmental Assessment (SEA) Directive is a structured decision-making process, aiming to ensure that environmental sustainability concerns are fully considered within plans and programmes (PPs), before their adoption. The value of SEA lies in promoting wider consideration of alternatives at an early stage of the PPP, in particular considering possible environmental impacts of alternatives under different scenarios, and integrating stakeholder concerns and knowledge into the decision-making process.

EU MS have transposed the Directive into national legislation in a range of ways, in accordance with their local priorities and planning context. However, many PPP initiators reportedly fail to see the benefits of the procedure and voice concerns as to the time delays and additional expense that can be incurred.

The focus of this case study was to ascertain specific resource inputs (in time and financial costs) at each stage of the SEA procedure in different PPs, the key factors that influenced these inputs, and examples of best practice from MS that can help to address these factors and maximise the benefits of SEA.

Methodology

The initial aim of the research was to obtain typical SEA costs broken down by stages of implementation (scoping, scoping consultation, environmental assessment and reporting, and full consultation) and by different public plan or programme (PPP) type and scope. The basis for this approach was that this would allow a more informative comparison and discussion of why costs vary between MS.

This was undertaken through a survey of a sample of MS, undertaken during September and October 2014.

- Six MS were initially prioritised to provide a geographical distribution across the EU.
- Initial invitation emails were sent to all 28 MS to participate in the survey, in anticipation of non-responses from priority contacts.
- An introductory call was undertaken with 13 MS to explain the survey, answer questions and confirm support and action.
- Follow-up calls and emails were made to pursue more detailed responses.
- Eight MS opted to complete the survey remotely, through consultation with partners.
- Four detailed quantitative responses were received.

Since previous studies (e.g. COWI, 2009) indicated that a majority of MS didn't have access to reliable information on SEA costs or sufficient experience to estimate costs, a more exploratory research design was used. To overcome the lack of readily available

data we sought to gather 'real world' data on a relatively small number of specific cases - to provide a way around the lack of recording of such information as well as avoiding spurious estimates by representatives by allowing them to seek information on a more manageable basis.

In line with MS views and corresponding evidence that SEA costs depend on the type and scope of plan or programme involved, as well as differences in approaching SEA procedures, the survey design sought to combine quantitative data on time inputs to each stage of SEA implementation (as an indicator of associated costs), as well as more contextual data on the factors that influence time investments.

The survey sought to obtain a mix of quantitative and qualitative data. A full copy of the questionnaire used can be found in Annex 1 of this case.

The survey provided four core data sets:

- 1. Qualitative data on institutional arrangements for SEA.
- 2. Quantitative data on time inputs for SEA for each assessment stage.
- 3. Qualitative and quantitative data on the factors that affect the time inputs across each assessment stage and best practice actions employed (or planned) to reduce time inputs
- 4. Anecdotal quantitative data that reflects issues identified in 2.

The structured quantitative survey sought to obtain data relating to the following variables that influence time inputs as shown in the Table below.

Cost type	SEA stage (Article Obligation)	Plan or programme industry & scale
 Public sector time input costs Private sector time input costs Public sector contracting costs (as contactor time input costs) 	 For example: Scoping Scoping consultation Full assessment Full assessment consultation 	 Scale (i.e. national, regional, local) Industry group

Table 11: SEA stages and costs

For the analysis, data have been analysed in both units of time and as financial costs where they relate to labour inputs. Time inputs have been converted to financial costs using the methodology detailed in the Standard Cost Model³³, i.e. time inputs multiplied by an hourly wage rate. In many cases, respondents did not have access to reliable data on public administration costs associated with the SEA procedure, but could point to direct costs (as well as overhead costs) associated with engaging external consultants. In such cases, average hourly public administration costs for each Member State were sourced from EUROSTAT. Whilst the use of average figures for public administration expenditure may be questioned, the use of average costs ensures that differences between employee seniority and departmental spending are reflected in the case studies.

³³ Sourced from comparable national wage statistics

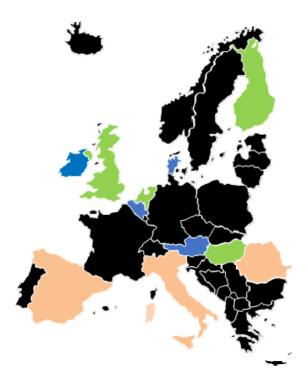
Quantitative analysis was undertaken on information sets 2 and 3, broken down by meaningful categories where the data allowed. There was insufficient data to do any exploratory quantitative analysis of possible correlations between variables. Where anecdotal evidence was provided this was used to enhance the quantitative analysis.

Responses

In total, 11 MS (see below) responded to the request for information in relation to the survey. Of these respondents, six MS (see below) provided a final submission of the survey, including detailed figures and examples of best practice (with one response pending), representing a 55% response rate. The remaining five MS opted not to complete the survey on the basis that it was too difficult to source data relating to time and cost inputs for SEA, particularly where data were not centrally held (i.e. where SEA was administered at the local authority level, with minimal interaction or coordination between authorities). The respondents are shown graphically in the Figure below.

This discrepancy in responses highlighted a major issue for SEA implementation in a number of MS – fragmentation of regulatory expertise and limited exchange of information between authorities. In many MS, a range of bodies had authority for SEA depending on the scope of implementation (a policy, plan or programme), but it was widely felt that this scope was weakly defined within official documentation, often leading to confusion, undue regulatory burdens on projects or their omission from the SEA procedure altogether. In particular, several MS report that competent authorities often struggle to distinguish between the applicability of SEA and EIA.

Figure 2: EU Member State survey responses



Key: Initial responses only (blue) qualitative only responses (orange) qualitative and quantitative responses (green)

Initial responses were received from Austria, Belgium, Denmark and the UK (England and Wales). However, representatives from these MS declined to complete the survey on the basis that the necessary information was unavailable to them. Nonetheless,

respondents typically provided some general insights into challenges of SEA implementation and best practice within their MS that have informed some of the qualitative data analysis presented here.

Final surveys were received from Spain, the Netherlands, Scotland, Finland, Hungary, Romania and Italy. Of these responses, four MS (Scotland, Finland, the Netherlands and Hungary) provided usable and comparable cost data.

These four responses contained more detailed quantitative data on SEA implementation experience at a range of scales- including local, regional, national and trans-national plans and programmes. Many of these countries point to a highly decentralised approach to SEA implementation, albeit with some form of central executive or regional forum that plays a coordinating role between local authorities.

A total of 25 case studies were provided by respondents within the final surveys. These ranged from local scale plans (including urban and rural land use plans, and local forest strategies) regional (including large scale terrestrial and marine spatial plans and development strategies) national (including major transport and infrastructure plans, rural development plans and a range of Operational Programmes) and transboundary (including regional and bilateral cooperation programmes).

Institutional arrangements for SEA

Member States have transposed the Directive in a range of ways according to their local planning frameworks, and this has implications for the overall costs of implementation. Devolution to sub-national legislation, for example, often results in an expanded role for private sector consultants (in the absence of in-house capacities) and may contribute to additional costs where coordination and exchange of best practice is weak.

In some Member States (such as Hungary and Finland) the SEA Directive has been transposed into national law in the form of a number of individual decrees. These normally draw a distinction between implementation at local and national scales, although regulatory clarity regarding the inclusion or exclusion of plans or programmes from the procedure.

The wide range of plans and programmes submitted highlighted substantial differences in time and cost inputs relating to different stages of SEA implementation. In general, input by authorities increased with the scale of the plan or programme in question - from a few days input to local plans to major investments in international cooperation programmes. However, input from external consultants appeared to relate more to the complexity of the plan or programme - by far the greatest consultant inputs concerned municipal development plans. This may reflect the wide focus of such plans and the range of stakeholders affected.

Early screening of plans and programmes

Screening is required by Article 3 (4) – (6). One consistent theme was that the earlier SEA is implemented within the planning process, the more effective the procedure was in adding value. Respondents highlighted the ability to influence the largely informal process of plan-making and consideration of alternatives in the early stages and to widen engagement and input into these processes, thereby avoiding additional time delays, costs and challenges further down the line.

A number of MS respondents (including Ireland, Austria, Scotland and Finland) took the view that the key value of SEA lies in earlier consideration and elaboration of alternatives. In Member States such as Austria and Germany, where planning procedures are quite detailed and heavily regulated, much of this discussion occurs on an informal basis. SEA could add substantial value by formalising these discussions and widening input into their elaboration, but often occurs too late in the planning process to reflect this informal consideration of alternatives.

Implementation in local or regional planning frameworks

In some Member States (such as Finland and Austria), responsibility for SEA is almost entirely devolved to provincial or local authorities through planning regulation. This can create practical difficulties where authorities do not have the necessary in-house capacities for SEA implementation (respondents pointed to a number of cases where external consultants were necessary to implement several elements of SEA) adding substantially to the costs of implementation.

In Austria, the SEA Directive has been transposed into 37 Acts at the provincial and national level. Over 2000 communities carry out SEA on local land use plans, and this makes it very difficult to coordinate implementation in practice. A lack of coordination is in turn thought to lead to duplication of efforts, particularly with regard to data collection, and pushes up costs.

The intention of this approach was to ensure that SEA is absorbed into the normal planning process as far as possible. Reportedly, this has been realised to an extent as authorities and developers recognise positive effects on the planning process, although opposition to SEA remains a problem amongst local authorities (LAs).

Some LAs in Austria have reportedly altered their definitions of plan or programme requirements so that SEAs are not required (with regard to application of Article 3 (3) of the SEA Directive). In such cases limited resources and concerns regarding impacts on local economic development are the primary causes of opposition. With hundreds or even thousands of SEA plans to comment on, many authorities prioritise plans or programmes that are likely to consume the least resources, owing to a general lack of administrative resources to assess SEA.

Conversely, some countries have localised institutional arrangements for SEA but have sought to maximise knowledge exchange and pooling of resources through national coordination and information systems. In Scotland, for example, the SEA Gateway provides a central resource for SEA implementation, coordinating correspondence between statutory environmental authorities, producing general and topic-specific guidance, maintaining a project database whilst providing training and supporting an annual forum for practitioners.

Periodical forums or events for exchange of best practice and experiences between responsible authorities were thought to add substantial value in those Member States that had implemented them.

In Ireland, seven annual regional forums have been held over the last three years to coordinate between statutory authorities for SEA and exchange best practice. As a result of these regional fora, a number of local authorities have set up ongoing 'expert groups' to coordinate responses to SEA and develop in-house capacities. This is consistent with experiences from Scotland, where development of in-house capacities relating to SEA have been seen to build greater support and early engagement for the process across local and national government.

Other governments are revising existing legislation to help ensure greater consistency of standards and implementation between authorities and regions. In Spain, for example, efforts have recently been made to simplify both SEA and EIA procedures within a revised national law so as to ensure consistency between autonomous regions. All the regional authorities are in the process of adapting their existing legislation in line with the new law- working towards a deadline of December 2014.

Trans-boundary implementation

Transboundary SEA is required under Article 7 of the SEA Directive and the SEA Protocol. In Hungary for example, SEAs have been undertaken across all of the country's 2014-2020 Cross-Border Cooperation Programmes (Slovakia, Serbia and Croatia) as well as the Danube Transnational Cooperation Programme. The complexity of such programmes requires input from a wide range of organisations at different phases of the SEA procedure - requiring significant resources from responsible authorities for coordination. In particular, there may be substantial costs relating to the production and translation of the environmental report, as experience from Hungary underlines. This is borne out in the case studies provided and cost analysis.

Coordination of trans-boundary SEA usually falls within the remit of the Hungarian Ministry of Agriculture. If a plan or programme might have significant trans-boundary environmental effects, the competent authorities, being in charge with the procedure, forward the documentation to the Ministry of Agriculture asking notification of potentially affected parties. Usually the Ministry persuades developers to translate relevant documents into the native languages of affected parties, but substantial costs may be accrued within the consultation process because of the need to ensure equal opportunity to comment. Increasingly, affected parties are provided with English documentation only to save time and costs- on the basis that they should arrange extra translation to their native languages.

Whilst only Hungary provided case studies relating to trans-boundary SEA, the issues encountered are likely to be typical for such cases and trans-boundary SEAs are likely to be required in most MS.

Analysis of costs of undertaking SEAs

Evidence from Member States indicates that costs can vary substantially between different regions, depending on the level of public sector consultation involved. The majority of resources are allocated to completion of the Environmental Report, and particularly, stakeholder consultation processes. The latter is particularly resourceintensive in Finland and the Netherlands, where SEA is deeply embedded within established planning frameworks.

This section presents:

- Average public and private implementation costs for SEA by MS
- Average time and organisational inputs to SEA by MS
- Cross-MS comparison of average costs

Care should be taken when interpreting the analysis presented in this report. The overall sample of individual SEA cases on which data was collected (24) is likely be too small a sample to be representative and may not therefore provide a fair representation of typical conditions across the EU. Whilst efforts were made to ensure that the range of, cases collected from MS were representative, some MS (notably Finland and the Netherlands) provided just a handful of cases, and cautioned that these may not be fully representative of typical costs for implementing SEA in their respective MS. Conversely, Scotland and Hungary's responses covered a wide range of plans and programmes and are more likely to reflect the typical costs of implementing the SEA Directive in these countries. In the analysis, costs for each MS are averaged across a range of case studies and different PPs. Where useful, ranges are also discussed in the text. Another important factor is the decision to compare costs between MS in Euros. As demonstrated below, costs of implementing SEA are heavily influenced by average labour costs in each country-as well as time and organisational inputs. These cost differentials are detailed as far as possible, but the conversion to Euros allows analysis of public/private sector costs so that ratios can be compared across MS. The number of person days input to each stage provides an absolute metric that can be compared.

The ease with which certain MS were able to obtain quantitative data pertaining to time and cost investments in SEA could be seen to reflect the degree of internal coordination and organisation between responsible authorities in those countries.

Average costs by Member State

In **Hungary**, average public administrative costs (labour inputs, calculated as gross daily wages) for implementing SEA amounted to \leq 4,012 per plan or programme, whilst costs for engaging external consultants (calculated as standard day rates) amounted to \leq 64,537. The total average cost was \leq 68,549, at a ratio of approximately 1:16 for administrative: consultant costs.

Regardless of whether SEA stages are undertaken by public assessors or private consultants, costs will usually be borne by the applicant (ie, the initiator of a PP). Since the applicant is usually a public sector entity, it may be misleading to define these respective costs as 'public' or 'private' costs.

These moderate administrative costs for SEA implementation obscure large differences in cost of various SEA stages. Screening processes, for example, may be relatively limited exercises where costs amount to only \in 260, or more large-scale undertakings incurring costs of \notin 2,340 and requiring inputs from 18 organisations.

One remarkable aspect of SEA implementation in Hungary is the widespread use of external consultants - whilst administrative costs are influenced by relatively low public sector labour costs (in the region of \leq 52/day), costs for hiring consultants are closer to the average in other MS (approximately \leq 330/day at current exchange rates). This will partially reflect overhead costs, which often equate to 100% of the direct labour costs incurred.

A number of SEAs conducted for large Operational Programmes in Hungary relied substantially on inputs from external consultants, owing to the complexity of the programmes in question and the wide range of stakeholders potentially affected. Since some of these programmes were trans-boundary in nature, this contributed to the overall costs of engaging external consultants with linguistic expertise and knowledge of legislation within neighbouring MS. A number of SEAs also related to specialist or technical plans or programmes in areas such as energy production/efficiency or competition.

	Public administration costs		External c	onsultant sts	Organisations
SEA Stage	Days	EUR (wages)	Days input EUR (wages)		involved
Screening	31 (5-45)	1622 (260- 2340)	20 (3-60)	5973 (990- 19800)	9
Preparing the Environmental Report	24 (0-80)	1000 (0-4160)	139 (40-450)	39229 (13200- 148500)	2
Consultation	29 (24-30)	1390 (1248- 1560)	29 (10-120)	6900 (3300- 39600)	9
Other	0	0	0	12435	0
Total	84	4012	188	64537	20

 Table 12: Average costs (and ranges) by SEA Stage, Hungary

Sample size: 11 SEA cases

In **Finland**, overall costs for SEA implementation are influenced by the relatively high labour costs of public administration (approximately $\leq 217/day$) and the dominant role of the public sector in implementing SEA in Finland. Private consultants were not engaged in any of the case studies provided (but are in other Member States, such as Finland) but average day rates are thought to be $\leq 550/day$, a wage cost ratio of approximately 1:2.5.

Given the substantial upfront time and organisational inputs to SEA in the Finnish case studies (see below) engaging private consultants would be expected to add considerably to the overall costs of implementation.

Because screening procedures are undertaken as part of land use planning within Finnish legislation, it was not possible to produce estimates of discrete time or cost inputs for this element in the case studies. Current SEA implementation consists of approximately 1,500 SEAs a year for land use plans (of which 1,400 relate to detailed local plans) and only 10-15 SEAs a year for other types of plans or programmes.

Substantial expenditures were associated with production of the Environmental Report, and for undertaking stakeholder consultation activities. However, it is important to caution that the case studies provided related to large-scale regional land use plans. This required significant resources for data collection (in particular, integration of existing datasets and analysis within geographical information systems and land-use models) relatively extensive scenario analysis and a wide range of stakeholders to consult. In each case, the relatively large geographical scale of the plan meant that there were delays associated with parallel decision-making or regulation (for example, the Habitats Directive). This is less likely to occur within the detailed local plans that represent the bulk of SEAs conducted in Finland, and the average costs estimated should be treated with some caution in this regard as the prioritisation of resources may be directed to lengthier SEAs.

Table 13: Average costs by SEA Stage, Finland Average costs by SEA Stage,	
Finland	

	Public administration costs		External c		Organisations
SEA Stage	Days	EUR (wages)	Days input	EUR (wages)	involved
Screening	0	0	0	0	1
Preparing the Environmental Report	135 (20-250)	29235 (4340- 54250)-	0	0	1
Consultation	139 (29-250)	30125 (6293- 54250)	0	0	1
Other	3 (0-6)	651 (0-1302	0	0	1
Total	277	60011	0	0	4

Sample size: 2 SEA cases

In the **Netherlands**, day rates for public administrators are relatively high (approximately €180/day), but inputs into the early stages of the SEA process are relatively efficient owing to the use of established advisory resources (for example, the EIA Committee, which must be consulted in any SEA). There is also a relatively even split of responsibilities between public authorities and private consultants in the case studies provided. Time and organisational inputs into the screening and scoping processes were notably low in comparison to other MS, whilst the time allocated to producing the Environmental Report was relatively high by international standards.

This is to some degree reflected in the relative costs of these stages, although it is important to note that for one case study (a municipal zoning plan for Oldambt) time and costs for public administration were unavailable, and external consultant fees were charged as a lump fee of \leq 40,000 for supporting the entire SEA process. This is the same as the average overall costs of external consultants for the other case. Ranges of costs and days have not been calculated for this reason.

	Public administration costs		External of	consultant costs	Organisations	
SEA Stage	Days	EUR (wages)	Days input	EUR (wages)	involved	
Screening	4.5	1953	0	5000	2	
Preparing the Environmental Report	22	3960	0	25000	1	
Consultation	54	9720	0	5000	1	
Other	31	5580	0	5000	1	
Total	111.5	21123	0	40000	5	

Table 14: Average costs by SEA Stage, Netherlands

Sample size: 2 SEA cases

In **Scotland**, all but one case study involved full management of the SEA process by inhouse public administrators (with associated labour costs of $\leq 146/day$). Where external consultants were engaged (the case of one detailed local plan), these charged a day rate equivalent to $\leq 400/day$. Both the Scottish Government and most local authorities have a dedicated individual or team of SEA assessors able to undertake all stages of the procedure- this apparently increases the consistency and efficiency of stages of implementation. Spending on other activities primarily related to the post-adoption statements and this consumed a considerable amount of time.

Table 15: Average costs by	SEA Stage, Scotland
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		dministration costs	External co	nsultant costs	Organisations involved	
SEA Stage	Days	EUR (wages)	Days input	EUR (wages)	mvorveu	
Screening	12 (0-25)	1460 (0-3650)		4758	1	
Preparing the Environmental Report	120 (10-360)	15017 (1460-52540)		5531	1	
Consultation	28 (6-52)	3504 (876-7592)		14711	1	
Other	48 (5-90)	5006 (730-13140)		11438	1	
Total	208	24987		36438	5	

Sample size: 9 SEA cases

Cross-Member State comparison of average costs

Based on analysis of differences between the MS that provided information to this study on implementing SEA, the following findings can be identified:

- The range in costs between the MS examined is remarkably small. The totals range from €60,001 to €68,539. This is despite the different contexts of the MS and the differences in distribution of the costs between public administrative costs and consultant costs. So, in Finland all costs are to the public administrative and in Hungary almost all costs are to consultants.
- Overall costs were broadly similar despite different allocations of resources to SEA stages and different levels of engagement of public and private consultants.
- An average of 217 full-time equivalent days was required for the full procedure.
- Preparation of the Environmental Report consumed the majority of both days and costs in most cases.
- Ratios of administrator to consultants costs varied significantly between MS from zero in the case of Finland to 1:16 in the case of Hungary.
- Wage differentials ultimately influence total costs both relative costs for administrators or consultants, as well as absolute wages across MS and there were substantial variations in this regard.

• For example, public administration costs are very low in Hungary, but the tendency to reply heavily on external consultants for SEA (whose wages are closer to those in other MS) negated any cost savings.

		Hungary		Finland		Netherlands		Scotland	
		Days	Costs	Days	Costs	Days	Costs	Days	Costs
<u>د</u>	Screening	19%	11%	0%	0%	5%	11%	6%	10%
distribution %	Preparing the Environmental Report	60%	59%	49%	49%	20%	47%	57%	33%
list	Consultation	21%	12%	51%	50%	48%	24%	14%	30%
U	Other	0%	18%	0%	1%	27%	18%	23%	27%
Ave of d	erage cost / number ays	272	€68,549	277	€60011	112	€61,123	208	€61,425
Rati cost	io of public-private ts		1:16	-	0	-	1:1.9	-	1:1.5
	io of public-private ges with MS	-	1:6	-	1:2.5	-	-	-	1:2.7
Pub MS	lic wages across	-	€52	-	€217	-	€180	-	€146

Table 16: Cross-MS comparison of days and costs

As the above table demonstrates, costs can be closely linked to resource inputs (in terms of full-time equivalent days for public administrators and organisations involved). Some clear differences emerge in the allocation of resources between MS, which have implications for the overall cost of SEA.

Whilst both Scotland and Finland favour an active role for public authorities in the implementation of SEA (reflected in the substantial number of days of authority input to SEA stages), Hungary in general favours the use of external consultants for certain stages of SEA implementation (particularly production of the Environmental Report) albeit with oversight and involvement from public authorities. Again, this is reflected in the number of days allocated to each task.

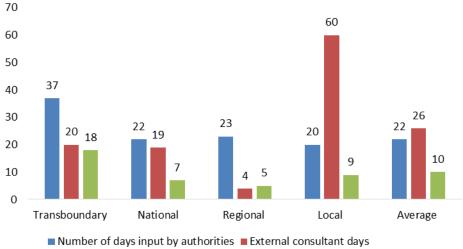
Of note in the Finnish case is the substantial time allocated to stakeholder consultationthis can be explained in part by the nature of the case studies provided (large-scale regional land use plans), the long-term and uncertain nature of the plans and diversity of affected stakeholders.

Although a breakdown of days allocated to external consultants was unavailable for the Netherlands, other survey data (particularly itemised billing) indicates that consultants have a substantial role in many stages of SEA implementation- particularly during stakeholder consultation processes, which generally appear to be conducted over relatively long periods.

Analysis by SEA stage

Screening

The complexity of some SEAs appears to increase with a more local focus - as one respondent indicated: "The more local you are, the more data required". This reflects the fact that a significant majority of SEAs undertaken in the EU relate to detailed Local Plans. This complexity is particularly clear in the case of municipal plans, where substantial early resources need to be directed to screening processes owing to the complexity of the plans, diversity of stakeholders potentially affected and the need for consideration of a diverse number of options.





Number of organisations involved

Resources allocated to screening varied substantially between plans and programmes, with input from authorities ranging from 5 days for local plans to 45 days for more complex municipal plans and trans-boundary cooperation programmes. This is largely reflected in the scale of organisational participation, which ranged from a handful of individuals for local plans to input from 15-20 organisations for more complex plans or programmes. Authorities spent an average of 22 employee working days on screening of all SEA procedures.

Interestingly, the greatest requirements for external consultant services were seen in the case of local/municipal spatial and zoning plans. This may reflect the more technical nature of such plans and the range of affected stakeholders, but is more often likely to reflect the lack of dedicated resources for SEA among local and municipal authorities as reported by respondents.

In Scotland, for six of the seven cases submitted, no external consultants were engaged in SEA procedures (owing to in-house capacities and support resources in the form of the SEA Gateway) and this appears to have resulted in substantial cost savings.

A number of small spending commitments were also required for the production of materials or the population of a GIS database- typically these corresponded to costs for one day's consultant work or less, and represent a small element of overall SEA costs.

In Finland, SEA implementation normally occurs within land use planning processes. It is common for scoping, data collection and other elements relevant to SEA to be undertaken as part of the plan or programme in question, so authority costs and time investments are thus contained within these plans or programmes. For example, one of the examples provided (SEA of the North Carelia Regional Programme) required 25 days additional input from authorities for SEA at a total cost of approximately EUR 6,000. The majority of these costs related to production of the Environmental Report.

Preparing the Environmental Report

Time inputs to the production of the environmental report vary substantially depending on the scope of implementation. Plans or programmes at the national scale mostly require the engagement of external consultants, whilst local plans or programmes typically require substantial time inputs from authorities. An average of 111 of external consultant days were required to produce the Environmental Report.

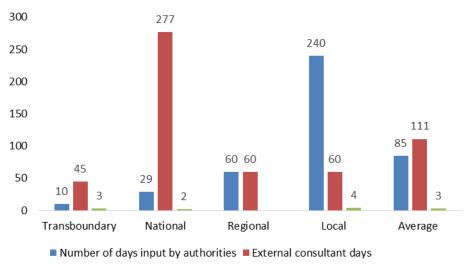


Figure 4: Time and organisational inputs to preparing the Environmental Report

Number of organisations involved

Consultation

In contrast to production of the Environmental Report, organisation and management of SEA consultation processes appear to require substantial time commitments from public authorities. On average, around 25 days of authority time was consumed by the consultation stage (including time allocated to consultation of the public by authorities), in comparison to 11 days of engaging external consultants. It is important to note that several Member States have recommended time requirements for consultation processes- this resulted in very uniform time inputs across diverse plans or programmes.

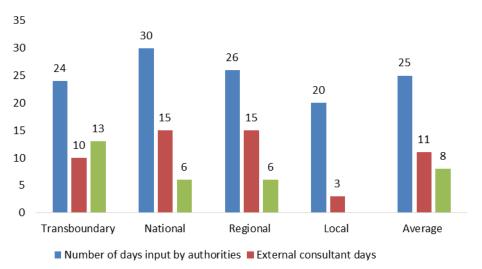


Figure 5: Time and organisational inputs to consultation

Number of organisations involved

Cross-Member State comparison

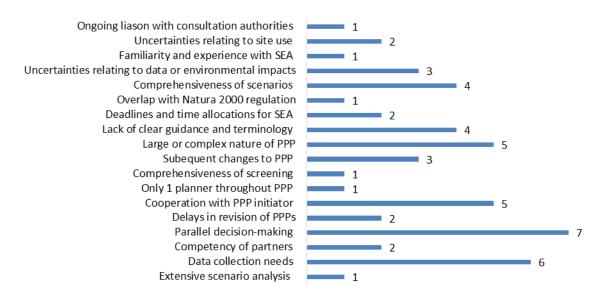
In line with the cost analysis, substantial differences can be observed between MS on the time allocated to SEA stages. Most MS allocated the bulk of time and organisational resources to the Environmental Report- reflecting the need for additional data collection and scenario generation late in the process (subsequent revisions to the PP were a frequent challenge). Some MS - notably Finland and the Netherlands - allocated substantial time to stakeholder consultation, reflecting the municipal scale of the case studies provided and the utility of the consultation process to wider planning objectives.

Analysis of the factors affecting costs

Survey respondents were asked to list the factors which they felt had the most significant influence on time inputs and costs for SEA overall using a five-point Likert scale ranging from those with a 'low impact' to those with a 'very high impact'³⁴. Whilst a shortlist of possible influencing factors was provided, respondents tended to define

On this basis, a shortlist of factors that purportedly influenced time and cost inputs to SEA procedures (both in positive and negative terms) was produced on the basis of those that were scored by respondents as having a high impact, or a very high impact. These factors are listed in the figure below, alongside the number incidences in which the same factor was encountered across all the case studies.

Figure 6: Most influential factors on time or cost within case studies, by incidence



A number of factors have proven to be influential across several cases. The most influential factor on time or cost inputs was parallel decision-making (see below), followed by original data collection needs. A major cross-cutting issue was the complexity of the plan or programme - whether in terms of geographical scale, uncertainty or the range of stakeholders potentially affected.

Despite wage differentials and the range of case studies provided by each MS, it is notable that costs appear to be reasonably consistent under different regulatory and institutional systems, i.e. there is no clear pattern indicating that the structure of the regulatory and institutional system meaningfully affects SEA costs. Part of this can be

³⁴ See questionnaire in the Annex for further details

attributed to the adoption and promotion of best practice by some respondents through provision of official guidance and online resources, which may help to smooth the differences in the inherent benefits and dis-benefits of different systems - this was not the case for all those MS consulted in the survey.

Parallel decision-making

This was the most commonly-cited factor impacting on the time and costs of SEA implementation. In some cases, the limited data provided, coupled with stakeholder concerns that the full range of possible effects were not reflected, resulted in additional research needs for the SEA. In some cases, the large number of options to test resulted in extensive cumulative impact assessment requirements. This required consideration of effects in combination with other planned and existing activities.

Data collection needs

In many cases, the complexity of the plan or programme in question, and resulting uncertainties relating to the scope and potential impacts of the PP, required substantial amounts of data from a range of sources. Measures within some large programmes, in particular, were formulated at a rather abstract level that made it difficult to assess environmental impacts and to prioritise data needs. For land use plans, there was often a need to collect a wide range of data covering different scenarios, or to source spatial data for analysis within geographical information systems and other spatial models. At some administrative levels, data were not aligned or easily comparable and this required original validation by stakeholders. Better integration of existing datasets, for example through searchable databases, has cut data collection requirements substantially in some cases.

These data requirements tended to be heavily 'front-loaded' when the plan or programme was weakly defined from the outset and subsequent revisions to the PPP had knock-on effects for the SEA process. Early integration of SEA within the plan-making procedure could help to alleviate this.

Large or complex nature of public plan or programme

The complexity of a plan or programme inevitably impacts on the range of options to be assessed, the number of scenarios to be analysed and stakeholders to be consulted. However, some cases demonstrated a sub-optimal approach to the integration of data and activities across SEA stages. Engaging different responsible persons or external consultants across different stages of an SEA can lead to duplication of effort and a weak understanding of existing data. Conversely, maintaining a consistent assessment team or individual can aid efficient planning of the assessment, particularly for large or complex PPs involving high degrees of uncertainty or technical data.

Cooperation with PP initiator

Discussions with the wider range of survey respondents indicated that engagement with the SEA process (particularly in terms of recognition of its benefits) was often weak amongst policy makers, and particularly amongst planning authorities, which in many cases still regard SEA as a disruption to existing planning procedures. Many public sector decision-makers struggle to comprehend key elements of the procedure or its terminology and there has been a tendency towards seeking derogation on SEA.

Some of the quantitative case studies provided were notable examples of strong early engagement between those responsible for SEA and initiators of the PPP. Working closely with policy makers, essentially acting as a component of the plan team, provides better opportunities for assessors to communicate the effects of a plan and for the SEA to influence its development. It also provides opportunities for plan makers to clearly see the benefits of testing the plan through assessment, and improvements in the means by which a plan and its effects are communicated to stakeholders. Examples where local authorities have developed internal assessors suggests that they can act as an advocate for the procedure in other departments - respondents suggested that PPP initiators were more keen to engage assessors on a voluntary basis in such cases.

Lack of clear guidance or terminology

A perceived lack of guidance was a major issue in many cases. Many respondents felt that the objectives and intended outcomes of SEA were insufficiently clarified by the European Commission and thus weakly defined in national or sub-national guidance. In most cases, the influencing factors referred not to the absence of guidance so much as the clarity of existing guidance. Some MS have sought to address this through the production of their own guidance materials or resources (in Ireland, for example, topicspecific guidance has been produced addressing issues such as the use of GIS in SEA, statutory SEA requirements, consideration of alternatives and assessing climate change impacts- all of which is made available through a central online resource).

Some local authorities that have developed in-house capacities in SEA have reviewed official guidance to ensure that it is less technical in language and more accessible.

Particular issues are encountered around terminology and this is one factor that should ideally be addressed at the EU level, i.e. through clarification within official guidance from the European Commission. Specific issues are frequently reported in relation to Articles 2 & 3 of the SEA Directive (regarding the definition of 'plans or programmes' for which SEA would be necessary).

Comprehensive scenario analysis

Development of a full range of scenarios usually entails substantial additional time for assessment, particularly where alternatives are not clearly defined and data uncertainties are high owing to the scope or complexity of the project. Nonetheless, working closely with the PPP team to develop scenarios and the thinking around them has been shown to improve the plan-making process overall - building the case for early engagement and consideration of alternatives to hone later scenario development.

Examples of best practice

Proportionality

According to respondents, the key to successful delivery of an assessment, not simply in terms of shorter reporting for stakeholder accessibility, was primarily through a focused scoping. An early understanding of the plan under assessment is essential to enabling a focused process of scoping, leading to targeted methods of assessment that can provide information on environmental effects in a form that can be clearly understood and influence the development of the plan. It is suggested that 'front-loading' time and resource inputs at an early stage (in terms of elaborating the programme and its measures thoroughly within scoping) alongside a basic SEA process will save subsequent time and costs.

In the case of one Scottish Local Authority, the SEA officer hosts a workshop prior to preparing a Scoping Report for a PP to which all relevant stakeholders are invited, including consultation authorities. This helps a more comprehensive and realistic scoping to take place, culminating in a more focused and proportionate assessment and environmental report. This process also facilitates earlier discussion of the PPP itself and ensures that environmental considerations are taken into account as early as possible in the strategic planning process.

Developing in house resources

A number of Member States, including Scotland and Finland, have benefitted from having a team of assessors in-house within national and local authorities. This has

resulted in both direct financial benefits from reduced consultancy fees, but also benefits in terms of developing a 'bank' of expertise and knowledge from undertaking many SEAs. This means that bespoke SEA work can be undertaken efficiently in terms of experiences on approach, knowledge of the environmental baseline and issues, easy access to information and ability to tailor the overall approach to the time period in which the plan, programme or strategy is to be developed.

Previously, private consultant costs for carrying out SEA work had proven to be very prohibitive, but there was seen to be a general lack of confidence and capacities, particularly within local authorities, to address these issues. In Scotland, a lot of effort has been expanded on explaining the SEA process to public sector employees and what it is intended to achieve, with the result that closer alignment of local authority plans and programmes with environmental objectives has been observed. Although there are still capacity issues, managers and officers are now more likely to engage with SEA work on a voluntary basis.

Similarly, it is helpful to elaborate guidelines, either at the national or regional level, for how to implement SEA in practice to facilitate and expedite the SEA process. These guidelines should ideally address best practice in different sectors (e.g. spatial planning, transport, waste management, water resource management, etc.).

Maintaining an online database or State of the Environment Report

An online database, or up-to-date report pertaining to the physical condition of the local environment is a valuable addition to a number of stages of the SEA process and can contribute to lowering time and costs relating to original scoping and data collection.

The Environmental Information Network of Andalusia, for example, (REDIAM) aims at integration, standardization and dissemination of all information on the environment generated by Andalusian centers. Having the information generated by the REDIAM facilitates decision making in the environmental assessment procedures and shortens overall time investments in the SEA process.

A regularly updated State of the Environment Report can be a particular support to generation of scenarios and modelling, and other data requirements relating to scoping and production of the Environmental Report. The key benefit of such a resource is to provide accurate environmental baseline data and to foster better integration of existing datasets. Given that the majority of SEAs address land use plans (involving a range of datasets held across different public sector interests) a common resource for SEA data can be a useful means to demonstrate the added value of SEA and promote better integration of data.

Integration alongside assessments

Assessments of many plans, particularly spatial plans, are often accompanied by plan level assessments relating to the Habitats Directive, and can help identify locations for projects likely to require project-level EIA. Working closely with these assessments can improve the quality of SEA assessment prediction. Dovetailing work with the data from historical and ongoing habitat assessment and allowing project-level information and knowledge of likely effects to inform the SEA can provide greater certainty in effects prediction and better communication of effects to stakeholders.

Conclusions

Although difficulties were encountered in engaging SEA representatives across the EU, a reasonable number of MS were happy to participate in an initial discussion and provide qualitative data relating to SEA implementation. Sourcing accurate data relating to time, and particularly, costs, was far more challenging in practice as this data was not clearly distinguished from planning expenditures in most cases.

The detailed case studies provided, though arguably too limited in number to be representative of the EU as a whole, nonetheless highlight a diversity of approaches to

implementing the SEA Directive and a number of general and idiosyncratic challenges. In most cases, substantial resources need to be allocated to data collection and analysis connected with the Environmental Report, both in sourcing data and subsequent revision.

Best practice highlights the potential for data integration, as well as better integration of SEA assessment stages as a means to mitigate this. A more even distribution of resources across the stages of SEA can be supported by in-house SEA capacities (ensuring that knowledge is maintained within the stages of each assessment and across PPs).

Greater early investment in screening by assessors with good familiarity with SEA and the PP in question can help manage some of the later costs relating to reporting and consultation by clearly defining the limitations and baseline of the study - this is a common deficiency with many SEAs because of a lack of capacities and awareness amongst the wider planning and policy-making spheres. Guidance and clarification of terminology can address this to some degree- a number of MS (particularly Finland, Scotland and Ireland) have invested heavily in guidance materials and online resources to assist assessors.

Key cost differences relate to wage differentials, allocation of time to different SEA stages (often defined within legislation or guidelines) and especially the level of engagement of private consultants in the SEA process.

In the Hungarian cases, reliance on external consultants for production of the Environmental Report pushed up overall costs because of the very large wage differential against public administrators (1:6). In Scotland, a comparable amount of effort was expanded on reporting, but because public administrators were used in most cases the share of overall cost expenditure to reporting was considerably lower.

In the Netherlands, expenditure on both public and private consultants was moderatebut data on time inputs for private consultants were unavailable. This is unfortunate as it could provide better insights into the total allocation of days to each task - it is likely that the estimate of 111.5 days underestimates the total time required for SEA implementation.

The relatively small sample of responses provided here highlights some of these challenges. The findings, whilst not statistically representative (most notably in the cases of Finland and the Netherlands where two case studies each were provided focusing on broadly similar land use plans) the findings nevertheless provide meaningful identification of costs associated with SEA, factors which influence them and best practices implemented to improve implementation, along with examples of how these differ across MS.

Annex: SEA Questionnaire

The purpose of this survey is to gather 'real world' data and information (that is, data based on actual cases) on costs involved in undertaking various tasks associated with the Articles of the SEA Directive. Specifically the questionnaire asks a series of questions around:

- Time inputs/costs of each section of the SEA process (as defined under the SEA Directive)
- What factors affect the time inputs / costs involved
- Best practice that can be implemented to improve the efficiency of the processes i.e. to reduce time/cost inputs

Where feasible and relevant data and information is to be presented and discussed separately for each stage of the SEA process:

- Screening (Article 3);
- Preparing the environmental report (Article 5)
- Consultation with relevant authorities, the public and other MS (Articles 6&7)
- Taking SEA into account in within plans and programmes (Articles 8 & 9)
- Ongoing monitoring of environmental effects (Article 10)

The questionnaire is made up of three sections:

- Section 1: a general overview of SEA institutional arrangements
- Section 2: detailed data and information on specific SEA cases (to be repeated for as many cases as is feasible)
- Section 3: general information on best practice implemented that reduces time input and costs of SEA

Section 1 – Overview of SEA institutional arrangements

Please provide a general description of the institutional arrangements for application of the SEA Directive. For example:

- Is SEA administered at the national level (within programmes) or regional level (within plans)?
- Is the SEA Directive transposed into a specific regulation or contained within existing regulation?
- Which authorities have specific accountability for SEA?

Answer

Section 2 – Detailed data and information on individual SEA cases

Please complete the following tables using data from a real SEA case. Please provide data for a representative selection of cases, repeating the table for each case. Please complete one form per SEA case. Please ensure that at least 1 case relates to a 'spatial plan'.

This data and information provided for Section 2 should be based on real SEA cases. Data should be provided for as many cases as is feasible, at least one of which should be for a spatial plan.

This section requests data on time input and costs and information on the factors that most influenced those time inputs and costs. Please provide time inputs and costs broken down by SEA stage and cost category (as indicated in the table) where feasible.

It also requests information on the factors that most influenced the time inputs and costs for SEAs in each case. It requests that you:

- A. Identify the factors that most influenced the time inputs and costs for SEAs and score their significance (indicate whether it helped increase or decrease time and costs). Please also indicate the extent to which you think that each factor frequently influences time inputs and costs for SEAs more generally for SEAs. The scoring system is set out in the table below.
- B. Describe and explain how it affected decision making and why, and provide an indication of the increase or decrease in time that it resulted in.

-			c 11 .		
Please	lise	the	following	scorina	system
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Sig	Significance of the effect					
1	No impact					
2	Low impact					
3	Moderate impact					
4	High impact					
5	Very high impact					

Frequency					
А	5% of the time				
В	25% of the time				
С	50% of the time				
D	75% of the time				
Е	95% of the time				

Examples of possible influencing factors from previous research

Influencing Factor
Large and/or complex plan or programme being considered
A lack of expertise in the competent authority
A lack of capacity / resources in the competent authority
A lack of clear guidance and understanding of terminology
Parallel decision making / associated EIA/SEA, SA
Extensive scenario analysis
Original data collection needs/lack of access to secondary data
Need for modelling of environmental impacts or effects
Need for original stakeholder consultation
Public opposition
Advertising and recruitment for consultation
Lack of guidance or understanding of terminology
Uncertainties surrounding environmental impacts
Lack of capacities for engagement and consultation
Overlap with other activities (eg. EIA, SA)
Uncertainties relating to data or environmental factors

С.

Case No.1 (please add more case study boxes as required				
A. General details				
Project / plan name				
Short description				

Case No.1 (please add more case study boxes as required

B. Time and Expenditure Costs

	Cost category							
Stage	Number of days input by authorities	External consultants (indicate if no. of days or €s)	Number people/orgs involved consultation	of in	Expenditure on materials	Other		
Screening								
Preparing environmental report								
Consultation								
Other (please specify)								
TOTAL								

C. Please indicate whether, in your view, the time/costs for this SEA case were: Below average / about average / above average

D. Influencing Factors							
Influencing Factor (SEA stage influenced)		Increase / decrease	Significance	Frequency			
		Delete as appropriate					
1		Inc/Dec	12345	ABCDE			
2		Inc/Dec	12345	ABCDE			
3		Inc/Dec	12345	ABCDE			
Etc	Please add more rows as required	Inc/Dec	12345	ABCDE			

Please describe and explain the factor, how it affected time inputs and costs and why it occurred

1	
2	
3	
Etc	Please add more rows as required

Section 3 – General best practice

Please indicate any general best practice (not already identified in section 2) that you have implemented (or plan to implement) that has a positive effect (i.e. helps to reduce) the amount of time and costs associated with SEA e.g. best practice documents. Please explain how the best practice is implemented and why and how it helps to reduce time inputs / costs.

Answer 1	
Answer 2	
Answer 3	
Answer 4	

Habitats Directive Case Study

Introduction

This case study examines the timeframes and influencing factors associated with permit decision making under the Habitats Directive in EU Member States. Key elements of the study relate to understanding the specific institutional and regulatory arrangements through which the Directive is implemented in national or provincial legislation, and how these and other process-specific factors influence the time required to process and decide on applications falling under the Directive's influence.

The Habitats Directive and Focus of the Case Study

The Habitats Directive (Directive 92/43/EEC, henceforth 'HD') seeks to protect a series of habitats and species, including through designated protected areas (termed Special Areas of Conservation [SACs]) which, together with Special Protection Areas (SPAs)³⁵, form a network of protected areas known as the Natura 2000 network. There are one-off costs of establishing the Natura 2000 network and then recurrent costs of management actions.

Whilst there have been a number of reviews exploring issues associated with implementation of the Directive, there has been a limited amount of research relating to the actual costs associated with its implementation. Research by Ecosystems Ltd (2013) could not obtain (from competent authorities, NGOs or the EU sector associations) any accurate information or quantifiable data on the costs associated with the Appropriate Assessment procedure under Article 6.3 of the Directive.

As effort shifts from the identification of new Natura 2000 sites towards successful management and protection of designated Natura 2000 sites, interest relating to costs of implementation should, naturally, focus more on the ongoing management costs associated with managing the network as well as the administrative burdens involved in complying with its requirements.

One area of costs generated by implementing the Directive relates to obligations under Article 6.3 and 6.4 of the HD, which require, respectively, 'an appropriate assessment to be undertaken of any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon' and 'implementing compensatory measures to ensure that the overall coherence of Natura 2000 is protected, where plan or project damaging to a site must be carried out for imperative reasons of overriding public interest'.

Indeed, a Defra review of the implementation of the Directives in England³⁶ found that they can impose costs on developers as a result of time, fees and delays in permitting processes for such plans or projects. In a small number of high profile cases these costs have been substantial. The implication of the English review is that the costs of implementing the EU legislation can be influenced by national and local processes of administration and delivery.

One cost issue that can be readily compared across MS is the time taken for project or plan permitting decisions by competent authorities under Article 6.3. This can affect project or plan applicants such as land owners and developers. Businesses and NGOs can be concerned that Authorities may take too much time to respond to the request for a permit (or not reply at all) or may rely too readily on the precautionary principle when reaching their decision on whether to issue the permit.

³⁵ SPAs are enabled through the Birds Directive

³⁶ Defra, 2013. Progress on implementation of the Habitats Directive Implementation Review. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/206379/pb13959-progresshdir.pdf (Accessed 21 July 2014)

Delays in permitting are widely cited as imposing costs on businesses, because they tend to require increased time inputs and professional fees, delay revenues and therefore increase financing costs, and lead to greater uncertainties for developers.

This case study sought information on the duration of decision making processes, as measured by the number of days taken, the factors that influence these timeframes and how they differ across MS.

The actual decision making process is linked to a number of assessment elements, which are detailed in EU guidance for assessments under Articles 6.3 and 6.4. The methodological guidance identifies four discrete stages, and a decision on project or plan authorisation may be given following any of these four stages (as demonstrated in the flow diagram in Annex A). In simplified terms, Stage 1 screening can be separated from the 'full assessment' required for projects or plans that proceed through stages 2, 3 and 4. Understandably, there is significantly greater scope for longer decision making timeframes under Stages 2, 3 and 4 than under Stage 1. Further, assessments required for Stages 2, 3 and 4 may themselves take a significant amount of time (in comparison to screening assessments), and in many instances where stages 2, 3 and 4 are required, submissions relating to each stage assessment may be made simultaneously by applicants.

Methodology

Previous research examining the costs of permitting procedures under Article 6.3 (and 6.4) of the Directive has struggled to obtain meaningful quantitative data on which to establish typical costs and variations in them across EU MS. The methodology was therefore designed to focus on the time taken to make a decision, which should be easier to measure than actual cost data. This is reasonable because delays lead to costs for businesses and economic sectors.

The focus was put on 'real world' data, that is, decision making timescale data (and influencing factors) for individual cases across a sample of MS. The reason for focussing on individual cases was to avoid the need for respondents to be able to access comprehensive datasets of all (or large numbers) of relevant cases and to ensure that the data collected was based on real cases as opposed to estimated averages.

A structured questionnaire (copy in Annex B) gathered the following information:

- The institutional arrangements relating to decision making under Article 6.3.
- Decision making timescales for individual cases.
- The factors affecting the timescales for each case.
- Best practice employed and how they influence timescales.

Six MS were selected to provide a sample representing a mix of geographies and length of MS membership. Initial requests for participation were sent via email to the principal contacts for the Habitats Directive in the competent authorities of each of the six target MS. Introductory phone calls were then undertaken to further explain the purpose of the research and discuss the most appropriate way to gather the required information for the survey. The MS principal contact then cascaded the survey to the relevant individuals for completion. Follow-up emails and phone calls were made to facilitate completion and responses. Upon receipt of the completed questionnaires, follow-up interviews were undertaken to further explore some of the issues raised and to seek any required clarifications on the response. This case, therefore, is based on information from competent authorities. Future work could, for example, seek data from business, though this would be a much larger undertaken in order to gather sufficient data for an assessment of comparability.

Responses

Responses were received from all six MS targeted. The figure below provides a graphic display of those MS (although Malta does not show given the scale the figure is presented at). Note that the UK response reflected only activity in England and Wales.

Whilst six MS responded positively to our request, the extent to which each was able and willing to provide information specific to the questions asked varied and the number of cases for which specific data was received was low. The Table below provides a summary of the scope of responses provided by each MS. Data on a total of eight individual cases was provided by the MS respondents. As such, care should be taken when interpreting the data presented as the sample cannot be considered to be representative.

The cases received included a large-scale housing development, port and road infrastructure plans, energy producing facilities and local recreation facilities and infrastructure. For the cases received the decision making timescales were, in all bar one case, perceived to be 'longer than average/normal'. (Further details on the factors that influenced the timescales are presented in the analysis). As such, as well as representing only a small sample, the timescale data received on these cases represents a sample that is biased towards those cases where certain factors were at play that elongated decision making timescales and this should be taken into account when considering and interpreting the data on timescales.

Two key challenges were highlighted (by nearly all MS) which limited the extent to which they were able to respond to the questionnaire: a lack of recording of information on the timescales of the process; and an inability to identify timescales relating to decision making under the Habitats Directive as assessments and decisions are often taken in tandem with related EIAs and other permitting decisions.

Figure 7: EU Member State survey responses (responding MS shown in blue, except Malta)



Table 17: Scope of survey responses by EU Member State

	Member State					
Information provided	DK	МТ	NL	ES	RO	UK
Institutional arrangements	х	х	х	х	х	x
Timescale data on individual cases (number of cases provided)		2	1	2		3
Factors influencing timescales for individual cases (number of cases provided)		2	1	2		3
Factors influencing timescales – not case specific	x				x	
Best practice	x		x	x		x

Analysis

This section provides a summary and analysis of the information received from the survey. It is set out in the following four sections:

- Institutional arrangements for permitting under the Habitats Directive.
- Decision making timescales.
- Factors affecting decision making.
- Best practices that influence decision making.

Institutional arrangements for permitting the Habitats Directive

Information was sought on the institutional arrangements relating to permitting procedures under Article 6.3 of the Directive. Three key aspects were considered, which are discussed in turn below:

- Responsibility for undertaking Appropriate Assessments.
- Responsibility for decision making.
- Existence of requirements or guidelines on decision making timescales.

Responsibility for undertaking Appropriate Assessments

Responsibility for undertaking (or funding) the Appropriate Assessment varies across MS between the competent authority and the permit applicant, with some variation within MS depending on the nature of the project.

In the Netherlands, Malta and Romania the responsibility for undertaking the Appropriate Assessment lies with the developer. For example, in the Netherlands this is prescribed for in Article 19f of the Natura Protection Act (Naturbeschermingswet 1998).

In Denmark, England & Wales and Spain, the responsibility varies depending on the nature of the project.

In Denmark this depends on whether the Appropriate Assessment is being undertaken in parallel with an EIA. In cases where it is, Danish legislation allows authorities to ask the applicant or developer to undertake and finance the screening and/or the full Appropriate Assessment - the provisions say the applicant should pay whatever is necessary to enable the authority to make decisions. Given this link, it is primarily those projects which are of a larger or more significant nature (i.e. those typically requiring EIA) for which the responsibility can be passed to the applicant. There are also linkages with other environmental legislation on other (non-EIA) activities which provide the same provision. Overall it is nearly always the case that responsibility for the Appropriate Assessment is passed to the applicant. In a small number of situations the necessary

provision may not be available, e.g. for projects falling under the Natura Protection Act and in such cases it is the responsibility of the competent authority (including data collection etc.).

In England & Wales, the competent authority is responsible for the Appropriate Assessment (termed a Habitats Regulation Assessment in the UK). However in many cases, especially where larger scale projects are being considered, the permit applicant will have to provide all the information a competent authority may require to complete the assessment. This is often referred to as a 'shadow HRA.'

In Spain, the regions are generally responsible for the Appropriate Assessment, however a number of stakeholders are involved in undertaking the Appropriate Assessment, such as developers, Appropriate Assessment consultants, competent authorities and NGOs.

Responsibility for decision making

Whilst in all cases responsibility for decision making rests with a suitable competent authority, there is variation between MS on the level and nature of authority responsible for decision making under the Article 6.3 permit procedure. This appears to be in part related to the constitutional structure of the MS and how administrative responsibilities for environmental issues and permitting regimes are distribution.

Of the MS interviewed, Malta has the most centralised system. All permitting decisions are taken at the national level by the Malta Environment and Planning Authority. This is not surprising given its relative size.

In Spain, which is a highly federalised state, responsibilities for permitting authorisation decision linked to Article 6.3 Appropriate Assessments have been allocated between the governmental and regional levels, although the responsibility lies essentially with the regions. Some, if not all, Spanish regions have each adopted their own (differing) laws transposing Article 6.3. However there is felt to be an overall lack of understanding of, or willingness to accept, the Article 6.3 procedure amongst certain authorities and/or sectors. This has caused difficulties in its implementation and frequent delays, inconsistencies in application and frustrations amongst developers, authorities and NGOs.

In Denmark, Netherlands, Romania and England & Wales, decision making responsibilities are distributed across different administrative levels, from national to local. The nature of the project being considered determines the appropriate decision making authority.

In Denmark, there are three administrative levels responsible for decision making: state level, regional level and municipality level. However it is primarily either the state or municipality levels to which the responsibility falls. At the state level there are a division of responsibility across sectoral divisions e.g. the Danish Agro-Fish Agency is responsible for licensing mussel fisheries and marine aquaculture. Regions are responsible only for decisions within the field of soil contamination and terrestrial extraction of raw materials (gravels, peat etc.).

In the Netherlands it is typically the Provincial Executive (Gedeputeerde Staten) of the province in which the Natura 2000 area is (mostly) situated that is responsible for the permitting decision. However, for a number of specific activities (e.g. main infrastructure projects) decision making is undertaken at the state level by the Ministry of Economic Affairs (the Ministry of Economic Affairs is also responsible for nature policy in the Netherlands).

In Romania there are multiple levels of competent authority, bringing a total of seven types of organisations. The principal disaggregation is between County, Regional and National Environmental Protection Authorities, which have responsibility in cases where projects affect, respectively, individual counties, multiple counties within a region, multiple regions. A special case applies in the Danube Biosphere Reserve where the Reserve Administration is responsible, except in cases where the effects straddle the Reserve and Galati County, in which case the Galati County Regional Environmental Protection Agency is responsible. In special situations which do not fall under any of these cases, the Central Public Environmental Protection Authority (Ministry of Environment) is responsible.

In England & Wales the competent authority responsible can include a wide range of decision makers. Land use decisions are predominantly made by local planning authorities. Other consenting regimes include those overseen by environmental authorities such as the Environment Agency and Natural England. The administrative level for decision making therefore varies depending on the nature and importance of the project in question. A distinct process is in place for the determination of nationally significant infrastructure project (NSIP) proposals, which proceed through a Public Examination before a final decision by the Secretary of State for the relevant Government department, as competent authority. Where a plan or project is considered to be of imperative reasons of over-riding public interest, and with an absence of any alternative solutions, decisions regarding the project will normally be made at a national level.

Guidelines and requirements on how long decision making should take

Of the responses received, England & Wales, the Netherlands and Romania identified guidance and/or requirements of a specific timescale for permit decisions under Article 6.3.

Competent authorities in the Netherlands have to take a decision within 13 weeks from the receipt of a permit application. This term can be extended once for another 13 weeks.

In Romania MO (Ministry order) 135/2010 details fixed deadlines for each step of the project in terms of number of days, linked to legislation. For Article 6.3 decision making (prior to consideration of alternative solutions or compensatory measures) a permit decision must be made within 15 working days of receipt of the AA report.

In England & Wales timescales are governed by the particular consenting regime relevant to the application as opposed to the Habitats Directive and therefore no specific guidelines are stipulated for Appropriate Assessments. For most planning applications guidance is for decisions to be made within eight weeks, unless they are unusually large or complex in which case the time limit is extended to 13 weeks. Specific timescales are also set for Nationally Strategic Infrastructure Projects (NSIPs) (which are determined by the Secretary of State). Following the pre-application stage, which is an undetermined length of time and is case specific, the process includes 'Acceptance', a formal application is submitted and accepted by the Planning Inspectorate (28 days), 'Pre-Examination – formal public representations made and preliminary meeting prior to Examination for interested parties (3 months), 'Examination' of the proposal is then undertaken by the Planning Inspectorate (6 months and the Planning Inspectorate prepares its report for the Secretary of State (3 months), Secretary of State decisions are then made following receipt of the report from the Planning Inspectorate (3 months). The total time is therefore 16 months.

Denmark's authorities have general guidelines on target timelines related to decisions making³⁷, however no specific timelines under Article 6.3. There exists general acknowledgement that the time required for an Appropriate Assessment depends on the specific circumstances.

From the cases received from MS respondents, it is not clear to what extent the availability of guidelines or requirements helps to influence the timescales within which

³⁷ Example target timelines for administration processes for the Environmental Protection Agency can be found here: http://eng.mst.dk/about-the-danish-epa/administration-processing-times/

decisions are made. A variety of influencing factors may transpire that result in extended decision making timescales which cannot necessarily be overcome in order to satisfy the guidelines or requirements.

Decision making timescales

The Figure below presents the timescales for decision making for each of the cases on which data was received. Those shown in red represent cases where the respondent felt that the time taken was longer than is normal, and that shown in green is for a case where it was felt that the time taken was shorter than normal. For the case in blue no such opinion was offered.

This clearly shows that MS respondents have generally provided data on cases which are not 'typical' but have had longer than normal durations and hence time-influencing factors. As such, the data analysis associated with them cannot be considered to be representative of the broader population of HD cases. Further, it should be noted that the sample is not sufficiently large to enable a meaningful average (overall or for MS) to be generated. It should be seen as a snapshot overview of specific cases rather than a true benchmark against which to test performance.

The average length of time between initial application and the authorisation decision for the cases provided was just over 700 days. This is clearly a significant length of time, even if allowance for authorities to undertake the full assessment internally is allowed for. I

Six of the cases present the time required to reach a decision under Article 6.3, whilst the MT Road junction case and EN mixed-use development case include the Article 6.4 process. Whilst these two Article 6.4 cases report the second and third longest time periods, it is not clear that the need to undertake the Article 6.4 process is a major factor in determining the overall length of the decision making process. In a majority of cases it appeared that a need for negotiation and communication with the applicant in order to deliver a successful permitting decision was important, as were issues around additional or revised information and reports.

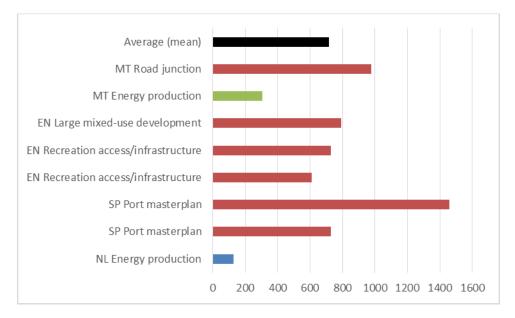


Figure 8: Decision Making Timescales (number of days)

Factors influencing timescales

Survey respondents were asked to identify the factors that had most influenced decision making timescales, and to score its significance, for the individual cases for which they had provided timescale data. In addition, for each factor, they were asked to score the perceived frequency with which the factor occurs as an influence on timescales.

The significance and perceived frequency of the factors were scored on five-point Likert scales. For significance, 1 represented 'no impact' and 5 represents 'very high impact', whilst for frequency 1 represented 5% of the time and 5 represented 95% of the time. For further details please see the template questionnaire in the Annex to this case.

In addition to this case-specific information provided by Malta, Netherlands, Spain and England, information on the factors thought to most influence decision making timescales in general (i.e. not case-specific) was provided by Denmark and Romania.

The Figure below presents the factors identified by respondents. It shows:

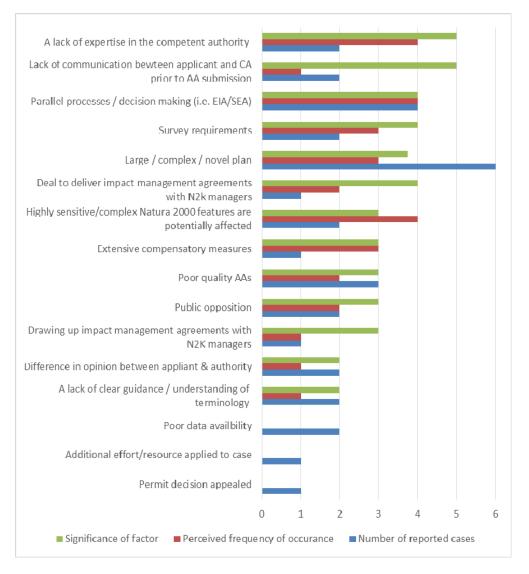
- The average significance assigned to the factor in individual cases (in green).
- The perceived frequency with which the factor is generally thought to effect timescales (in red).
- The number of times the factor was cited in the survey responses (in blue). For this series, each factor identified in the Denmark and Romanian responses, which were generic rather than linked to specific cases, was only counted once.

A number of the factors presented the figure and which were discussed during MS interviews are examined qualitatively in the remainder of this section. In all cases multiple factors were identified as influencing the timescale.

A number of these factors tie in with findings from a UK Government review³⁸ which found that there is scope for improving the way the Directives are implemented in England by addressing a number of these factors: reducing the complexity of the national legislation and guidance, reducing the complexity of the authorisation process for development, improving the availability and comparability of data, and strengthening the customer-focused, collaborative culture in statutory bodies dealing with development issues.

³⁸ HM Government (2012) Report of the Habitats and Wild Birds Directives Implementation Review. https://www.gov.uk/government/news/examination-into-how-well-the-habitats-and-birds-directives-arebeing-implemented-in-england





Large/complex/novel project

This factor was the most commonly cited factor that can significantly increase the time to take a decision. It reflects an overwhelming view that came across from MS that the timescales required for the Appropriate Assessment process a very much case specific, often affected by the particulars of the applicant project and the Natura site in question as opposed to more institutional factors.

Underlying issues linked to large, complex or novel applications included the volume of documents that need to be analysed and whether the process is occurring concurrently with other assessment/permitting processes.

A related issue lies in the complexity of the species and habitats affected and/or the potential impacts on them. This was cited as occurring quite frequently. Lack of specialist expertise can exacerbate this issue. In England & Wales, Natural England (a statutory nature conservation advisor) has a range of habitat and species specialists to advise on such cases, and a protocol for the escalation of cases whether there are significant complexities or risks. Even so there are still cases where such complexity negatively influences timescales.

The England & Wales response also raised the issue of new or novel projects and approaches. In such cases it is found to be essential to fully work through the legal issues, seeking to be sure that a new approach is Habitats Regulations compliant. One also needs to secure the necessary level of certainty for the decision maker that the mitigation is fit for purpose and capable of timely implementation. As was the case in one example cited in the response, this requires collection of a comprehensive evidence base and considerable discussion and negotiation to reach agreements. However, it was also noted that this experience can be drawn on for subsequent scheme where appropriate.

Parallel assessment processes

The undertaking of Appropriate Assessments alongside EIAs or SEAs was the most commonly cited factor that could negatively influence decision making timescales, identified by Denmark, Spain and Romania. It is common across MS for Appropriate Assessments to be integrated, or at least coordinated, with the EIA/SEA procedure when the EIA/SEA is required (Ecosystems Ltd, 2013).

Both Spain and Romania noted that the Appropriate Assessment process runs alongside the other assessment processes. Whilst this can generate efficiencies, there can be delays as the outputs of one assessment process may have implications for the project design which may in turn affect the Appropriate Assessment already undertaken. In should be noted that sometimes it may be the EIA/SEA process that affects the Appropriate Assessment timescale, and in others the effect may run the other way. As such the two (or more) assessment processes and outputs need to 'talk to each other'.

Notably Denmark stated that EIAs are generally considered to take longer than the Appropriate Assessment process and it is therefore typically the EIA that drives the overall permit decision timescale, rather than the Appropriate Assessment. EIA requires the assessment of a broad range of potential environmental impacts as well as an obligatory public consultation exercise which can be a reason for this (Ecosystems Ltd, 2013).

In most MS the Article 6.3 process has been attached to the existing permit procedure (e.g. for EIA and SEA or other forms of planning consent) which are generally designed for other purposes and often have different objectives and approaches. Indeed in both this research and previous research (Ecosystems Ltd, 2013), this parallel process was a principal reason why it was not possible to identify data on costs or timescales attributed solely to the Appropriate Assessment process.

Another important aspect of the Article 6.3 permit procedure is that its outcome is legally binding on the competent authority and conditions its decision. This contrasts with the impact assessments carried out under the EIA and SEA Directives where the findings merely have to be 'taken into account'. However no evidence was provided through the case study that indicates that this difference influences decision making timescales.

Lack of communication

A lack of communication between the applicant and the competent authority was identified as an influencing factor that could increase timescales in the England & Wales and Romania responses.

In the England & Wales case presented, a lack of communication was exacerbated by existing activities being undertaken by the applicant causing damage to the Natura site which was not being rectified. The fact that the applicant was already damaging the site, and would not liaise positively to resolve the issue, made it difficult for all parties to move forward. This was identified as a very significant issue, although it was also

recognised that a lack of communication in such circumstances (ongoing damage) was rare.

In Romania communication issues often surface in situations where external consultants are hired by the applicant to undertake the assessment. This can lead to miscommunication between the three parties, resulting in substandard assessments that subsequently require additional information to be requested.

It was recognised in both the England and Denmark responses that positive engagement and communication can help to develop a compliant project, being influential in informing adjustments to elements of the project and any associated mitigation accordingly, which can in turn reduce the potential for delays in the decision making process.

An example of successful communication was provided in England & Wales where the applicant, local planning authority and Natural England were able to develop a mitigation plan for possible nutrient enrichment impacts on a water body that enable a positive permit decision to be made. Denmark also mentioned that sectoral state authorities responsible for the AAs have built up relationships with the other stakeholders in their sector which allows for smooth communication processes and also quicker access to information.

Resources and expertise

A lack of expertise in the competent authority was identified as an influencing factor in the England & Wales, Romania and Spain responses.

In England & Wales the experience of local planning authorities varies considerably, with a key issue being a lack of ecological staff. Very few have in-house ecologists and their numbers have been declining in recent years. A similar problem with skills, resources and a basic understanding of the requirements of Article 6.3 at the lower administration level was identified as a commonly influencing factor in general across Spain. In some cases this may stem from a lack of willingness to accept the Article 6.3 procedure amongst certain authorities and/or sectors.

In Romania it was recognised that a lack of resources often influences timescales. In many cases one person in the local or regional authority may have an overload of cases to analyse and assess. In order to meet the legal time expectations, the assessment might not be as accurate and in depth as the assessor would want it to be.

In Denmark, it was felt that in general the competent authorities have good resources available to deal with Appropriate Assessments. Agencies and municipalities have built up capacity to deal with undertaking assessments and considering applications. In cases where the assessment must be done by the competent authority, consultants are typically hired to support the authority. This is particularly the case for specific habitats and species. Further, particularly large or complex cases can present resourcing issues.

Capacity development was also highlighted in England & Wales, where Natural England employs a range of habitat and species specialists to advise on specific cases as required. Denmark also highlighted that at a state level, their sectoral integration in the Appropriate Assessment procedure ensures that capacity and knowledge is built in authorities in parallel on both the sector issue and Appropriate Assessment processes.

Poor quality data and Appropriate Assessments

Poor quality Appropriate Assessments and related issues of poor data availability and bespoke survey requirements were identified a total of seven times by respondents.

In both Spanish cases the developer was obliged to re-do the assessment and as a result timelines significantly increased. This had add-on effects beyond simply redoing the

assessment work. The public consultation process also had to be carried out again, which was in itself particularly lengthy given the trans-boundary nature of the projects. The trans-boundary element of the consultation delayed the decision making process by approximately nine months.

An explanation for why poor quality Appropriate Assessments are submitted was offered in the England & Wales response. The developer frequently does not properly consider or seek appropriate advice on the amount or nature of ecological information that is required to support the applications. This then leads to delays during the decision making process as further information needs to be requested. This could entail further survey work.

The Romania response highlighted that seasonal restrictions on the appropriate time to undertake a survey can influence timescales. Further, some habitats might require a longer analysis time given the complexity or the size of the populations. The England & Wales NSIP regime (discussed further under best practice) has helped to overcome this potential cause (for qualifying development proposals) as it requires that all necessary information is gathered pre-submission.

In relation to the England & Wales explanation, the Romania response noted that it is often the case that poor communication on the data requirements for the Appropriate Assessment often occurs in cases where external consultants are employed to carry out the assessment.

Further it was noted in the Romania response that assessments made by the developer or external consultants are often biased and in favour of the project even if the reality might be different. A case presented for Spain identified this factor as a key reason for delays in the overall decision making timescale. In the case example there was a difference of opinion between the developer and the competent authority over the extent of impacts. Significantly the difference in opinion resulted in a potential need for compensatory measures (the competent authorities view) and no requirement for compensatory measures (the developers view). Indeed more broadly, differences of opinion, between the applicant and competent authority or voiced through public opposition, can have a negative influence on timescales.

In Denmark a general lack of data on the habitats and species of the Natura 2000 sites was a factor that influenced timescales in the early days of the Habitats Directive. However the national monitoring programme for Natura sites provide significant levels of information which can be used in assessment and this has helped to reduce the burden on gathering baseline data over the last four or five years.

Appeal procedures

Appeal procedures were identified by Denmark as a potential cause of significant delays in situations where they occur, taking many years to settle and requiring special task forces to be established. Denmark has a highly developed complaint system, under the Danish Environmental Board of Appeal, allowing applicants, neighbours, NGOs, stakeholders and public administrative bodies to make a formal complaint in the majority of cases where an authority has adopted a plan or granted an authorisation, if they disagree with the result on legal grounds. Legal issues extend across the requirements of the legislation, including for example use of appropriate data and quality of the Appropriate Assessment. An increasing number of cases have come about in relation to Natura sites.

Best practice

There are a number of best practices employed across MS which seek to counteract some of the factors that negatively affect decision making timescales and improve the overall efficiency of the process.

A number of these are discussed thematically in this section.

Simplified planning processes and strategic spatial planning

Mechanisms which can seek proactively to simplify or remove potential Habitats Directive issues for future developments provide a high level approach to aiding the protection of Natura sites, enabling development and reducing decision making timescales and overall cost burdens. Such best practice examples were identified by three MS.

A strong strategic planning system in Denmark, which supports appropriate and efficient coordination of activities across the countryside, can help to remove potential conflicts between proposed developments and Natura sites at an early stage i.e. prior to project identification and permit application. A specific example was highlighted for the planning of onshore and offshore wind farms across the country. Upfront strategic spatial planning, identifying potential sites for windfarms, has been able to avoid potential clashes with Natura sites.

Such best practice can be considered to be prevalent in all EU MS which have efficient, well-functioning spatial planning systems. However, despite coordinated strategic planning of potential development areas this will not always prevent potential conflicts between developments and Natura sites. This will most likely be the case in densely populated areas and spatially constrained environments. Examples of this can be seen in the UK where, despite a good spatial planning system and strategic forward planning for major industry development (such as energy production), developments still overlap with and/or have an impact on Natura sites and their habits and species.

Enterprise Zones (EZs) in England combine strategic spatial planning with streamlined permit procedures. EZs, announced in 2011, are intended as a tool for encouraging local economic growth and new jobs through a combination of financial incentives and reduced planning restrictions in specific areas or 'zones'. In total there will be 24 EZs in England. A key element of the EZ is a simplified planning framework and Government expect this to be brought forward through the making of Local Development Orders (LDOs). The LDO enables the local planning authority (LPA) to permit development without the need for planning permission. However this does not negate the fact that any LDO which will result in a likely significant effect (LSE) on Natura habitats or species will not be compliant with the Habitat Regulations and will therefore not be granted permission for development. For those EZs located within or in the vicinity of European sites it is essential to understand how a LDO may affect Natura sites before it is progressed in order to ensure that the LDO only contains development that is appropriate in the context of the Habitats Regulations. Natural England (and other relevant consultative bodies) proactively seeks early engagement with the local bodies responsible for the EZ proposal in order to ensure that the EZs are established in compliance with the Habitat Regulation (i.e. the Habitats Directive).

The Nationally Significant Infrastructure Projects (NSIP) process in England & Wales, brought in under the Planning Act 2008 with refinements made by the Localism Act 2011, was put in place in response to the time taken for large scale projects of national significance to proceed through the planning process to a final decision. The strict process and timetable now set in place does not allow for delays and there is confidence in a decision within the 16 months timescale. In terms of Natura site protection, the developer is required to provide all assessment information upfront to inform the start of the Examination. This simplifies the decision making process by reducing the scope for delays whilst extra survey information or underpinning evidence is gathered, as this work is all undertaken before the decision making process commences.

Technical guidance and protocols

A lack of clear guidance or protocols was identified in two instances as being a factor negatively affecting decision making timescales. Further, it may be a confounding factor in the delivery of poor quality Appropriate Assessments and unsuitability of presented data. Notably it was recognized that in more novel cases, where there is no pre-existing standard assessment approach or criteria, this can lead to delays. Poor quality assessments may move through the national planning process but ultimately be rejected by the European Court of Justice (ECJ), which can cause significant delays to the overall decision making timescale.

Decision making processes can be facilitated by guidance to identify acceptable levels of impact. In Denmark systems for developing Appropriate Assessments for licensing mussel fisheries within Natura 2000 sites were developed after the ECJ decision C 127/02 on cockle fishery in the Dutch Wadden Sea and after a number of cases in Danish waters, in particular in the Limfjord where the former level of mussel fishery activities and its compatibility with the Natura 2000 provisions was challenged, among others by the European Commission. The Danish Agro-Fish Agency has now developed a policy as a framework for licensing sustainable mussel fishery within Natura 2000 sites, which sets a scientifically based level of acceptable impact from mussel fishery.

In Spain, the Ministry of Agriculture, Food and Environment is currently developing methodologies and establishing quantitative criteria that will allow the rapid identification of potential significant negative effects on Natura 2000 sites. The methodology will set a checklist to quickly determine and assessment quantitatively whether negative impacts are significant or not.

A protocol refers to a standard procedure for carrying out an exercise and can be utilised to improve the efficiency with which that exercise is undertaken. In England, the Marine Maintenance Dredging Protocol was established to streamline the process of obtaining approval for maintenance dredging activities by ports that could potentially affect European sites. A MDP document is developed which holds data that is periodically revised in the light of monitoring of the interest features of designated Natura sites in the area, carried out on a 6-yearly reporting cycle. This ensures that individual maintenance dredge proposals have all the necessary supporting information to be swiftly assessed, and do not require extensive and time-consuming information gathering and consultation.

Expertise and skills

In many MS the use of external consultants to undertake Appropriate Assessment and to aid their review for decision making purposes is common. However, even in such cases there remains a need for a suitable level of 'in-house' capacity and expertise. A lack of such capacity and expertise was highlighted in the previous section as a potential cause of delays in decision making (and of poor decision-making).

In Denmark the high degree of sectoral integration at the state level was identified as an institutional mechanism to ensure build-up of both sectoral and Habitats Directive process knowledge. In England & Wales, employment of specialists, again at the state level, was identified as a way of enhancing expertise. Whilst use of external consultants, improved guidance and protocols, ensuring fit-for-purpose Appropriate Assessments and strategic planning can all help to alleviate potential capacity and skills shortages by removing many potential issues, no specific best practice was identified which can address the often seen lack of expertise and capacity at lower administrative levels.

Ensuring fit-for-purposes Appropriate Assessments

Poor Appropriate Assessments can occur for a number of reasons (as discussed in the previous section). Best practice to ensure Appropriate Assessments are fit-for-purpose has been put in place in England & Wales for major infrastructure projects. Two key mechanisms have been developed:

The Nationally Significant Infrastructure Projects (NSIP) process (as already discussed) requires all necessary assessment information to be provided upfront before the Examination will begin. This ensures adequate information can be drawn on during the decision making process.

The Major Infrastructure and Environment Unit was established to facilitate positive cooperation between developers and statutory consultees. Its purpose is to overcome quality issues arising from lack of communication between the two parties, which may relate to a number of elements of both project design and assessment development. The role of the unit is to:

- Play a key early risk management role to identify potential Natura issues for projects.
- Ensure collaboration between all parties to support resolution of issues as necessary.
- Introduce a new Evidence Plan process for agreeing evidence requirements upfront and to provide greater clarity to developers on requirements.

Appeal procedures

Appeal procedures can cause major delays to obtaining a final permitting decision.

In Denmark, flaws in the assessment process for licensing mussel fisheries were highlighted by the ECJ during appeal. Best practice was developed, learning from this experience, (as already discussed above) in order to avoid this particular issue in the future. Similar improvements to the overall functioning of the permitting procedure have occurred from decisions made at the national level under the Danish Board of Appeal, where the final determination can help to clarify how to comply with the nature directives in future cases.

In the Netherlands, the Crisis and Recovery Act (Crisis- en herstelwet) was set up to speed up procedures. The Act entered into force in 2010 and was intended to counteract the impact of the economic crisis. One of the elements of the Crisis and Recovery Act is the reduction of time taken for objection and appeal procedures and the number of opportunities for appeal procedures to be required.

Conclusions

There is clearly no 'typical' situation that can be drawn on to present an average view of decision making timescales, and the extremely small sample size means it is not even valid to provide indicative ranges. The individual cases examined demonstrate that the decision making process can be relatively lengthy. Of those cases presented the average timescale was just over 700 days (min: 128 days; max: 1,460 days). Of the eight cases presented, six were thought by the respondent to be of longer than average duration. Notably the decision making timescales for all of the specific cases reported were well in excess of any guidance or requirements in place in MS. Clearly the potential scale of delays that can occur, relevant across all surveyed MS, in comparison to what one might expect (using the benchmarks establish by the decision making period guidelines) means there is potential to lead to administrative and commercial costs for all parties involved.

Common factors influencing decision making timescales were identified across the MS. Whilst the limited number of cases for which such information was gathered limits our ability to draw realistic quantitative conclusions on frequency and significance, the

qualitative analysis allowed for a number of core issues to be grouped and discussed. Key factors influencing the timelines of decision-making included:

- Lack of communication
- Resources and expertise
- Parallel assessment processes
- Poor quality data and Appropriate Assessments
- Large/complex/novel project
- Appeal procedures

Insufficient data was obtained to draw conclusions on the extent to which some factors are more prevalent in some MS than others. Notably, most respondents stated that project-level factors (nature of the project and Natura site details and their interaction) are key to determining the overall timescales and there is no clear rule of thumb for when a project is likely to come against decision making timescale delays. A number of process-performance issues were also identified.

Clearly some influencing factors are outside the direct control of the competent authorities or the relevant HD regulation and national legislation. However, a number of best practices have been employed across MS in order to address current and past factors that delay decision making. These include:

- Simplified planning processes and strategic spatial planning
- Technical guidance and protocols
- Expertise and skills
- Ensuring fit-for-purposes Appropriate Assessments
- Appeal procedures

The best practices identified cover, at least in part, all of the core factors affecting timescales identified above. One notable exception was in satisfactorily addressing lack of skills and capacity at lower administrative levels.

Again it is difficult to draw direct comparisons in the level or success of best practice implementation across MS. Subject to the resources available for implementing such best practices there is though likely to be scope for best practice knowledge transfer between MS.

In short, Appropriate Assessment procedures form an important stage in the delivery of the Habitats Directive because they have a significant impact on how quickly the Habitats Directive can be implemented. With increasing implementation and organisational learning, one would expect timelines for decision-making to decrease in the coming years.

A significantly larger sample of cases is required for robust quantitative data on timescales to be presented and to enable analysis of the significance of individual factors to be fully explored. A simplified survey (i.e. focussed solely on timescales and factors with no requirement for addition case-specific qualitative discussion), targeted to authorities at multiple administrative levels in each MS may help to encourage a higher response rate covering a larger number of cases. However a lack of easy access to data on a high volume of cases in MS would continue to be a barrier to achieving a higher response rate. It is recommended that better logging of decision making timescales and associated costs would enhance the ability to comprehensively evaluate such issues in the future. Given the interest in the integrated nature of assessments – it was identified as a factor affecting timescales in both the HD and SEA case studies - and the desire to understand which assessment may be driving decision making timescales, it may be appropriate to undertake more targeted research on this factor.

Annex A: Questionnaire

The purpose of this survey is to gather 'real world' data (that is, data based on actual cases) and information on how permit decision making under Article 6.3 of the Habitats Directive is undertaken in Member States, specifically:

- how long decision making processes take,
- what factors affect the length of time taken to reach a decision
- best practice that can be implemented to improve the efficiency of decision making processes i.e. to reduce the time required

The research is specifically interested in decisions made on Appropriate Assessments in relation to Article 6.3. This refers to 'Stage 2' as depicted in Figure 1 in the Annex to this questionnaire.

The questionnaire is split into three sections

- Section 1: general information on HD implementation and decision making in the $\ensuremath{\mathsf{MS}}$
- Section 2: detailed data and discussion on specific cases (to be repeated for as many cases as is feasible)
- Section 3: general best practice implemented that reduces the length of time required for decision making

Section 1 – HD Article 6.3 Implementation and decision making – general

- Who is responsible for undertaking Appropriate Assessments relating to Article 6.3 of the Habitats Directive? (E.g. the developer/applicant, environmental authority, other)
- At what administrative level is the permitting authorisation decision linked to Article 6.3 Appropriate Assessments taken? (e.g. national, regional, local/municipality, a combination depending on the type of plan/project)
- Who is (are) the decision making body(s)? (please provide the organisation names(s) at each administrative level)
- Are there any guidelines or standards regarding the length of time within which permit authorisation decisions relating to Article 6.3 Appropriate Assessments should be taken?

Section 2 – Data and information on real cases

Data is requested on decision making timescales and factors affecting length for actual cases under Article 6.3 Appropriate Assessments. *Please complete the following tables using data from a real HD appropriate assessment case. Please provide data for a number of cases, repeating the table for each case. Please complete one table per case.*

Please:

D. Identify the factors that most influenced the time required for decision making and score their significance (indicate whether it helped reduce or resulted in an increase in time). Please also indicate the extent to which you think that this factor frequently influences decision making more generally timescales. The scoring system is set out in the table below.

Answer

E. Describe and explain how it affected decision making and why, and provide an indication of the increase or decrease in time that it resulted in.

Please use the following scoring system

Sig	Significance of the effect				
1	No impact				
2	Low impact				
3	Moderate impact				
4	High impact				
5	Very high impact				

Frequency				
А	5% of the time			
В	25% of the time			
С	50% of the time			
D	75% of the time			
е	95% of the time			

Examples of possible influencing factors from previous research

Influencing Factor

Large and/or complex plan or project being considered

Extensive and/or complex mitigation being considered

Highly sensitive Natura 2000 features are potentially affected

Poor quality Appropriate Assessment

Limited dialogue between the developer and the competent authority prior to submission of the Appropriate Assessment

A lack of expertise in the competent authority

A lack of capacity / resources in the competent authority

A lack of clear guidance and understanding of terminology (e.g. definition of the threshold of significance)

Public opposition

Differences of opinion between authorities

Difficulty co-ordinating with other authorities

Parallel decision making / announcement of the decision on the AA and any associated $\ensuremath{\mathsf{EIA}}\xspace/\ensuremath{\mathsf{SEA}}\xspace$

CASE NUMBER TEMPLATE CASE NUMBER XX	
A: General details and decision making	ing time data
Project / plan name	
Short description	
Who was the decision making	
authority	
Decision outcome (authorisation	
granted / not granted)	
How long did the decision making	
process take (number of days)	
In your opinion was this shorter / in	
line / longer than the typical decision	
making time required	

CASE NUMBER XX Any further relevant details B: Factors that influenced the length of time for decision making Increased time Significance / Frequency **Influencing Factor** decreased Delete as appropriate 1 Inc | Dec 12345 ABCDE 2 Inc | Dec 12345 ABCDE 3 Inc | Dec 12345 ABCDE Inc | Dec Please add rows as required 12345 ABCDE ...

 Please describe and explain the factor, how it affected decision making, why it occurred and indicate quantitatively by how much it affected the time required

 1

 2

... Please add rows as required

3

Section 3 – General best practice

Please indicate any general best practice (not already identified in section 2) that you have implemented (or plan to implement) that has a positive effect (i.e. helps to reduce) the amount of time required for decision making. Please explain the problem that it helps to overcome and how it has been implemented.

Answer 1		
Answer 2		
Answer 3		

Annex B: Additional Literature

The literature review undertaken during Stage 1 of the study provided a broad understanding of the extent of research on costs associated with the HD and the nature of costs involved in implementing the HD. As part of the development of the case study questionnaire, a further review of available literature was undertaken to aid its design.

Implementation of Article 6.3

Ecosystems Ltd (2013) undertook a review of the application of Article 6.3 of the HD across MS. It found that there was great variation between, and even within, MS on how the Article 6.3 permit procedure is applied. It notes that this variation is the result of a number of pre-determining factors, most notably:

- The basic constitutional structure of the countries concerned (whether it is a devolved or centralised government structure);
- The distribution of administrative responsibilities and competences for environmental issues amongst the different authorities (e.g. whether shared among development sectors or exclusively in the hands of environment authorities; whether the permit procedure is integrated into other consent procedures or treated as a standalone procedure);
- The traditional administrative practices and cultures (e.g. in terms of cooperation and dialogue between different administrative bodies, the role of spatial planning for development and land use policies)
- The type and level of detail of the transposing legislation for the permit procedure as well as the margin of discretion left to the authorities when implementing the legislative provisions.

The level at which the decisions are taken as regards the Article 6.3 permit procedure depends greatly on the constitutional framework:

- In highly federalized countries like Austria, Belgium, Germany and Spain, the responsibility for implementing Article 6.3 lies essentially with the regions. Some countries, like Austria and Spain, are so autonomous that the regions have each adopted their own (differing) laws transposing Article 6.3.
- Others like France, Germany, Netherlands, Poland and Sweden have transposed Article 6.3 into national law which provides a common legal framework across the country, but, due to their existing governance structures, they have passed most of the decision-making powers onto the lower administrative levels (e.g. the County Administrative Boards in Sweden, the Provinces in the Netherlands, DREAL in France...). The federal authorities in these countries are nevertheless often still responsible for the more strategic, nationally important infrastructure plans and projects for which they have either the full decision making powers or are the 'statutory advisors'.
- Some countries have, on the other hand, a much more centralised administrative system to deal with nature protection and the Article 6.3 consent procedure. This tends to be especially the case for countries with a smaller territory where the delegation of powers from the central authorities to local counterparts would be difficult due to lack of capacity outside the capitals (e.g. Baltic countries, Cyprus, Luxembourg, Malta, Slovenia).

There can also be a distinction according to who is the competent - and ultimately the decision-making - authority for the Article 6.3 permit procedure.

• In a number of countries (e.g. France, Germany, Ireland, UK) the AA process is 'integrated' into other consenting procedures and the competent authority is the authority responsible for the sector in question (eg forestry, marine,

energy, land use planning...). They are the ones who make the final decision as to whether a plan or project can be approved, based on the opinion of the statutory advisor – ie the relevant nature conservation authority - whom the competent authority is required to consult before making a decision.

• In other countries (like Denmark, Malta, Slovenia) the procedure is more 'centralised' in that it is a single body (eg the State Institute for Nature Conservation in Slovenia, the Danish Nature Agency in Denmark, the Malta Environment and Planning Department....) who is responsible for the AA procedures and for issuing the consent for the plan or project

The size and nature of the plan or project being considered is also a key factor that dictates at what level and which body the final decision may be taken. Typically smaller more localised plans and projects may be dealt with by lower levels of administration whilst the larger nationally important infrastructure projects and strategic plans may be dealt with at the national administrative level, even in highly federalized countries. Another important aspect is that for major infrastructure developments there may be more than one competent authority involved.

When transposing the HD no MS has put in place an entirely new or distinct administrative system to deal specifically with the Article 6.3 permit procedure. Rather, the Article 6.3 process has been attached to the existing permit procedure (e.g. for EIA and SEA or other forms of planning consent) which are generally designed for other purposes and often have different objectives and approaches. However, it should be noted that whilst SEA, EIA and AA may run alongside each other or information pertaining to the AA may form part of the EIA/SEA process, in such cases, the AA should always be clearly distinguishable and identifiable, or should be reported on separately so that its findings can be differentiated from those of the general EIA or SEA³⁹.

In practice the way in which the AA procedure interacts with EIA/SEA procedures varies from one country to another. In situations when both an AA and an SEA/EIA are required, for the majority of MS the Article 6.3 procedure is integrated into the SEA/EIA procedure. In a minority of MS the Article 6.3 procedure is always independent of the SEA/EIA, although there is likely to still be a level of co-ordination between the AA and the SEA/EIA.

Data availability

As a result of the wide variety in which Article 6.3 is implemented across and even within a country it is difficult to identify and phrase questions that are meaningful and appropriate across all MS. Where questions can be appropriately phrased it is likely to be difficult to obtain quantitative data. It is thought that no MS keeps statistics on how many plans or projects are required to go through the Article 6.3 procedure. Recent research by Ecosystems Ltd (2013) could not obtain (from competent authorities, NGOs or the EU sector associations) any accurate information or quantifiable data on the costs associated with the AA procedure. Those interviewed as part of this research stated that where costs were recorded, they were typically for all aspects of the relevant permit procedures (e.g. including EIA/SEA) and public consultation exercises.

Key factors influencing decision timeframes

Ecosystems Ltd (2013) asked MS nature authorities: how well does the AA procedure operate in your country/region overall? The responses were as follows:

- 4% considered that 'the AA procedure operates well, without any difficulties';
- 89% considered that 'the AA procedure operates well; some difficulties occur, but it is usually possible to deal with them'.

³⁹ Guidance re estuaries and coastal zones http://ec.europa.eu/transport/modes/maritime/doc/guidance_doc.pdf

• 7% considered that it doesn't operate well (with all such respondents being from local level administrations)

Economic sector/NGO concerns: Authorities may for instance take an inordinate amount of time to respond to the request for a permit (or not reply at all) or may rely too readily of the precautionary principle when reaching their decision on whether to issue the permit or ask for too much information in terms of baseline studies and impact studies.

A range of factors that influence how well the AA procedure operates (and related elements e.g. the cost) were identified by Ecosystems Ltd (2013). Whilst these cover the broad spectrum of issues associated with implementing Article 6.3, a shortlist can be distilled of factors that are most likely to influence decision making timeframes. Those identified include:

- Size and nature of the plan or project
- Extent / complexity of required mitigation
- Whether the plan or project is applying for derogation under Article 6.4 i.e. alternative solutions and compensatory actions need to be considered
- Characteristics and complexity / sensitivity of the potentially affected Natura 2000 site(s) and its features
- The quality of the AA assessment
- Lack of dialogue between developer and competent authority / nature authority early on in the process
- Lack of expertise at the competent authority to be able to correctly assess AA reports
- Lack of capacity at the competent authority to undertake decision making activities
- Clarity of guidance and terminology e.g. a definition of the threshold of significance $^{\rm 40}$
- Public opposition
- Differences of opinion between authorities / difficulty co-ordinating with other authorities
- Delays due to parallel decision making / announcement of the decision on the AA and any associated EIA/SEA

Other research carried out on SEA and EIA also throws up some potentially interesting factors that may influence decision making timescales, although care should be taken when considering their relevance for AAs under Article 6.3. Key variables could include project-specific variables (e.g. the nature of project, the levels of impact significance being considered); MS processes (e.g. extent of guidelines, complexity of the process; number of parties involved); macro issues (e.g. the number of applications dealt with per annum; staff capacity and skills). Ecosystems Ltd (2013) also identifies a range of best practice measures, some of which are relevant and can influence decision making timescales. These include:

- Initiatives that improve access to data on Natura 2000 and protected habitats and species e.g. a National Data Warehouse (The Netherlands); website holding extensive Natura 2000 data (Czech Republic); website holding Natura 2000 data and AA procedure information (Picardie, France);
- Good guidance on AA issues e.g. guidance setting thresholds of significance (Germany); Guidance on windfarm impacts on birds (Scotland);
- Improving the standard of AA experts e.g. licensing of AA experts (Czech Republic);
- Encouraging early dialogue / working in partnership.

⁴⁰ Also noted in: European Exchange of experience http://www.bfn.de/fileadmin/MDB/documents/service/skript226.pdf

End-of-Life Vehicles (ELV) case study

Definition of the case

This case study examines the administrative costs of the requirement, under Article 5 of the End of Life Vehicles (ELV) Directive (2000/53/EC), for Member States (MS) to ensure that economic operators set up systems for the collection of ELVs and (where technically feasible) of waste used parts from passenger cars when repaired. It should be noted that collection systems were already in place in a number of MS before the adoption of the ELV Directive.

Extract from Article 5 – Collection of Directive 2000/53/EC

- 1. Member States shall take the necessary measures to ensure:
 - that economic operators* set up systems for the collection of all endof-life vehicles and, as far as technically feasible, of waste used parts removed when passenger cars are repaired
- 4. Member States shall take the necessary measures to ensure that the delivery of the vehicle to an authorised treatment facility ... occurs without any cost for the last holder and/or owner as a result of the vehicle's having no or a negative market value.

Member States shall take the necessary measures to ensure that producers meet all, or a significant part of, the costs of the implementation of this measure and/or take back end-of-life vehicles under the same conditions as referred to in the first sub-paragraph.

*Economic operators are defined in Article 2.10 of the Directive as 'producers, distributors, collectors, motor vehicle insurance companies, dismantlers, shredders, recoverers, recyclers and other treatment operators of end-of-life vehicles, including their components and materials.

Whilst the Directive places a legal obligation on MS to ensure that companies set up a producer responsibility scheme, it does not prescribe how this should be done. This therefore leaves considerable flexibility for MS to design schemes, which leaves the possibility for differences to arise in costs. There is concern that the various interpretations by the MS of the Directive, and varying implementation, have the effect of creating uncertainty for the industry. The level of responsibility of stakeholders (vehicle manufacturers, customers, recycling businesses, other economic operators and national authorities) varies between MS: Germany has applied shared responsibilities in its legislation, whilst other MS such as Finland have made manufacturers/producers/ distributors responsible.⁴¹

The case study aimed to focus on the following categories of costs:

- Costs associated with the creation of producer responsibility schemes: the initial start-up costs (time and financial) for the producer responsibility schemes, which may have been incurred by public administrations, producers and/or new producer responsibility organisations (PROs);
- Costs of running the producer responsibility schemes: the ongoing financial costs of running the schemes, including staff and communication costs, and costs associated with meeting recycling/recovery/reuse targets;
- Costs to producers of participation in producer responsibility schemes: costs to vehicle manufacturers of participating in/being members of producer

⁴¹ BIO Intelligence Service et al (2014), Ex-post evaluation of certain waste stream Directives

responsibility schemes; this may include annual membership fees and fees paid per vehicle to PROs, costs of contracting with authorised treatment facilities, and time spent collecting and reporting data.

Methodology

It was decided to focus on a limited number of MS to make the case study manageable. The MS selected were: Germany (DE), the Netherlands (NL), Spain (ES), Portugal (PT) and Finland (FI). These MS were selected to include northern and southern MS, and MS which have implemented collective producer responsibility schemes (NL, ES, PT, FI) as well as one that has not (DE). In addition to desk-based research and literature review, a questionnaire was sent to the PROs in NL (Auto Recycling Nederland (ARN)), ES (SIGRAUTO), PT (VALORCAR) and FI (Suomen Autokierrätys Oy (SAO)) in an attempt to gather supplementary information. In addition, it was decided to approach vehicle manufacturers (primarily through the European Automobile Manufacturers' Association (ACEA)) to ask for their views and any data they could share on costs to them of fulfilling their producer responsibility obligations. ACEA has contracts with Authorised Treatment Facilities (ATFs), but independent dismantlers also exist (represented by the European Group of Automotive Recycling Associations (EGARA)) who do not have contracts with ACEA. Since vehicle manufacturers tend to be large businesses that trade across many EU MS, it was assumed that the differences in administrative costs between the MS may impact differently on the costs of businesses according to the MS in which they are active.

Introduction to ELV producer responsibility in the selected Member States

This section provides some basic information on the systems in place to implement ELV producer responsibility in DE, NL, ES, PT and FI, to provide context for information in the costs sections of the case study.

Finland

Only one collective PRO exists: Suomen Autokierrätys Oy (SAO, Finnish Car Recycling). It was set up the Association of Automobile Importers in Finland in 2003. The cost of joining the association is $\in 600.00$, if the number sold cars is $50 - 99^{42}$, with an annual cost of $\in 662.00^{43}$. Producers may also comply with their obligations individually, reporting directly to the Centre for Economic Development, Transport and the Environment for Pirkanmaa (PIR ELY), which oversees the ELV management system. A network of 272 collection points exists, and collected vehicles are sent to the four operators with PST in Finland, which are under contract to SAO. SAO does not cover the costs of collection and treatment of ELVs; the costs are covered by the revenues from recycling activities. SAO does not publish annual reports.⁴⁴

Germany

In Germany, car producers/importers set up individual contracts with collection and dismantling facilities, thereby implementing individual (rather than collective) producer responsibility. There is no collective PRO. There are also 'independent' authorised treatment facilities (ATFs) that do not have a contract with a producer (vehicle owners taking their cars to such facilities may have to pay). Producers/importers are responsible for creating a sufficient network of collection facilities (there should be at least one

⁴² http://www.autokierratys.fi/suomen_autokierratys/jasenet/tuottajayhteisoon_liittyminen

⁴³ http://www.autokierratys.fi/files/68/Jasenmaksun_maaraytyminen_2014.pdf

⁴⁴ BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study on ELVs in Finland

facility within 50km of the residence of every car owner). In practice, every producer/importer has organised its own network of collection and dismantling facilities which must take back their vehicles free of charge. ELV treatment facilities are responsible for the correct dismantling, depollution and shredding of vehicles.⁴⁵ VDIK, the association of car importers, set up a nationwide collection network for ELVs; Honda, Toyota and Daihatsu set up a separate joint network, MARLI.⁴⁶

The Netherlands

Auto Recycling Nederland (ARN) was set up by the Dutch car industry, with encouragement from the Minister responsible for the Environment. ARN became the body to deal with waste vehicles, and later became the compliance organisation (PRO) for the ELV Directive in the Netherlands. ARN is a collective scheme, which contracts a national ATF network of around 247 dismantling and treatment operators and also partners with 4 collection companies, 17 recycling companies and 14 accredited shredding companies.⁴⁷ ARN also operates a post shredder technology (PST) operation to ensure that residues from Dutch automotive shredders are recycling rather than incinerated or landfilled.⁴⁸ ARN covers part of the collection and treatment costs of ELVs; the system as a whole is self-financing and covers all costs of collection, depollution, recycling and treatment. There are no individual producer responsibility schemes in the Netherlands.⁴⁹

Portugal

In Portugal, there is only one collective PRO – VALORCAR – and no individual producer responsibility schemes are in place. VALORCAR began operating on 1 January 2004 and was officially licensed as a Management Entity on 2 July 2004⁵⁰. It is run as a private non-profit organisation; 95% of its share capital is held by the Portuguese Automobile Association (PAA) and 5% by the National Association of Recyclable Product Recovery Companies (ANAREPRE). VALORCAR's main objective is to contribute to achieving the ELV management goals. Amongst its activities are: the creation of a network of ATF installations (the VALORCAR NETWORK, which at the end of 2013 comprised 5 reception facilities, 68 dismantling facilities and 6 shredder facilities⁵¹) for the final owners/holders of ELVs to deliver them free of charge; monitoring of the flow of ELVs and components/materials arising from their treatment; promoting R&D on new methods and tools for dismantling, material separation and recycling solutions for ELVs; and promoting awareness and information about the procedures for ELV management.⁵² VALORCAR also manages waste batteries, and in 2013 applied to the Portuguese Environment Agency to become a PRO for used oils.⁵³

Spain

In Spain, SIGRAUTO was formed in 2002 through an agreement between the associations representing the main stakeholders in the ELV treatment chain, and providing them with the means to meet their environmental obligations with regards to

⁴⁵ BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study on ELVs in Germany

⁴⁶ Perchards (2004) TRANSPOSITION OF THE ELV DIRECTIVE IN OTHER EU MEMBER STATES, http://www.atl.re.kr/board_upload/11789299540.pdf

⁴⁷ BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study on ELVs in the Netherlands ⁴⁸ Communication with ARN

⁴⁹ BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study on ELVs in the Netherlands⁵⁰ VALORCAR (2004) RELATÓRIO DE ACTIVIDADE 2004,
http://www.valorcar.pt/core/components/manageLibFiles/uploads/D/RelAct2004_Rev_For4.pdf

 ⁵¹ VALORCAR (2013) Relatório de Atividade 2013 : Veículos em fim de vida (VFV), http://www.valorcar.pt/core/components/manageLibFiles/uploads/D/RelAct2013_VFV_FINAL_Internet.pdf
 ⁵² VALORCAR (2014) Website: http://www.valorcar.pt/uk/quemsomos/objectivos-valorcar.html

⁵³ VALORCAR (2013) Relatório de Atividade 2013 : Veículos em fim de vida (VFV), http://www.valorcar.pt/core/components/manageLibFiles/uploads/D/RelAct2013_VFV_FINAL_Internet.pdf

the treatment of ELVs.⁵⁴ Vehicle manufacturers/importers that are members of SIGRAUTO have access to a network of 504 ATFs and 31 shredder facilities to ensure final owners of vehicles can deliver their ELV to an ATF free of charge. As well as creating an adequate network of ATFs and shredder facilities, SIGRAUTO provides public information on the location of ATFs, facilitates information exchange between ATFs, manufacturers/importers and shredder facilities, and aims to find solutions to avoid the appearance of negative market values of ELVs.⁵⁵ The ATFs are responsible for receiving ELVs, and for decontamination and removal of parts/components that can be recovered for reuse.⁵⁶ The regional authorities/autonomous communities are responsible for the surveillance, control and enforcement of good practices in the ELV management system, and for reporting to the Ministry of the Environment.⁵⁷

Costs associated with the creation of producer responsibility schemes

The creation of producer responsibility schemes as required under the ELV Directive will have resulted in initial start-up costs in those MS which did not already have such systems in place (notably ES and PT). This includes time spent and/or actual financial costs of activities such as: setting up collection systems for ELV; establishing PROs; creating internal record-keeping systems; and developing public information.

In Finland, SAO was unable to provide detail on the costs of establishing the company, since it has been operating for 10 years.⁵⁸

The system in Germany has been in place since the 1990s, pre-dating the ELV Directive⁵⁹. However, the German Government did estimate some of the cost impacts of implementing the ELV Act 2002:

- Disposal cost due to the free-take back of ELVs from 2007: around €409 million (DM800 million)⁶⁰ per year;
- A reduction in tax due to building of financial reserves for Federal Government, Länder and Municipalities of €238 million in 2002 (Federal Government: €79 million, Länder: €79 million, Municipalities: €82 million); and
- Increased cost to producers of €102 (DM200)⁶¹ per new car as a result of producer responsibility (around 0.5% of the value of a new car), although these could be offset by the aforementioned tax breaks for the financial reserves that producers were required to put in place to cover future costs.

No additional enforcement/administration costs were predicted for the federal government, and no significant cost for the Länder. In addition, no large cost increases were predicted immediately after the Act's implementation for the treatment sector, since major changes were already implemented following the ELV Ordinance in 1998. No additional cost was anticipated for ELV collection, and no significant cost increases for shredders to 2006. However, some additional costs were foreseen should more detailed dismantling be required (at least until the resultant parts/materials became marketable), and there would be potential considerable increases for shredders prior to 2015. Some potential additional costs could also arise for producers from the prohibition of certain materials, the provision of dismantling information and other information requirements

⁵⁴ Seguridad y Medio Ambiente (2011) Year 31 Nº 123, 2011: The treatment of end-of-life vehicles in Spain and the trend over time, http://www.mapfre.com/fundacion/html/revistas/seguridad/n123/docs/Articulo3en.pdf

 ⁵⁵ SIGRAUTO (2014) Website: http://www.sigrauto.com/guiob.htm

⁵⁶ SIGRAUTO (2014) Memoria Anual 2013 http://www.sigrauto.com/pdf/Memoria2013.pdf

⁵⁷ Seguridad y Medio Ambiente (2011) Year 31 Nº 123, 2011: The treatment of end-of-life vehicles in Spain and the trend over time, http://www.mapfre.com/fundacion/html/revistas/seguridad/n123/docs/Articulo3en.pdf

⁵⁸ Communication with Finnish Car Recycling

⁵⁹ BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study on ELVs in Germany

 $^{^{60}}$ € cost derived from fixed exchange rate, effective as of 1 January 1999, of €1 = DM 1.95583

 $^{^{61}}$ € cost derived from fixed exchange rate, effective as of 1 January 1999, of €1 = DM 1.95583

(although most of these requirements were already fulfilled by the car industry on a voluntary basis).62

In the Netherlands, ARN was founded in 1995, prior to the ELV Directive. It was therefore not possible for ARN to provide detail of the initial costs of setting up systems related to ELV producer responsibility arising from the ELV Directive, since the organisation already existed and systems were already in place.⁶³

In Portugal, VALORCAR was incorporated on 22 August 2003 and granted its licence by the Portuguese Environment Agency (APA) on 2 July 2004 after a negotiation period of around 10 months. The license granted was valid for 5 years, and can be extended for periods of five years at a time. During 2004, VALORCAR developed several documents for approval by the APA: a draft contract to manage its relations with producers and to take on their ELV management responsibilities; a draft contract for ELV reception centres; a draft contract for dismantling centres; specifications/requirements for ELV reception centres and dismantling centres to belong to the VALORCAR network (the specifications relate to administrative, financial, infrastructure, equipment and operating aspects of the facilities); a draft contract for shredder facilities. These documents were all notified to/approved by the APA in September 2004. By the end of 2004, VALORCAR had concluded contracts with 31 manufacturers/importers representing 48 vehicle brands. By 1 April 2007, VALORCAR was to create a network of at least 29 installations covering all districts of mainland Portugal. The selection of facilities took place in two stages: firstly analysing the documents submitted by the facility, and then one or more site surveys/visits to the facility. From 15 November to 31 December 2004, VALORCAR received applications from six facilities to join the VALORCAR network, but it was not possible to conclude any contracts by the end of the 2004 due to the time spent on the selection process. The contracts, when awarded to facilities, would be valid until 2009, to run until the end of VALORCAR's first operating licence. No information was found on the cost (either financial or time) of these licensing and administrative activities. Also in 2004, VALORCAR developed its web-based integrated information management system (Information VALORCAR (SIV)); the tender to design, develop and implement the SIV was released in November and awarded in late December 2004, with the SIV due to be fully operational by April 2005. By 8 September 2004, the general VALORCAR website was operational; other significant communications/information related activities during 2004 included production of a TV 'documentary', participation at 8 workshops/ seminars/ conferences, and the production of 1,000 copies of a VALORCAR leaflet/brochure. Significant efforts were also made during 2004 to acquire a thorough knowledge of the national and international situation regarding the ELV sector. In total in 2004, €10,008 was spent on awareness-raising/ information and R&D activities.⁶⁴

In Spain, a scheme was devised for co-financing activities related to the ELV management, based on producer responsibility and the principle of shared responsibility. Economic operators (manufacturers, distributors, dealers and importers) were to help finance the necessary investments to create the facilities to meet the requirements of the ELV Directive, but in reality there was no financing from producers, meaning that dismantlers and shredder facilities had to make investments themselves. The National Plan for Control of ELV for the period 2001-2006 estimated that the cost of putting in place the necessary Centres for Reception and Decontamination of vehicles (CARDs, or ATFs) to meet the technical and environmental rules of the ELV Directive was between €233 and €264 million. The cost per facility was estimated at €126,212 for facilities treating 440 ELVs/year, €184,150 for those treating 1,100 ELVs/year, and €331,890 for

⁶² GHK (2006) A Study to Examine the Costs and Benefits of the ELV Directive – Final Report, Annex 4: Case Studies, http://ec.europa.eu/environment/waste/pdf/study/annex4.pdf

⁶³ Communication with ARN 64 (2004) RELATÓRIO VALORCAR DF

ACTIVIDADE 2004, http://www.valorcar.pt/core/components/manageLibFiles/uploads/D/RelAct2004_Rev_For4.pdf

those treating 2,200 ELVs/year; most of this was construction, material and machinery costs. $^{\rm 65}$

Summary and discussion of costs

The table below summarises the identified costs associated with the creation of producer responsibility schemes in NL, FI, DE, ES and PT.

Table 18: Summary of costs associated with creation of producer responsibility schemes

n/a no data/information found, - no cost. The table shows administrative/time costs and financial costs

	Finland	Germany	Netherlands	Portugal	Spain
Creation of collection/ATF networks (Numbers of facilities are those affiliated with the main PRO where one exists)	Administrative / time costs: In 2014: 272 collection points; 4 shredder facilities.	Administrative/ time costs: Each producer/ importer has organised its own network of collection/ dismantling facilities. Financial costs: No significant cost before 2006.	Administrative/ time costs: In 2014: 247 dismantling and treatment operators; 4 collection companies; 17 recycling companies; 14 shredding companies.	Administrative/ time costs: In 2013: 5 reception facilities; 68 dismantling facilities; 6 shredder facilities. Development of 3 types of draft contract and technical requirements. Six months to develop web- based integrated information system.	Administrative / time costs: In 2014: 504 ATFs; 31 shredder facilities. Financial costs: €233- €284 million total; €126k- €332k per facility.
Building of financial reserves to cover future costs	n/a	Financial costs: €238 million in 2002: (€79m federal govt; €79m Länder; €82m municipalities).	n/a	n/a	n/a
Issuing of PRO licence	n/a	-	n/a	Administrative/ time costs: Ten months to negotiate licence.	n/a
Communication / awareness- raising activities	n/a	n/a	n/a	Administrative/ time costs: TV 'documentary', 8 events, 1,000 leaflets, knowledge- building; Financial costs: totalling €10,008 in 2004.	n/a

⁶⁵ GHK (2006) A Study to Examine the Costs and Benefits of the ELV Directive – Final Report, Annex 4: Case Studies, http://ec.europa.eu/environment/waste/pdf/study/annex4.pdf

The PROs in the MS are affiliated with varying total numbers of collection/ treatment/ shredder facilities, ranging from 79 facilities in the VALORCAR network in Portugal to 535 facilities affiliated with SIGRAUTO in Spain (276 in Finland, 282 in the Netherlands; no figures were found for Germany).

It is important to consider the number of ELVs treated by the facilities in each MS in order to compare these numbers. The table below shows that these figures are in the same order of magnitude for Portugal and Spain, and for Finland and the Netherlands. This could perhaps be as a result of many of the Finnish and Dutch facilities pre-dating the implementation of the ELV Directive, and many of the Portuguese and Spanish facilities having been created/licensed after the ELV Directive, resulting perhaps in more modern techniques from the outset and therefore greater efficiency (at least in terms of numbers treated) in Portugal and Spain. Where the average ELV treated per year is higher than that generated, this may be due to a number of factors, such as movement of second-hand vehicles across borders.

Table 19: Number of ELVs generated in each MS, 2012 and average 2006-	
2012 ⁶⁶	

	ELV generated in 2012	ELV generated per facility in 2012	AverageELVtreatedperyear,2006-2012
Finland	119,000	431	86,286
Germany	476,601	n/a	656,467
The Netherlands	187,143	664	188,146
Portugal	92,008	1,165	87,028
Spain	687,824	1,286	819,386

Population/ population density provide a reasonable basis to compare the provision of collection/treatment facilities. The number of collection/initial treatment facilities is as follows: 1 per 20,000 people in Finland; 1 per 68,000 in the Netherlands; 1 per 143,000 in Portugal; and 1 per 92,000 in Spain.⁶⁷ The Finnish figure can possibly be explained by the low population density of the country (18 inhabitants/km², compared to 93 in Spain, 114 in Portugal and 497 in the Netherlands⁶⁸); a larger number of facilities is therefore required to allow the final holders of vehicles to deliver them easily to an ATF.

The number of shredder facilities ranges from 4 in Finland to 31 in Spain (6 in Portugal, 14 in the Netherlands; no figures were found for Germany). Geographical area provides possibly the most useful comparison in terms of the number of shredder facilities, since materials must be transported to shredders following initial treatment/depollution at ATFs. The number of shredder facilities per km² is as follows: 1 per 2,967 km² in the Netherlands; 1 per 15,348 km² in Portugal; 1 per 16,302 km² in Spain; and 1 per 84,536 km² in Finland⁶⁹. The number of ELV treated per shredder is also interesting: 13,367 in the Netherlands; 15,335 in Portugal; 22,188 in Spain; and 29,750 in Finland. In terms of both geographical area and the number of ELV treated, it appears that the shredders in Finland have greater capacity than those in the other MS.

Comparable data were unfortunately not found for the other types of costs related to the creation of producer responsibility schemes: estimated costs for the creation of a network were only found for Spain, and both the time taken to issue the licence for a

⁶⁶ Figures from Eurostat, End-of-life vehicles: Reuse, recycling and recovery, Totals (data code: env_waselvt), accessed 31/10/14

⁶⁷ Population figures from Eurostat, Population on 1 January 2014 (data code: tps00001), accessed 31/10/14

⁶⁸ Population density figures from Eurostat, Population density (inhabitants per km²) in 2012 (data code: tps00003), accessed 31/10/14

⁶⁹ Geographical area of countries from the CIA World Factbook, https://www.cia.gov/library/publications/theworld-factbook/wfbExt/region_eur.html, accessed 31/10/14

PRO and the financial cost of communication activities in the initial set-up phase were only found for Portugal.

Costs of running the producer responsibility schemes

Once producer responsibility schemes are in place, there are ongoing costs associated with running the schemes, including costs for activities associated with meeting recycling/recovery/reuse targets. For manufacturers/producers this can include time spent and/or actual financial costs of activities such as: ongoing administration; communication efforts (including public information required under Article 9 and dismantling information under Article 8); ELV collection/delivery to authorised treatment facilities (ATFs) at no cost to the final holder of the vehicle; obtaining certificates of destruction (COD) (often CODs are issued by ATFs, which may incur related costs such as (electronic) record-keeping and reporting to MS ministries); contracts with ATFs; and ensuring that recycling, recovery and reuse targets are met (e.g. through sorting and treatment activities). For PROs it can include time spent and/or actual financial costs of activities such as: ongoing administration and staff costs; communication efforts; ELV collection; contracts with ATFs; and ensuring that recycling, necovery and reuse targets are met (e.g. sorting and treatment). In some cases, there may be revenues (e.g. from the sale of recyclable materials) that can offset some of these costs.

In its questionnaire response, ACEA stated that the administrative costs of producer responsibility schemes depend on conditions in each MS, such as the general market situation and the market price for relevant materials. In its view, individual take back systems are often 'more competitive, more efficient and more effective', and ELV related costs are higher in those markets where central PROs have been implemented. In some cases, this is as a result of national legislation prescribing that this approach should be taken.⁷⁰ Although ACEA did not provide any details of costs, this comment does suggest at least that costs do vary, both between manufacturers and between MS.

With regards to revenue that can offset costs, ACEA pointed out that vehicle producers do not receive any revenue from fulfilling their obligations, although ELVs and used parts do have a considerable market value. Based on this value of ELVs, ACEA states that recycling is a self-sustaining business, with no need for PROs.⁷¹ In support of this, ACEA provided the figure below which illustrates the typical costs and material revenues involved in the ELV treatment chain in the EU. The material revenues (from ferrous and non-ferrous metals, the catalytic converter and battery) amount to \leq 349 per vehicle, whilst the costs (procurement, treatment, transport, shredding, energy recovery, post-shredder technology and landfill) are \leq 235, indicating a net profit of \leq 114 per ELV.⁷²

⁷⁰ Communication with ACEA

⁷¹ Communication with ACEA

⁷² ACEA (2014) Economic analysis of the ELV treatment chain in Europe

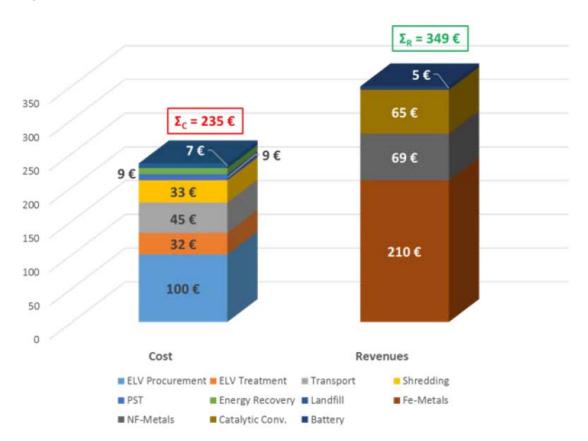


Figure 10: Costs and revenues in the ELV treatment chain (source: ACEA)

In Finland, the total annual cost of running SAO is around €500,000.⁷³ SAO does not cover the costs of collection and treatment of ELVs; these costs are covered by the revenues from recycling activities. The fees paid by producers are used for data reporting, audits and communication/awareness actions (including press and radio campaigns).⁷⁴ The cost per inhabitant per year of running the scheme is estimated at €0.08, and the cost per ELV collected and treated at €0.12.⁷⁵ SAO reports to PIR ELY on an annual basis, and also undertakes audits (having done some 400 to date).⁷⁶

In Germany, dismantling and shredder facilities finance their operations through revenues received from the sale of spare parts, recovered components (e.g. batteries and catalytic converters), materials, and metal scrap. Producers/importers do not publish information on the costs of running their systems, but it is assumed that some do not pay for collection of ELVs since car parts have an intrinsic value. The Federal government carries out the monitoring and reporting obligations of the ELV Directive: dismantling and shredder facilities must report their data to the statistical offices of the Länder, which are then reported to the Federal Statistics Authority (Statistisches Bundesamt), and the Federal Ministry for the Environment then reports to the European Commission. Vehicle producers must publish information on collection and dismantling facilities.⁷⁷ In 2006, the German car owners' association ADAC suggested that the cost of ELV treatment was between €80 and €130 per ELV. In 2002, the BDSV reported that the pre-treatment of ELV (handling and drainage) cost between €50 and €100 per ELV, with

⁷³ Communication with Finnish Car Recycling

⁷⁴ BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study on ELVs in Finland

⁷⁵ BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study on ELVs in Finland

⁷⁶ BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study on ELVs in Finland

⁷⁷ BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study on ELVs in Germany

additional dismantling costs ranging from $\leq 250-350$ (depending on the type of car and degree of dismantling required).⁷⁸

In the Netherlands, ARN states that the cost of recycling depolluted materials and tooling, and obtaining weights of deliveries of empty hulks from ATFs to shredders is around €35 per ELV. The total cost of the PST operation run by ARN is around €9 million. These figures take into account revenues from any PST fractions with a positive residual value.⁷⁹ The ELV producer responsibility system in the Netherlands is self-financing and covers all costs of collection, depollution, recycling and treatment. ARN's car recycling activities (along the whole recycling chain from car dismantling companies to the PST plant) are financed from the Recycling Fund contributions.

The largest proportion of ARN's operating expenses are related to paying premiums to around 300 ATFs to cover the depollution and treatment of materials with a negative residual value (e.g. fluids, wheels, and airbags), provided that dismantled materials are delivered in the correct way. These premiums change annually based on market conditions and are set by material in €/kg; in 2011 they amounted to up to €56 per ELV for treatment and up to €29 per vehicle for post-shredder treatment. The premiums are being reviewed and may be reduced in the near future.⁸⁰ In 2013, ARN received €17,149,232 from the recycling fee (for 461,463 newly-registered vehicles), and paid out €16,522,649 for dismantling fees (for 192,433 vehicles) to 245 ATFs and collection and processing costs of ARN materials.⁸¹

ARN undertakes audits/visits of its contracted ATFs. It aims to visit companies that process more than 400 ELV per year annually, and other companies at least every 2.5 years, to verify the quantity of materials recycled. In 2013, ARN carried out the numbers of checks presented in the table below Physical volume inspections make a physical count of the material stock and adjust the administrative (i.e. reported) stock as necessary.⁸²

	Quality	Physical volume
	inspections/controls	inspections
Vehicle dismantling companies	Twice a year on average and 65 checks on dismantled ELVs	183 (109 at large facilities, 74 at small facilities)
Collection and recycling companies	37	Once a year (in January)
Shredder companies	18	

Table 20: Checks carried out by ARN (Netherlands) in 2013

ARN also conducts awareness-raising programmes for consumers, previously through the yellow pages, but now via the internet and social media. No information is available on the cost of these activities.

As of 21 October 2014, ARN had 34 members of staff.⁸³ The cost of salaries for all ARN group companies amounted to \notin 3,360,379 in 2013 (for 69.7 FTE (full-time equivalent) staff); an additional \notin 777,373 was paid in social charges and pension expenses.⁸⁴

⁷⁸ GHK (2006) A Study to Examine the Costs and Benefits of the ELV Directive – Final Report, Annex 4: Case Studies, http://ec.europa.eu/environment/waste/pdf/study/annex4.pdf

⁷⁹ Communication with ARN

⁸⁰ BIO Intelligence Service et al (2014), Ex-post evaluation of certain waste stream Directives

⁸¹ ARN Sustainability Report 2013, http://issuu.com/arnbv/docs/arn_jaarverslag_2013-en-issuu

⁸² ARN Sustainability Report 2013, http://issuu.com/arnbv/docs/arn_jaarverslag_2013-en-issuu

⁸³ ARN website, http://www.arn.nl/en/over-arn/, accessed 21 October 2014

⁸⁴ ARN Sustainability Report 2013, http://issuu.com/arnbv/docs/arn_jaarverslag_2013-en-issuu

The cost per inhabitant per year of running the ARN system was estimated in 2014 to be €1.40, and the cost per ELV collected and treated to be €11.31.85

The costs of drawing up a notification to the Ministry for Housing, Planning and the Environment of the measures taken to fulfil producer responsibility obligations was estimated at €227,000 per reporting period (€4,500 per manufacturer/importer if a collective approach was taken). ARN reports data to the Dutch Ministry of Infrastructure and the Environment on an annual basis (data on vehicles placed on the market, collected, depolluted and recycled).⁸⁶ The Dutch government estimated that it would cost between €9,000 and €13,600 annually to report to the Ministry for Housing, Planning and the Environment on the execution of producer responsibility obligations.⁸⁷ In 2002, the registration and control system necessary for such reporting was estimated to cost around €908,000.88

In Portugal, the activities of VALORCAR are funded by manufacturers'/importers' annual subscription fees (Annual Financial Provision, PFA). VALORCAR does not pay dividends to its shareholders, and any net income is reinvested in its activities. In 2013, VALORCAR's total revenues amounted to €677,311. Only €136,532 of related to ELVs (€130,354 in annual subscription fees paid by producers plus €6,178 other income); the remainder was related to waste batteries. ELV-related revenues were significantly down on the 2012 revenues of €208,067, due to the lowest number of sales of new cars in the past 27 years. Total spending by VALORCAR in 2013 was around €617,743; only €150,903 of this was related to ELVs. This was broken down as shown in the table below:⁸⁹

Table 21: VALORCAR expenditure on ELV-related activities in 2013

Activity	Expenditure (€ and % of total)
Internal expenditure (i.e. day-to-day running of VALORCAR)	100,533 (67%)
Awareness-raising/information	24,872 (16%)
Research & development	23,768 (16%)
Transportation	930
Payments to operators	0
Total	150,903

To keep its operating licence, VALORCAR must spend no less than 6% of its total annual revenue on R&D and information/awareness raising activities.

In 2013, there was an increase of 11.5% in the number of new cars registered (compared with 2012); this is anticipated to result in an increase in revenue to VALORCAR of around €140,000 in 2014.

VALORCAR monitors the activity of its network of ATFs, and undertook 102 unannounced inspection visits during 2013, as well as beginning a series of 'interim audits' (13 carried out in 2013; 15 to be carried out in 2014) to examine more carefully how the installations operate (including evaluating: whether there is evidence of legal/contractual

⁸⁵ BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study on ELVs in the Netherlands

 ⁸⁶ BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study on ELVs in the Netherlands
 ⁸⁷ GHK (2006) A Study to Examine the Costs and Benefits of the ELV Directive – Final Report, Annex 4: Case Studies, http://ec.europa.eu/environment/waste/pdf/study/annex4.pdf

⁸⁸ GHK (2006) A Study to Examine the Costs and Benefits of the ELV Directive – Final Report, Annex 4: Case Studies, http://ec.europa.eu/environment/waste/pdf/study/annex4.pdf

VALORCAR (2013) Relatório de Atividade 2013 : Veículos em fim de vida (VFV), http://www.valorcar.pt/core/components/manageLibFiles/uploads/D/RelAct2013_VFV_FINAL_Internet.pdf

failings, whether acceptable standards are being maintained; and their general performance during their contract with VALORCAR). VALORCAR also carries out technical visits to recipients of the materials resulting from the dismantling of ELVs, to better understand their needs in terms of materials, treatment processes and the resulting products, and to identify difficulties and opportunities.

VALORCAR typically has 3 employees; staff costs amounted to €145,325 in 2013 and €142,867 in 2012.⁹⁰

In Spain, SIGRAUTO is run on a non-profit basis.⁹¹ Since early 2013 SIGRAUTO provides through its website monthly information to its members about vehicles delivered to ATFs.⁹² SIGRAUTO stated that it was unable to provide any cost-related information for the study.⁹³

In Belgium, the annual cost of running the PRO Febelauto is \leq 466,000 (plus \leq 511,000 only for costs relating to tyres).⁹⁴

ACEA feels that the approach in NL is 'ineffective', whereas a more efficient solution has been implemented in ES and PT, and countries such as DE with individually organised take back systems are well functioning, and economically and environmentally well balanced. ACEA's view is that producers need to be free in their choice either to implement an individual scheme or to join collective PROs.⁹⁵

Summary and discussion of costs

The table below summarises the identified costs associated with the running of producer responsibility schemes in NL, FI, DE, ES and PT.

⁹⁰ VALORCAR (2013) Relatório de Atividade 2013 : Veículos em fim de vida (VFV), http://www.valorcar.pt/core/components/manageLibFiles/uploads/D/RelAct2013_VFV_FINAL_Internet.pdf

⁹¹ SIGRAUTO (2014) Website: http://www.sigrauto.com/quiene.htm

⁹² SIGRAUTO (2014) Memoria Anual 2013 http://www.sigrauto.com/pdf/Memoria2013.pdf

⁹³ Communication with SIGRAUTO

⁹⁴ Communication with Febelauto – Belgium was outside the scope of this case study, but Febelauto responded to the questionnaire so the information is included here

⁹⁵ Communication with ACEA

Table 22: Summary of costs associated with running of producer responsibility schemes

n/a no data/information found

- no cost

The table shows administrative/time costs and financial costs

	Finland	Germany	Netherlands	Portugal	Spain	EU-wide (info from ACEA)
Total cost of running the ELV management system	Financial costs: Total €500,000 per year running cost for SAO. €0.08 per inhabitant per year; €0.12 per ELV.	n/a	Financial costs: €1.40 per inhabitant per year; €11.31 per ELV.	Financial costs: Total spending on ELV activities by VALORCAR in 2013: €150,903. €100,533 on day-to-day running (the rest on awareness-raising/ information/ R&D – see relevant row above)	n/a	Financial costs: In Belgium, annual running cost of FEBELAUTO's ELV operations is €466,000.
Total cost of processing an ELV	n/a	Financial costs: 2006: treatment cost of \in 80- \in 130 per ELV. 2002: pre- treatment of ELV \in 50- \in 100; plus additional dismantling cost of \in 250- \in 350.	Financial costs: 2011: ARN paid out \in 16,522,649 in dismantling fees/ collection/ processing costs for 192,433 ELVs, equal to almost \in 86 per ELV (but received \in 17,149,232 from the recycling fee for 461,463 vehicles).	n/a	n/a	Financial costs: €235 cost, but also €349 material revenues, giving profit of €114 per ELV.
Cost of operations at an ATF	n/a	n/a	Financial costs: Around €35 per ELV (cost to ATF); ARN paid up to €56 per ELV to ATFs for treatment in 2011.	n/a	n/a	n/a
Cost of post- shredder	n/a	n/a	Financial costs: For ARN's PST operation: €9 million.	n/a	n/a	n/a

	Finland	Germany	Netherlands	Portugal	Spain	EU-wide (info from ACEA)
treatment (PST) operations			ARN paid up to €29 per ELV for PST in 2011.			
PRO staff costs (including salary, social & pension costs)	n/a	-	Financial costs: ARN Recycling: 34 staff members (in 2014). Whole ARN Group: 69.7 FTE staff, total salary/ social/ pension cost of €4,137,752 (in 2013).	Financialcosts:VALORCAR:3employees;staff costsamountedto $\in 145,325$ in 2013 and $\in 142,867$ in 2012.	n/a	n/a
Audits/ inspections	Administrative/ time costs: SAO had undertaken around 400 audits by 2014.	n/a	Administrative/ time costs: Quality inspections: Average of 2 per vehicle dismantling company per year; 65 checks on dismantled ELVs (in 2013); 37 for collection & recycling companies (in 2013); 18 for shredder companies (in 2013). Physical volume inspections: 183 for vehicle dismantling companies (in 2013); 1 per collection & recycling company per year.	Administrative/ time costs: VALORCAR undertook 102 unannounced inspections of ATFs in 2013; plus 13 more detailed 'interim audits' (a further 15 to be carried out in 2014); unspecified number of technical visits to recipients of materials.	n/a	n/a
Awareness- raising/ information/ R&D activities	n/a	n/a	n/a	Financial costs: By VALORCAR in 2013: €24,872 on awareness-raising/ information; €23,768 on R&D.	n/a	n/a
Reporting costs	Administrative/ time costs: SAO reports to PIR ELY (responsible for oversight of the ELV management	n/a	Financial costs: €277,000 per reporting period (every 3 years) to notify Ministry of measures taken, plus €9,000-€13,000 annual reporting (2002 estimates).	n/a	n/a	n/a

	Finland	Germany	Netherlands	Portugal	Spain	EU-wide (info from ACEA)
	system) annually.		Cost of registration & control system necessary for such reporting: €908k (in 2002)			
Participation in revisions of Annex II of the ELV Directive	n/a	n/a	n/a	n/a	n/a	Administrative/ time costs: 7 revisions completed to date; 8 th ongoing.

Figures have been found for the total running costs of the ELV management systems in Finland (\leq 500,000), Portugal (\leq 150,903) and Belgium (\leq 466,000). Based on these figures, provided by the PROs (and in the case of the figures for the Netherlands taken from the BIO 2014 report), the rough costs per ELV treated and per inhabitant are presented in the table below. This indicates that the ARN system in the Netherlands is the most expensive, followed by the SAO system in Finland, the FEBELAUTO system in Belgium, with the VALORCAR system in Portugal the cheapest to run.

Table 23: Rough cost of running producer responsibility schemes, per ELV	
treated and per inhabitant	

	Cost per ELV treated	Cost per inhabitant/year
Belgium (FEBELAUTO)	€3.27	€0.04
Finland (SAO)	€5.09	€0.09
Germany	n/a	n/a
The Netherlands (ARN)	€11.31	€1.40
Portugal (VALORCAR)	€1.98	€0.01
Spain (SIGRAUTO)	n/a	n/a

In terms of staff costs, information was only found for ARN in the Netherlands and for VALORCAR in Portugal. The total staff cost for ARN Recycling is estimated at $\leq 2,018,416$ or $\leq 59,365$ per employee for its 34 employees (this assumes equal staff costs for all employees across the whole ARN Group which is surely not the case, but more detailed information is not available), whilst the total staff cost for VALORCAR is $\leq 145,325$ or $\leq 48,441$ per employee. In terms of cost of living in the two MS, these figures are probably broadly comparable.

In terms of audits/inspections, it is estimated that in 2013 ARN carried out around 818 inspections of various types across the 282 affiliated facilities in the Netherlands, whilst VALORCAR carried out 115 across its 79 affiliated facilities in Portugal. This amounts to 2.9 inspections per facility per year in the Netherlands, and 1.5 in Portugal. No reasons for this difference have been found.

Comparable data were unfortunately not found for the other types of costs related to the running of producer responsibility schemes.

Costs to producers of participation in producer responsibility schemes

The costs to producers of participation in producer responsibility schemes include time spent and/or actual financial costs of activities such as: annual PRO membership fees; fees paid per vehicle/per tonne of vehicles to PROs; contracting with ATFs; and time spent recording, collecting and reporting data.

ACEA estimates that the cost of participating in ELV producer responsibility schemes for the entire European automotive industry is `in the magnitude of high double digit millions of euros'. All ACEA members are members of PROs in several MS. ACEA also pointed out that there are a number of additional ongoing administrative costs to manufacturers than those mentioned at the start of this section. These include: creating and providing dismantling information to the International Dismantling Information System (IDIS); creation and implementation of comprehensive software systems to follow up materials used for construction (supplier's declaration in the International Material Data System

(IMDS)) as well as for calculating recyclability quotas (various in-house systems);

participating in the Annex II Revision process (8th revision is ongoing); providing detailed information, sometimes generated through costly studies; and individual compliance reports requested by national or local authorities. ACEA was not able to provide reliable ongoing cost estimates due to the variety of costs and the differences in manufacturers' organisational structures and different national legal requirements and systems.⁹⁶ This comment in itself, however, suggests at least that costs do vary, both between manufacturers and between MS.

In Finland, the fees paid by producers to SAO amounted to \leq 450,000 in 2012. Producers pay a one-off joining fee and then an annual fee based on the number of imported vehicles (the fees vary between \leq 189 and \leq 96,090 per producer, or between \leq 3.20 and \leq 18.92 per vehicle).⁹⁷ Since the cost of ELV collection and treatment is covered by revenues from their recycling, the fees paid by producers are used for data reporting, audits and communication/awareness actions.⁹⁸

There is no collective producer responsibility scheme in Germany. No up to date information has been found on other costs to producers/importers; however, the German Government estimated in 2002 that the disposal cost due to the free-take back of ELVs from 2007 would amount to around \leq 409 million (DM800 million)⁹⁹ per year, and that there would be an increased cost to producers of \leq 102 (DM200)¹⁰⁰ per new car as a result of producer responsibility (although that could be offset to some extent by tax breaks for the financial reserves that producers were required to put in place to cover future costs).¹⁰¹ It is assumed that some do not pay for collection since car parts have an intrinsic value.¹⁰²

In the Netherlands, producers pay a recycling fee of €45 including VAT (€38 ex VAT) to ARN per newly registered car¹⁰³; this fee is typically passed on to consumers who pay it when purchasing a new vehicle.¹⁰⁴ Dismantlers receive €30 per car since 1 August 2014 (until 2012 they received around €70).¹⁰⁵ In 2011, fees were collected for 603,000 newly-registered vehicles, and the fees paid to ARN amounted to €23,311,481.¹⁰⁶ The Dutch government estimated that the provision of dismantling information (including the collection and processing of this information) by producers to companies and consumers would cost between €3.6 and €4.5 million per year.¹⁰⁷

In Portugal, manufacturers/importers pay an annual subscription fee (Annual Financial Provision, PFA) to VALORCAR; these subscription fees fund VALORCAR's activities. The PFA includes a fixed annual amount (between ≤ 250 (for manufacturers placing less than 500 cars on the market) and $\leq 1,500$ (for manufacturers placing more than 20,000 cars on the market)) and a variable amount based on the number of new vehicles placed on the market in the previous year (currently ≤ 1 per vehicle). In 2013, VALORCAR had 36 member manufacturers who paid $\leq 130,354$ in annual subscription fees; in 2012, 38 member manufacturers paid $\leq 208,067$ in annual subscription fees.¹⁰⁸

¹⁰⁰ € cost derived from fixed exchange rate, effective as of 1 January 1999, of €1 = DM 1.95583

¹⁰⁷ GHK (2006) A Study to Examine the Costs and Benefits of the ELV Directive – Final Report, Annex 4: Case Studies, http://ec.europa.eu/environment/waste/pdf/study/annex4.pdf

⁹⁶ Communication with ACEA

⁹⁷ SAO (2012) Determination of the membership fee (in Finnish), http://www.autoalanverkkopalvelu.fi/Julkaisujarjestelma/JulkkariData/1946/Dokumentit/Jasenmaksun_maaray tyminen.pdf

⁹⁸ BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study ELVs in Finland

⁹⁹ € cost derived from fixed exchange rate, effective as of 1 January 1999, of €1 = DM 1.95583

¹⁰¹ GHK (2006) A Study to Examine the Costs and Benefits of the ELV Directive – Final Report, Annex 4: Case Studies, http://ec.europa.eu/environment/waste/pdf/study/annex4.pdf

¹⁰² BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study on ELVs in Germany

¹⁰³ Communication with ARN

¹⁰⁴ BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study on ELVs in the Netherlands

¹⁰⁵ Communication with EGARA

¹⁰⁶ BIO IS et al (2014) Guidance on Extended Producer Responsibility, Case study on ELVs in the Netherlands

¹⁰⁸ VALORCAR (2013) Relatório de Atividade 2013 : Veículos em fim de vida (VFV), http://www.valorcar.pt/core/components/manageLibFiles/uploads/D/RelAct2013_VFV_FINAL_Internet.pdf

No information could be found on the cost to producers of participating in the SIGRAUTO scheme in Spain.

The implementation of the 'free take back' obligation varies significantly by MS, resulting in different costs for producers. In many MS, ELVs have a positive residual value and therefore no fees need to be paid by producers. However, in some systems (including older ones such as that in the Netherlands), producers pay a premium to dismantlers for the treatment of parts of the ELV with a negative value, even though the overall residual value of the ELV remains positive.¹⁰⁹ In its questionnaire response, EGARA made the point that this 'zero-cost' model, which claims that an ELV has enough value to cover the cost of its recycling, is flawed because producers claim that some parts cannot be resold due to safety issues, and producers also refuse to sell parts data to dismantlers to enable their reuse/resale.¹¹⁰

Summary and discussion of costs

The table below summarises the identified costs to producers of participation in producer responsibility schemes in NL, FI, DE, ES and PT.

¹⁰⁹ BIO Intelligence Service et al (2014), Ex-post evaluation of certain waste stream Directives

¹¹⁰ Communication with EGARA

Table 24: Summary of costs to producers of participation in producer responsibility schemes

n/a no data/information found

- no cost

Note that all costs identified above are financial costs/profits, rather than administrative/time costs

	Finland	Germany	Netherlands	Portugal	Spain	EU-wide (info from ACEA)
Fees paid by manufacturers to PROs	Producers paid €450,000 in fees to SAO in 2012. Producers pay a one-off joining fee plus an annual fee (from €189 for ≤ 10 vehicles imported (€18.92 per vehicle), up to €96,090 for 30,000 vehicles imported (€3.20 per vehicle).	-	Producers paid	Producers pay an annual subscription fee comprised of: fixed fee of between \in 250 (<500 vehicles) and \in 1,500 (> 20,000 vehicles) plus variable	n/a	High double digit millions of euros (for all manufacturers to all PROs across the EU).
Information provision	n/a	n/a	Cost to producers of providing dismantling information to companies/ consumers: \in 3.6- \notin 4.5 million per year.	n/a	n/a	n/a

The only comparable cost data found for more than one MS is the fees paid by producers to PROs. In Finland, SAO has 76 member organisations¹¹¹, which paid a total of €450,000 in fees in 2012. In the Netherlands, ARN's member organisations paid a total of €23,311,481 in fees in 2011; however, it should be noted that this cost is passed on to the consumer at the time of purchase of a new vehicle. In Portugal, VALORCAR's 38 member organisations paid a total of €130,354 in fees in 2013 (and €208,067 in 2012). The average per member annual fees in Finland is therefore an average of €5,921, and in Portugal an average of €3,430 in 2013 (and €5,475 in 2012). The total average costs paid per producer can therefore be considered as broadly comparable.

However, when looking at the annual fees based on the size of producer, the table below reveals that the fees in Finland are actually between 3.1 and 4.5 times more expensive than those in Portugal, across all sizes of producer. The figures in the table are calculated based on the publicly-available fee structures of SAO and VALORCAR.

Table 25: Comparison of fees paid by producers in Finland and Portugal

Size of producer (cars placed on the market per year)	Fees per year in Finland (does not include one-off joining fee)	Fees per year in Portugal
100	€1,135	€350
200	€1,947	€500
500	€3,972	€1,000
1,000	€6,812	€1,500
5,000	€23,832	€5,500
10,000	€40,870	€11,000
15,000	€56,031	€16,000
20,000	€70,089	€21,500
25,000	€83,380	€26,500
30,000	€96,090	€31,500

On an EU-wide scale, ACEA estimates the total cost to all manufacturers of participation in PROs across the MS to be in the high double digit millions of euros.

¹¹¹ SAO website (2014) Member Companies, http://www.autokierratys.fi/en/finnish_car_recycling/members

Conclusions

Do costs vary between Member States?

Both the literature review and the case studies demonstrate that the EU environmental acquis places a range of obligations on public administrations, businesses and individuals leading to administrative costs.

There are differences in these costs between countries. So, even where the EU requirements are the same, national choices lead to cost differences for businesses.

Care needs to be taken in interpreting cost differences between Member States. If one simply focuses on the costs of an individual element of an overall administrative process, differences between Member States may be identified. However, limiting analysis to this one point could be misleading. This is most obviously seen in consideration of fees for issuing permits where Member States have adopted different choices on the distribution of the administrative costs of permitting.

Costs arising from the acquis may arise for public administrations in the MS. These administrations may be central government, regional/local government or other public bodies and agencies. Costs include 'start-up' costs as legislation begins to be implemented (which might include capacity building, training, new staff, IT systems etc) and recurring costs, such as may arise with permit handling, inspections, monitoring, reporting, communicating with stakeholders, associated research, etc. In some cases there is more leeway for MS in how these obligations are implemented than in others and, therefore, different levels of costs may result. For many directives the degree of 'flexibility' is probably greater than in most regulations. This seems to be the case for the chemicals acquis, which has been the subject of intense scrutiny regarding cost, but for which attention is focused on the directly applicable obligations in the regulations.

Transaction costs to business from regulatory requirements of the EU environmental acquis may arise from a variety of different sources. Businesses may take time to become familiar with legislation and the specific obligations required of their activities. They may need to apply for permits, undertake assessments, be subject to inspection, undertake monitoring, report on their activities, etc. These all take time (hence a staff cost), but business may also need to invest in training, etc., to have the capacity to perform such activities. Alternatively, business may pay for others to perform these regulatory activities for them (e.g. paying consultants to develop permit applications). Delays by public administrations represent opportunity costs to business.

This study has shown that the amount of information on costs of implementation in general is highly variable across the acquis. For some older directives and those that have been subject to review, more cost information is available – such as for EIA, Natura and some of the waste acquis. However, some areas with significant administrative obligations have, as yet, to generate detailed cost data (as opposed to anecdotal or specific examples of costs), as is the case with major items of law such as the Water Framework Directive.

Even where cost data are available at a general level, the amount of information that allows direct comparison between the MS is negligible in many cases in the literature. There are reasonable data for comparison on issues such as EIA and public access to information and the case studies have generated further information. However, beyond this comparative information in reports is at a proxy level (e.g. number of inspections) and these are difficult to translate to monetary figures. In contrast there has been more examination of the issues of costs under the CAP and lessons from this may be learned.

For public administrations differences in costs were found for a range of different types of activity. Most of these costs are staff time.

Permitting/issuing of licences is an activity which should allow for direct comparison between Member States. From receipt of a permit application to authorisation of a final agreed permit, time can be recorded. The IED case study shows that it does seem to be standard practice for authorities to record this information and it is likely that this would apply to similar permitting and licensing activities. Further, the study has found that there are differences in the time taken to issue permits. The average time to issue IED permits can be quite different between Member States. However, it can also vary significantly within a single authority within a Member State suggesting it may be due to the nature of the case.

Similarly to the time taken to issue permits, the time taken for developing and reviewing assessments of the environment or potential environmental impacts varies. The literature shows that this is the case with the EIA Directive and the cases show that this is the case for the SEA Directive and Habitats Directive.

Time for interaction with stakeholders was not specifically examined in the cases or in much of the literature, it was noted as a clear variable in the implementation of the Directive on public access to environmental information. Member States have widely differing experiences of interaction with the public leading to cost differences. It is likely that while the implementation of this directive may be the most obvious in highlighting costs (and their differences) on stakeholder engagement, the variations seen are likely to reflect differences in costs for dealing with stakeholders in other policy fields. This is particularly likely where Member States have taken different approaches. An example is the wide variation in levels of public engagement in river basin planning under the Water Framework Directive. Member States are encouraged, but not required, to maximise public engagement. As a result, practices between Member States vary and, presumably, costs vary.

Why do costs vary between Member States?

Some differences in costs simply reflect different situations in different countries, and is to be expected. Nevertheless, there also seem to be differences in administrative costs between countries for actions that should be broadly comparable. Whilst the data is too poor to provide systematic evidence, there are indications that there is potential to improve efficiency, for example, by adoption of best practice. Understanding why costs vary has proved difficult to get firm conclusions on. Reasons include the following:

Degree of implementation

One possible reason for differences in administrative costs between Member States is that these may arise due to incomplete implementation of a directive or regulation in one or more Member State. Ignoring specific provisions, 'cutting corners', etc., could reduce costs. This study has not sought to examine the consequences for differences in costs arising from uneven implementation of EU law and it will not be considered further. However, it is important to note that this can be a cause and an impediment to delivering a level playing field.

Options within EU law

EU law is often not prescriptive in the detail of many administrative tasks required for its implementation. Indeed, it can on occasions encourage diverse approaches to implementation, as seen in the different approach between Germany and the other case study MS in implementing the ELV Directive. The literature review highlighted a number of areas of EU law where there is little information on comparative costs. In some cases these reflect the fact that there is flexibility within EU law, thus making comparisons difficult or impossible. For example, while developing River Basin Management Plans or Marine Strategies may follow a common framework in their respective directives, the scope, detail and processes for these all vary on a case by case basis. Therefore, even if cost data are collected, comparison is, in most cases, not possible.

Integration of administrative tasks at Member State level

A further area of flexibility open to Member States that affects the costs between Member States are the decisions of administrations to integrate the administration procedures across more than one directive or regulation and/or integrate provisions at a national level. For example, integrating IED permitting and permitting required under EU waste law may make the individual permit process a little more complex, but overall reduce costs to both business and administrations. Also, ensuring synergies (mutual recognition) of environmental assessments between policy fields (biodiversity, water, etc.) may occur. Where such integration takes place, defining comparable actions is difficult and divergence between Member States will appear on the surface.

Administrative structure

The costs or efficiency of public administrative procedures also reflects the administrative structures in the Member States, in particular where competencies are highly devolved. This is illustrated by the SEA case study for Austria, the ELV case for Germany and the IED case study for Poland. Smaller administrations have challenges for capacity and expertise. The consequence may be costs for contracting out (see below), delays or ineffective implementation.

In-house or contracted-out

A variable identified in the study which leads to variations in costs is whether administrative tasks undertaken by public bodies are undertaken in-house or contracted out. The differences are markedly demonstrated in the case study on the SEA Directive, where significant contracting out to consultants occurs in Hungary, but Finland retains the expertise in house. Scotland reported that not contracting out tasks resulted in significant cost savings. The complexity of alternative approaches between use of public and private institutions is further illustrated by the ELV Directive case study.

Time for issuing permits

In order to issue a permit, the competent authority needs to be satisfied that the information supplied is complete, accurate and that the activity will comply with the conditions required under EU law. Where there are bespoke permits, the time taken will inevitably reflect the complexity of the activity. This variability will occur within Member States and the distribution of more or less complex activities will affect the average time taken between Member States.

It is not fully clear why competent authorities take the time that they do. The literature does not provide concrete data and the IED case showed that competent authorities are not clear on recording the specific time for individual permit decisions. However, the data suggest that the length of the period of determination is not always linked to the

amount of time required for the task. Thus it is likely that the time taken may reflect the ability of staff to fit in the administrative task into their work schedules. This is turn would reflect differences in available resources, training, institutional culture, etc. A further lesson from this study is that Member States can take action to reduce the time taken for decision making. This is very clearly seen in the IED case for England with the competent authority being instructed in 2012 to reduce the time to be taken for issuing permits. This it did, so reducing costs to business. Doing this required more focused activity by individual staff.

However, a factor that is important in efficient consideration of permit applications is the ability of those applying to provide full and complete applications. In the IED case study we specifically asked Member State authorities what proportion of applications resulted in requests for further information and, therefore, in delays. The response varied significantly between Member States, from a relatively small percentage to "all applications". It is not clear why all applications would routinely be asked for more information. The ability of an applicant to provide a complete application would partly depend on whether the competent authority has provided them with sufficient guidance. We are unable to determine whether this might be the reason for this type of delay, but it is a possibility.

A further factor that could result in headline differences in the time for issuing permits could be the potential complexity of the permitting process. It may be assumed that the procedures for issuing permits under IED or the waste acquis, for example, are distinct procedures and that comparisons between Member States are possible. However, there has been considerable emphasis in some Member States on integrating permitting processes across several areas of environmental regulation (e.g. in England) and even non-environmental areas of regulation (e.g. The Netherlands). The objective is to streamline the permitting processes for businesses. However, for an individual component within that permit, the time for decision making might be longer than if it was considered separately. Thus it is important to consider individual cost issues within the wider administrative context of costs and initiatives to reduce those costs.

Time to undertake assessments

As with the time for permit determinations, the time for undertaking and reviewing environmental assessments depends on a number of factors. An EIA or SEA is not necessarily equivalent to another EIA or SEA, nor are two assessments under the Habitats Directive. Assessments may cover more or fewer issues and consider issues of varying complexity. Thus drawing conclusions from comparisons of a few individual cases is not appropriate. However, when considered overall, there are differences in costs between Member States.

Fees

Where fees may be charged to businesses, these vary significantly between the Member States. This is most evident in the case on IED permitting. However, the variation in fees reflects three broad situations:

- There are countries where fees are not charged and where costs are viewed as part of the public administration, not to be charged out.
- There are other cases where fees are set with the aim fully to recover the costs of the administration.
- In other cases fees are charged, but the level of the fees is not designed fully to recover costs.

It can be seen, therefore, that variation in the level of fees is expected. With regard to cost recovery, the size or complexity of the activity subject to a permit should be

reflected in the size of the fee. This can be seen in the examples of different charging rates in Malta and the UK for IED. However, these charges 'generally' reflect differences in complexity rather than charging for exact days worked by the administration.

Variation in fees is also seen in the ELV case study with fees paid by manufacturers to PROs. Fees may be absent, per vehicle or lump sums for different quantities of vehicles.

In considering the variation in costs, it is therefore important fully to consider the distribution of costs. The staff time of an administration is the basic cost. If that is fully or partially passed on to a business, that redistributes the cost to that business. If not, that cost is met out of the government budget (i.e. part of general taxation). If differences in fees are important in considering the 'level playing field' for business across the EU, it is not the cost, but its distribution, which affects the level playing field.

Having said this, it is worth noting from the IED case that fees were not found to constitute a large part of the costs operators had in applying for permits. Time and consultancy fees were much more important. Also for the ELV case, the size of the fee is not large compared to other costs.

Support to those subject to regulation

An important factor affecting the costs to business is the support that they get in meeting their regulatory requirements. Good guidance and support tools are important, as well as the ability to communicate informally with competent authorities.

It is important to note that this study did not identify quantitative benefits of such support activities. In most cases there may not be a clear baseline against which to judge benefits (e.g. a new approach is brought in to accompany a newly transposed directive). However, the value of such initiatives is often highlighted in a range of different contexts.

Data limitations: the degree of confidence

This study has found a number of problems with the availability of data on administrative costs for different parts of the acquis. It is important to recognise these limitations in taking forward any recommendations or other actions. The key limitations found were:

Defining comparable activities

A precondition for undertaking comparative analysis of the costs is not only that there are data available, but also that the data are for comparable activities. As we have noted above two assessments, two permits, etc., are unlikely to be comparable. However, the overall time for a large number of permits or assessments is much more likely to be comparable. Thus the limitation for data analysis is to ensure likely comparability of the sample size for analysis.

A particular issue for comparability is where MS have pre-existing systems in place which incorporate a transposed directive. Examples include IPC in Ireland (which has additional elements to IPPC/IED), the scheme in Germany which pre-dated the ELV Directive and strategic assessments in the Netherlands predated SEA. The difficulty in such cases is that separating specific costs only associated with EU law can be very difficult indeed.

The timing of data availability

Where a directive or regulation is relatively new, in most cases Member States have few data available on the costs of administrative actions. In some cases these are still being worked out and in other cases data are not yet collected or in a form which can be made

available. In contrast a well-established directive or regulation should allow for establishment of record keeping of specific types of costs. However, the problem for older legislation is that some of the data are so old that their relevance is questionable. Further, where older data are recorded, staff may be unable to interpret the data as the institutional memory is lost. This is well illustrated by the IED case study where competent authorities were providing both new and old data and interpretation questions were raised.

Changing situation over time

The administrative procedures and costs in implementing a directive or regulation by an individual administration may change over time. This is clearly seen, for example, in the costs for IED permitting in England where procedural changes were introduced to reduce costs. However, less dramatic changes can also change the cost base (e.g. IT systems helping to streamline communication, etc.). Such changes are themselves interesting as they illustrate why costs occur and what can be done to reduce them. However, it does mean that care needs to be taken in interpreting the relevance of data – costs accurately recorded for past administrative systems may not reflect today's situation.

Data not recorded in useful format

It may be assumed that both administrations and businesses record in detail the time and cost for specific administrative activities. However, this is not always the case. In particular issues arise where the administrative costs of interest for a particular directive or regulation are combined with other activities (whether for the same directive, another directive or a national level obligation).

Data not recorded in the same format

There is no one agreed way to record time and costs on administrative tasks. In particular there is an issue with trying to identify costs for a specific task arising from EU law. In this study we found, for example, that businesses may record the time/costs for undertaking environmental regulatory activities, but they would not necessarily separate these costs for individual aspects of these activities, such as initial assessments and permitting from ongoing costs.

Lack of collation of available data

Data may be collected for local internal management purposes (e.g. to assess allocation of time by staff), but these are not centrally collected or analysed. This may occur in the same organisation. However, it is a particular issue where local authorities are the competent authorities and there is neither a process nor consistent approach to recording and collating costs centrally.

Willingness to make data available

The analysis of data on administrative costs, where these are recorded, also depends on the willingness of those who have the data to make these available. It is clear from this study that some organisations may be reluctant to provide such data or under constraints that do not allow them to supply the data.

Small sample size

An important, if obvious, finding of the study is that conclusions should not be reached on the comparison of individual activities or events. A particular decision in one MS may be much more delayed than a comparable decision in another MS. The individual costs for assessment, permit, etc., may be much more than in another MS. However, where such examples arise, the first question to ask should be: are these costs typical and, therefore, are these differences typical? The IED case study, for example, has shown that in the UK the time taken to issue a permit varies significantly and the fees vary significantly (even for the same types of installations).

Methodological conclusions

It is evident from the analysis in this report that there are limitations to undertaking a comparative assessment of the costs of implementing EU environmental law across Member States. Doing so presents a number of methodological challenges. It is not possible to propose a particular methodology for undertaking such work in the future (as a methodology would be specific to individual items or areas of EU law or types of public administration). However, it is possible to set out some points that a methodology would need to take into account. These include:

- The purpose for a comparison needs to be clear. If it is about identifying costs so that actions could be identified to reduce those costs, then a scoping exercise to identify the largest costs is a good approach. Following this, research can focus on these costs. For example, recurrent administrative costs (e.g. monitoring and reporting) are likely to be larger than one-off costs.
- It is important to clarify the null hypothesis what costs would be in place without EU law and, therefore, what additional costs arise from application of EU law.
- The national or regional administrative context is important to understand, particularly if there are pre-existing administrative procedures to which EU law has been integrated (e.g. the costs to an operator may be partly driven by national requirements and partly by EU requirements, but the operator may not distinguish these nor be able to separate them).
- A study should be careful to ensure all costs are examined across private entities and public administration. This is even if the aim of a study is, for example, to examine costs to business. Member States may choose to distribute costs in different ways and, therefore, examining costs to one type of actor can present an erroneous picture of the cost of EU law. This is most clearly see in permit fees, which may be small, may try to recover all costs or may be non-existent and covered by the administration (i.e. public taxation).
- The methodology should seek to determine why costs are different. Where quantitative data are found to show differences, it can be difficult to understand why these occur. This also applies to proxy information such as the time for decision making. It is usually only with such information that it is possible to propose actions to reduce costs.
- It is important to consider that procedures and costs change over time. An administration is likely to consider current costs, while businesses might provide information for actions taken some time before (particularly for one-off costs). This affects the comparability of information.

Recommendations

Following the results of this study, this report makes recommendations to three audiences: businesses, Member State governments and administrations and the European Commission. Note that where recommendations to the Commission concern the way that EU law is formulated, such recommendations would also apply to the Council and European Parliament as they debate and adopt that law.

Recommendations to businesses:

- Business associations and larger individual businesses should undertake more indepth reviews of the administrative costs they are subject to in different Member States including the reasons for cost differences and whether these have consequences for businesses.
- Businesses operating across more than one Member State should bring together comparative cost information on administrative tasks arising from national application of EU law. Such information would be valuable in reviewing and designing future legislation.

Recommendations to Member State governments and administrations

- Member States should adopt systems to log basic administrative costs of implementing EU law, including logging the time it takes to reach decisions (e.g. issue a permit).
- Member States should undertake studies of the administrative costs of implementing different aspects of individual EU directives and regulations, with a breakdown of data for different tasks, types of cost, etc..
- Member States should adopt support systems (guidance, IT tools, advice, etc.) to aid the regulated community in fulfilling its administrative obligations so aiding efficiency both for business and public administrations. This is particularly important for SMEs.
- Member States administrations should learn from each other about levels and causes of administrative costs in implementing the environmental acquis and best practices in reducing those costs.

Recommendations to the European Commission

- The Commission should further analyse administrative costs and reasons for differences as different policy fields are reviewed, etc.
- The Commission should encourage business stakeholders to come forward with examples of information on differences in costs across Member States along with ideas for harmonising/reducing those costs.
- The Commission should undertake the collection and sharing of best practice in reducing administrative costs in relation to specific tasks required in EU environmental law, thus moving beyond current best practice on administrative efficiency generally.
- The Commission must ensure that the drafting of legislative proposals does not preclude the opportunity afforded to Member States of simplifying or streamlining their own administrative implementation at national level.





