



European Union Network for the Implementation
and Enforcement of Environmental Law

A SURVEY ON PRACTITIONERS' VIEWS ABOUT THE IMPLEMENTATION CHALLENGES WITH EU ENVIRONMENTAL LEGISLATION, THEIR UNDERLYING REASONS AND WAYS TO IMPROVEMENT: 2017

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Introduction to IMPEL

The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) is an international non-profit association of the environmental authorities of the EU Member States, acceding and candidate countries of the European Union and EEA countries. The association is registered in Belgium and its legal seat is in Brussels, Belgium.

IMPEL was set up in 1992 as an informal Network of European regulators and authorities concerned with the implementation and enforcement of environmental law. The Network's objective is to create the necessary impetus in the European Community to make progress on ensuring a more effective application of environmental legislation. The core of the IMPEL activities concerns awareness raising, capacity building and exchange of information and experiences on implementation, enforcement and international enforcement collaboration as well as promoting and supporting the practicability and enforceability of European environmental legislation.

During the previous years, IMPEL has developed into a considerable, widely known organisation, being mentioned in a number of EU legislative and policy documents, e.g. the 7th Environment Action Programme and the Recommendation on Minimum Criteria for Environmental Inspections.

The expertise and experience of the participants within IMPEL make the network uniquely qualified to work on both technical and regulatory aspects of EU environmental legislation.

Information on the IMPEL Network is also available through its website at: www.impel.eu



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Executive Summary

Background

Improving the implementation of environmental law is a priority theme of the [7th \(current\) Environment Action Programme](#) of the European Union. Failure to comply with environmental law has many serious consequences, not only for the state of the environment itself, but also for economic and social costs, and its impacts on the health and well-being of people and wildlife. It can create an uneven playing-field for businesses and can undermine the credibility of both national authorities and the European Union. The European Commission is carrying out an initiative, the [Environmental Implementation Review](#), to help to achieve full implementation of environmental law across the EU.

The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) is an international non-profit organisation of environmental authorities in Europe that works for a more effective implementation of environmental legislation. In 2014, IMPEL carried out the first questionnaire survey involving its member organisations to investigate the challenges that authorities were facing in the practical implementation of environmental law in their countries and how IMPEL might support them in overcoming these challenges. This survey was followed up in 2015 with further analysis to help inform decisions on priorities for IMPEL's work programme across its five Expert Teams.

This report summarises the findings of a second questionnaire survey carried out in 2017. It describes the project approach and the main findings, and provides a series of recommendations for IMPEL to consider in how it could further support its member organisations in improving the level of implementation of environmental law.



Project approach

The project developed an online questionnaire survey to collate and analyse the information sent by respondents. This was structured according to IMPEL's Expert Team's main areas of work with sections on industry, noise and air quality; waste and the trans-frontier shipment of waste; water and land; nature protection and cross cutting matters. To the latter were attributed sections on challenges across the compliance chain, complementary support of stakeholders for compliance assurance, and trans-boundary and trans-sectoral problems.

The questionnaire was distributed in English and in machine translated versions of all EU national languages to the IMPEL National Coordinators (NCs), and it was left to their discretion how to eventually further distribute it to national and regional environmental administrations and how to collect and aggregate the answers. E.G. the Portuguese Inspectorate IGAMAOT opened the questionnaire to all inspectors and practitioners. In Germany, the questionnaire was integrated in a national research project and sent out to over 2.000 practitioners from German environmental authorities. In Denmark, some environmental authorities were selected for representative answers. In Iceland, the NC herself (an inspector) has answered the questionnaire.

A total of 63 responses from authorities in 28 countries were received. The majority of responses communicated by NCs had been aggregated from several responses of different environmental authorities collected at the national level. Probably the highest number of answers was aggregated in the German National Coordinator's response: it relied on 189 answers from German regional and local authorities. Besides, some answers from singular regional and local authorities were directly sent in. Confidentiality was assured and it was possible to answer the questionnaire anonymously.

A workshop was held at the premises of the European Environment Agency (EEA) in Copenhagen in September 2017 to report back on the findings of the survey and to further discuss some of the key emerging themes. The EEA was also invited to compare the findings of this survey with their EU environmental data. It stated that the survey findings were in accordance with EEA data and had no further remarks.

In 2018 a refined analysis of training needs and best practice suggestions was carried out as well as a revision and streamlining of the questionnaire. The findings were discussed at the IMPEL Expert Team Meetings in autumn 2018 and included into this project report.

Main findings

As in the previous survey from 2014, the lack of overall staff resources and suitably qualified personnel in regulatory authorities continues to be the most commonly-reported barrier to achieving effective implementation of environmental law. Other areas that emerged in 2014, including – lack of skills at municipal level, insufficient data, evidence and information; and inadequate sanctions and low level of fines – continue to be problematic.

Problem areas that emerged particularly strongly in this survey are:

- Regulation of the agriculture sector
- Definition and classification of waste



- Clarity of environmental permits
- Operator self-monitoring
- Tackling environmental crimes
- Reducing nuisance, conflicts and complaints
- Unclear, incomplete or overly complex legislation
- Access to environmental information

The survey also asked respondents about possible solutions to overcome implementation challenges. They were especially in favour of:

- Exchange and communication between different authorities and within networks
- Application-oriented guidance and training
- Improved availability and accessibility of data and information
- Coordinated action between different inspection authorities

Implications for IMPEL's work

It is clear from this survey that IMPEL's member organisations continue to face many significant challenges in implementing environmental law in their countries. Some of these are long-standing problems and IMPEL should consider whether and how it could help to find complementary and innovative solutions.

There is continued and strong support for the sharing of information, experience and good practice across the Network. The priorities in IMPEL's strategic work programme 2016-2020 continue to be very relevant. An integrated approach across IMPEL's five Expert Teams will be essential in addressing the challenges emerging from this survey.

Areas for particular further consideration in IMPEL's ways of working are:

- Helping organisations to develop more efficient and effective ways of working, for example, by using modern surveillance technologies, risk-based approaches for targeting of resources and improved vocational training.
- Improving the level of engagement with local authorities, for example, through IMPEL's connections with regional authorities and through national and European networks that represent local authorities.
- Supporting countries and organisations in developing compliance assurance strategies that will help to guide regulatory decision-making, achieve more integrated responses and inform regulated businesses.
- Improving the dissemination and uptake of IMPEL's work and encouraging more active feedback from practitioners on their experiences in using IMPEL's outputs.

The report provides 32 recommendations for future actions for further consideration by IMPEL.

Disclaimer



This report is the result of a project within the IMPEL network. The content does not necessarily represent the view of the national administrations or the Commission.



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1 Introduction

1.1 The Purpose of the Project

It is widely recognised that countries sometimes face difficulties in implementing EU environmental legislation, whether as a result of a failure to adequately transpose and apply EU law or from a lack of adequate enforcement of obligations on regulated entities.

IMPEL can make an important contribution by regularly monitoring implementation gaps and its causes from the viewpoint of practitioners in environmental authorities. The network also has an important role to play in identifying possible remedies and developing as well as publicising practical approaches, which can contribute towards closing these gaps.

Improved implementation will not only protect human health and the environment but also contribute to creating a level playing field for industry across EU Member States, aid job creation and support resolution of trans-national environmental issues. Identifying practical obstacles to implementation and eliminating them can reduce administrative burdens and reduce costs of implementation. This current project is designed to help IMPEL and its members to achieve that.

The purpose of the project on the Implementation Challenge carried out in 2014 was to analyse where there were remaining practical challenges in the implementation of EU environmental law and how IMPEL could help to address these challenges in a way that would also provide the greatest benefit to its members. Furthermore, it would also make an important contribution to the evidence base for policy makers.

The subsequent project in 2015 was intended to build on the work that had already been done and to help embed relevant findings in the IMPEL work programme through discussions with the expert teams, namely Industry Regulation, Waste and Trans-frontier Shipment of Waste, Land and Water, Nature Protection and Cross-Cutting Tools and Techniques.

This project was designed to build on and develop the findings from the two previous projects. Its purpose was to obtain more detail about the perceived causes of the Implementation Challenge and to use that information to make proposals for IMPEL on how that challenge might be overcome.



1.2 Scope and Methodology

The project was intended to identify key implementation challenges, trends, developments and relation to other data identifying implementation challenges and potentially their causes and to make proposals on possible future activities for the IMPEL Network. It would also identify common ground in problems and challenges with implementation across the EU where there is potential for IMPEL to help through sharing knowledge and best practice to improve compliance.

The questionnaire was drawn up in such a way as to maximise the information it would be able to gather while at the same time ensuring its findings would be comparable with those obtained by the questionnaire used in 2014. It was circulated in English to all IMPEL National Coordinators and as a support, the Commission provided for machine translation into all other EU-languages as well as into Norwegian, in order to facilitate understanding and maximise the number of responses.

Regarding the further distribution at the national level, it was left to the discretion of the national coordinators how to eventually further it to different bodies of their environmental administrations and how to collect and aggregate the answers. While the majority of the national coordinators distributed the questionnaire to several other experts, coverage and the number of aggregated answers overall were widely varying¹. In addition to the national coordinators' answers, some survey answers were given directly from individual regional and local authorities.

In the event, 63 responses were received from 28 different IMPEL member states. An analysis was made of the replies to the questionnaire and recommendations for future action by IMPEL were drawn up.

A workshop was held at the premises of the European Environment Agency (EEA) in Copenhagen in September 2017 to report back on the findings of the survey and to further discuss some of the key emerging themes. The EEA was also invited to compare the findings of this survey with their EU environmental data. It stated that the survey findings were in accordance with EEA data and had no further remarks.

¹ E.G. the Portuguese Inspectorate IGAMAOT opened the questionnaire to all inspectors and practitioners. In Germany, the questionnaire was integrated in a national research project and sent out to over 2.000 practitioners from German environmental authorities. In Denmark, some environmental authorities were selected for representative answers. In Iceland, the NC herself (an inspector) has answered the questionnaire. Probably the highest number of answers was aggregated in the German National Coordinator's response: it relied on 189 answers from German regional and local authorities.



In 2018 a refined analysis of training needs and best practice suggestions was carried out as well as a revision and streamlining of the questionnaire. The findings were discussed at the IMPEL Expert Team Meetings in autumn 2018 and included into this project report.

2 Tasks undertaken in the Project

2.1 Preparation of Questionnaire

The questionnaire was drawn up in the light of experience with the questionnaire used for the Implementation Challenge project in 2014 and the recommendations from the project in 2015. The main requirement was that the questionnaire should obtain as much useful information as possible. The questionnaire was translated into other languages and circulated to all IMPEL National Coordinators.

2.2 Analysis of Responses to the Questionnaire and Workshop

Responses to the questionnaire were analysed and proposals for future IMPEL work resulting from the project were drawn up. The findings were discussed at the workshop in Copenhagen in September 2017 and further possible work for IMPEL was proposed.

2.3 Refined Analysis of Possible Solutions to Overcome Implementation Challenges

A follow-up project in 2018 conducted an in-depth analysis of possible solutions suggested by respondents to overcome implementation challenges, with a special focus on training needs and best practice examples. The findings were discussed in the IMPEL Expert Team meetings in autumn 2018. Based on these discussions, IMPEL's Multi Annual Strategic Work Programme (MASP) and its Annual Work Programme 2018, IMPEL's options to provide for these potentially helpful measures were explored.

2.4 Revision of the Questionnaire for the Next Wave of the Survey

Following up on the feedback of respondents that the questionnaire was too burdensome, it was revised and streamlined for the next round(s) of the periodic survey. In order to improve the questionnaire and to make it less burdensome for respondents, some major changes were implemented. Nevertheless, the wording of individual items was largely kept identical in order to ensure comparability between results between the periodic surveys. The new version of the questionnaire can be found in Annex V.

3 Analysis of Responses to the Questionnaire



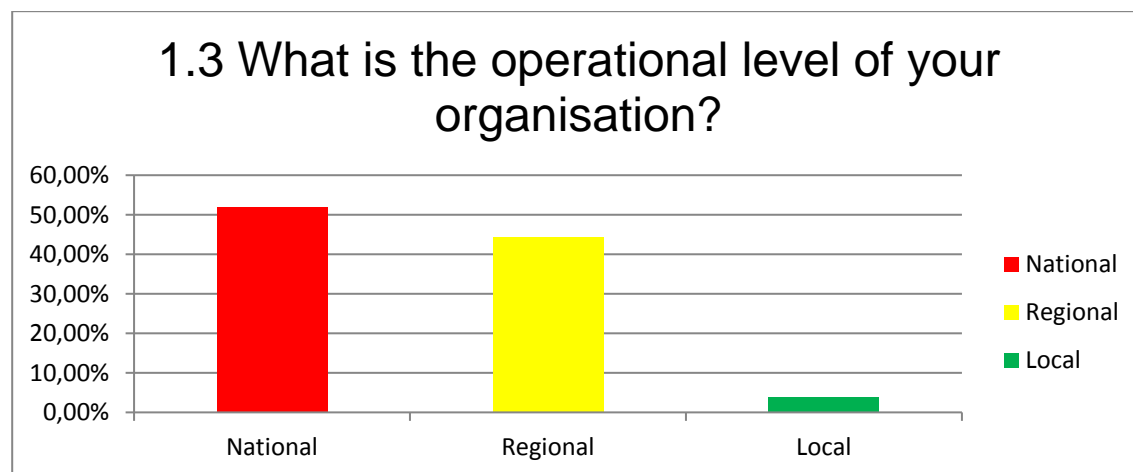
The questionnaire drew on experience with previous IMPEL project on the Implementation Challenge in 2014 and was designed to obtain more detailed information than had been the case with the previous questionnaire.

In order to maximise the number of responses machine translations into different languages of the EU and Norwegian were made available² through the technical support of the EU Commission. The questionnaire was sent to IMPEL National Coordinators and IMPEL members on 31 May 2017. A total of 63 replies were received from 28 different IMPEL member countries. Overall, it is fair to say that a lack of resources (mostly in qualified personnel, less often in technical equipment) is again the most commonly mentioned single barrier to achieving effective implementation of environmental laws. At the end of each section, the principal challenges identified in the Implementation Challenge project in 2015 are listed to provide a comparison with those identified in the current project.

The analysis of the response to the questionnaire is below. Where there are comparable challenges identified in the IMPEL project in 2014 these are shown in *italics* at the end of the relevant section.

3.1 Details of Respondent and Organisation

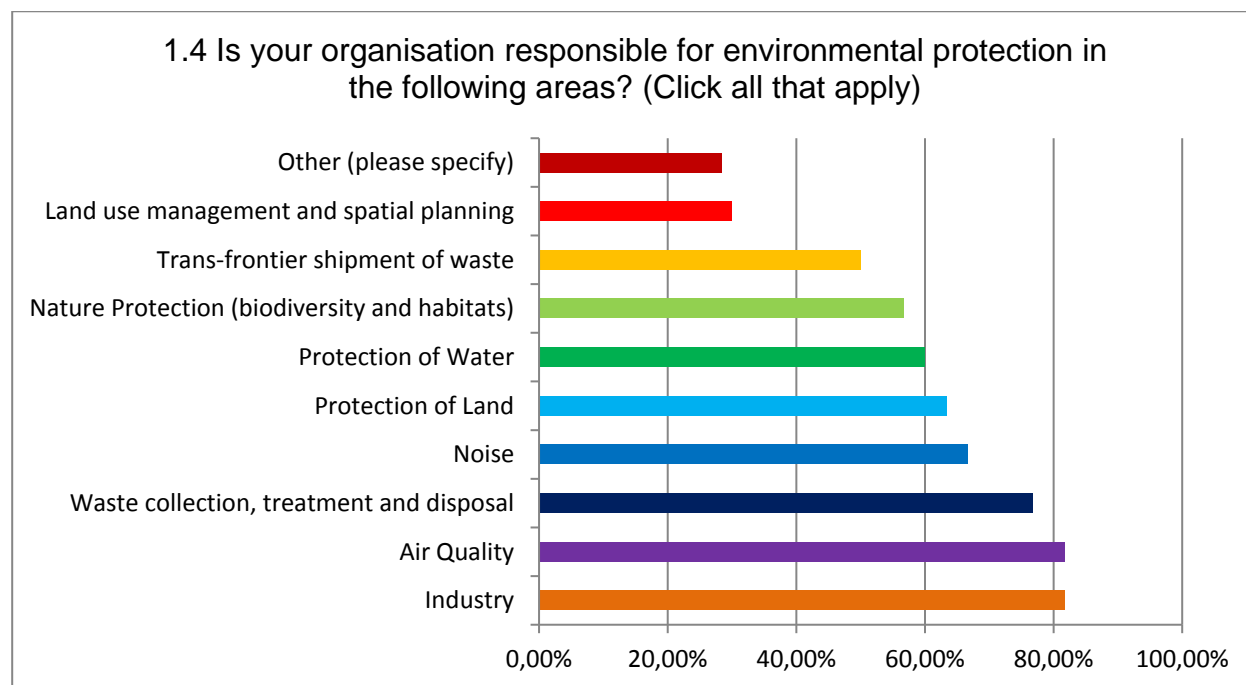
Question 1.3 asked about the **operational level** of the respondent's organisation. There was a broadly equal balance between national (**52%**) and regional organisations (**43%**): there were far fewer replies from organisations operating at a local level (**5%** of the total number).



² However, the quality of those translations had to be improved considerably through extensive linguistic revisions in order to enhance comprehensibility. Only a minority of national coordinators was able to invest the resources necessary for this revision. Some others and those national coordinators coming from IMPEL Members with non EU-languages solely used the English version of the questionnaire.

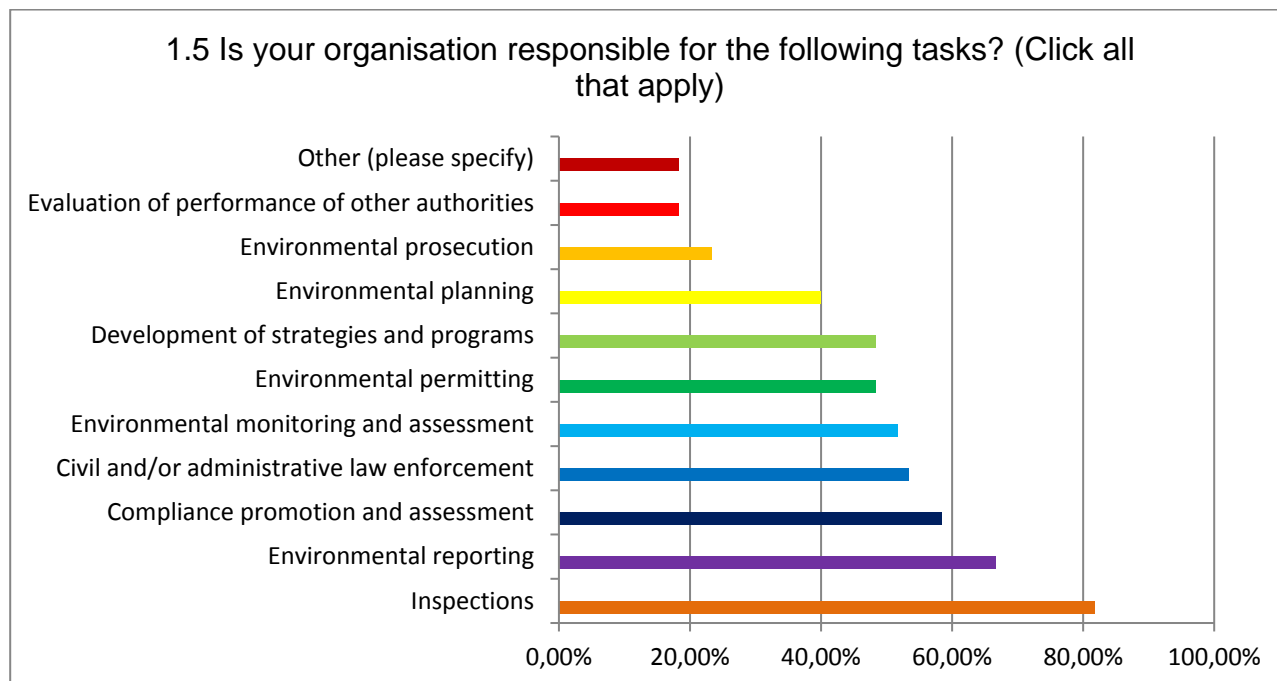


Question 1.4 was about the **areas of responsibility for environmental protection** of the respondent's organisation. There was a good broad coverage of areas of responsibility as can be seen in the table below.



'Other' areas of responsibility included REACH, Seveso and Bathing Water quality.

Question 1.5 was about the **tasks** for which the respondent's organisation was responsible.



In terms of responsibility for tasks, **82%** had responsibility for inspections and **67%** for environmental reporting. **59%** had responsibility for compliance promotion and assessment, **58%** for environmental monitoring and assessment, **53%** for civil and/or administrative law enforcement and **48%** for tasks involving environmental permitting. **48%** had responsibility for development of strategies and programmes and **23%** had environmental prosecution while **18%** had evaluation of performance of other authorities. Other tasks mentioned included joint inspections with other authorities, environmental impact assessment of Natura 2000 sites, REACH, Seveso and the development of policy and legislation.

3.2 Industry, Noise and Air Quality

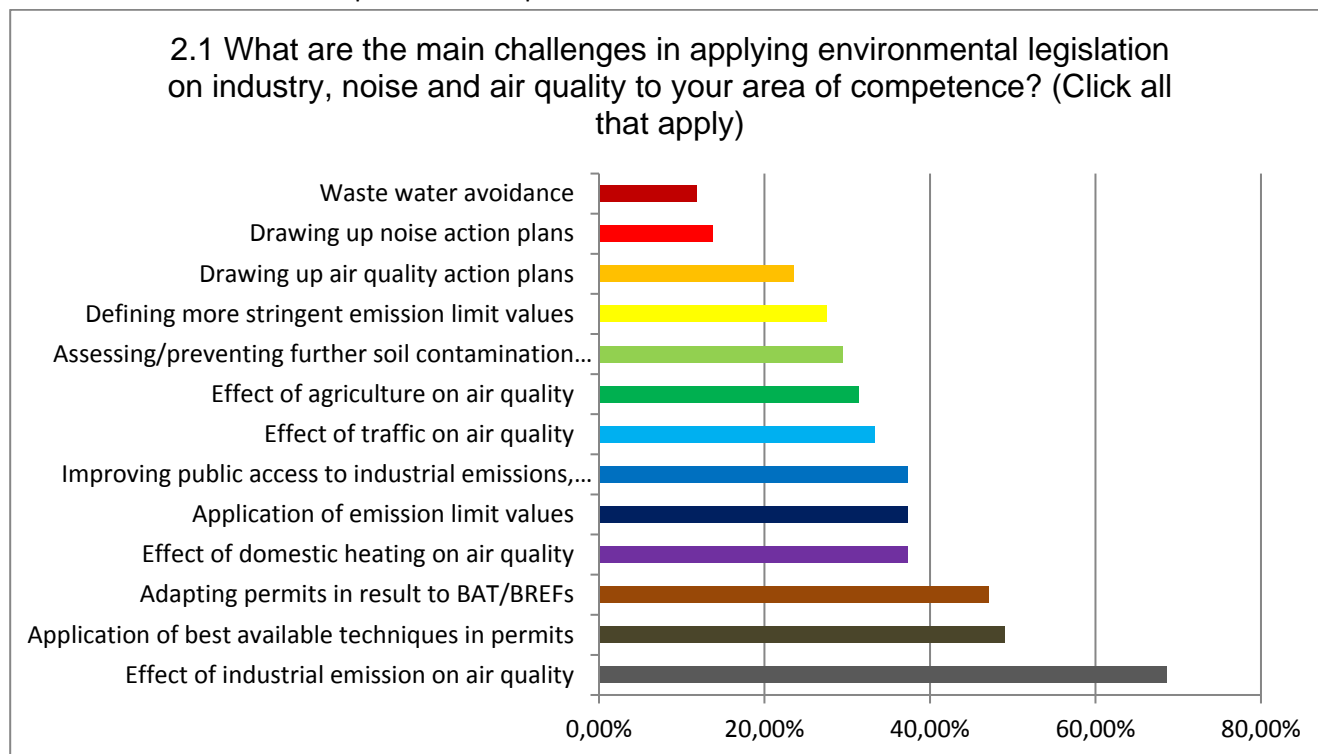
3.2.1 Main Challenges

Question 2.1 asked about the main challenges **in applying environmental legislation on industry, noise and air quality** in the areas of competence of those who had completed the questionnaire. In reply to this, **69%** cited the effect of industrial emissions on air quality, **49%** the application of best available techniques in permits and **47%** adapting permits as a result of BAT and BREFs.

The effect of domestic heating on air quality was mentioned by **37%** as was improving public access to information on industrial emissions and application of emission limit values: the effect of traffic on air quality was mentioned by **33%**, the effect of agriculture on air quality by **31%** and assessing/preventing further soil contamination around installations was mentioned by **29%**. Defining more stringent emission limit values was mentioned by **27%**, drawing up air quality action plans was mentioned by **24%**, noise action plans by **14%** and waste water avoidance by **12%**. One of the respondents stressed the importance of cooperation between



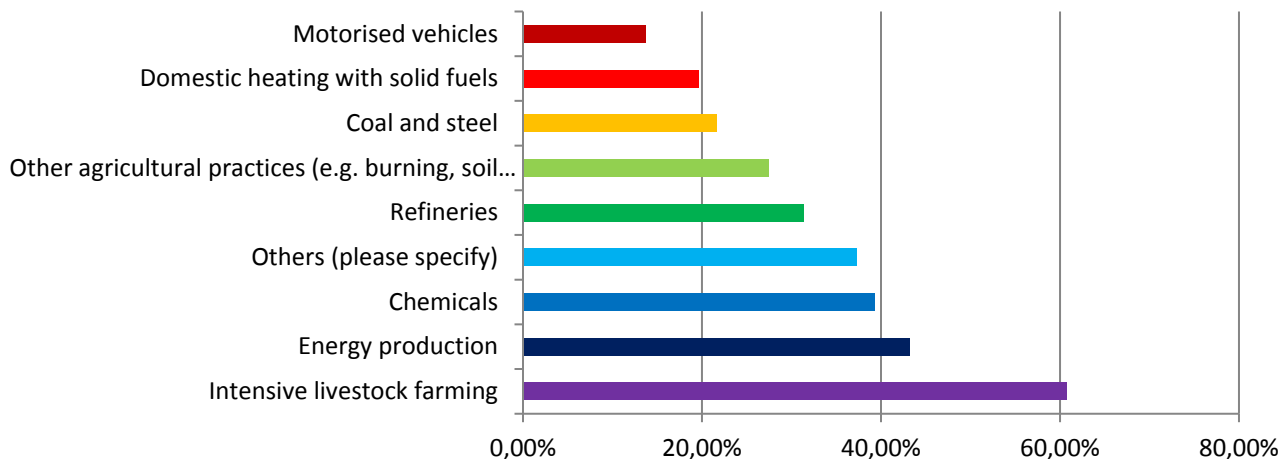
environmental authorities and another said that local level authorities lacked technical equipment to measure air pollution and there was no possibility to check the accuracy of self-monitoring reports. One said that the main challenge can often be to identify the source of pollution, for example noise when a complainant is far away from the source. One pointed out that, while adapting permits to BAT/BREF, the results in terms of actual improvements in emission levels are limited. Permits tend to stick to the middle value of the range given as admissible within a BAT/BREF and the industry only follows the permit conditions without setting up a mechanism of continuous improvement of performances.



Question 2.2 sought information about **specific industry sectors or processes that present the greatest challenges**. **61%** mentioned intensive livestock farming. Energy production was next (**43%**) followed by chemicals (**39%**). This was followed by refineries (31%) and other agricultural processes (27%). Coal and steel was mentioned by 22% and domestic heating with solid fuels by 20%: motorised vehicles were mentioned by 14%. In the other categories mentioned there were no particularly numerous cases though waste treatment was mentioned in four replies and mining was mentioned in two.

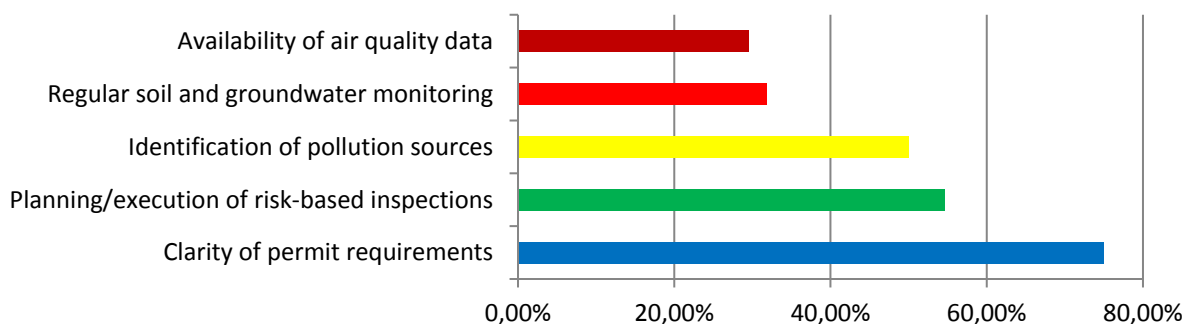


2.2 Are there specific industry sectors or processes that present greater challenges than others? (Click all that apply)



Question (2.3) identified a clear factor on the **key challenges in the control of industrial emissions**, namely clarity of permit requirements mentioned by **75%**. Planning and execution of risk-based inspections were mentioned by **55%** and the identification of pollution sources was mentioned by **50%**.

2.3 What are the key challenges in the control of industrial emissions and ambient air quality? (Click all that apply)



Regular soil and groundwater monitoring was cited by 32% and availability of air quality data by 30%. One reply mentioned the lack of legislation on odours and standards and of measuring systems for the impact of odour. Another mentioned a lack of equipment for the measurement and analysis of air pollution. The use of solid fuel for domestic heating was seen in one case as one of the most significant contributors to national levels of pollution such as PM2.5. Two mentioned issues with self-monitoring, including reliability and quality. One mentioned problems when the operator does not come forward with the information required which can be due to ignorance of the legislation or unwillingness. Another said that only the manager of an installation



knows exactly how to control self-monitoring effectively. Competent authorities tend to be over-prescriptive in order to fill the knowledge gap. One said that only rarely are challenges caused by legislation.

Question 2.4 sought to identify the **main underlying reasons and causes of problems in achieving the requirements of relevant EU legislation**. Insufficient capacity in terms of staff was mentioned as being the primary cause.

On definitions, one said that terms and definitions are differently used in Directives from the ones used in BAT conclusions. Specific terms quoted for unclear definitions included nuisance, intensive agriculture and installation. For data and information from operators, it is sometimes difficult to get reports from smaller operators and it can be difficult to fight against diffuse air emissions and odours in part because of a lack of specific information. On collection of data by the authority, one said that this was not done. Another pointed out that this is much less of a problem than in the past because there is now an IT system for the collection of data but what is missing is an analysis of that data. One pointed out that they had limited on-line access to environmental permits. On technical equipment, there was some feeling that the equipment was too old but otherwise little in the way of strong feelings on that. On training, there was felt to be a need for guidance about implementation of IED (including permitting) and also on BAT and BREFs.

Question 2.5 was about **other main reasons for problems** in achieving the requirements of relevant EU legislation. Uniformity of application across the country was seen as a challenge as was the lack of coordination between different EU Directives. Over-regulation of reporting requirements is a burden and the initial state report according to the IED is meaningless on traditional sites. One mentioned the poor quality of translation of certain EU legislation into their own language.

Industry and air - key implementation challenges as identified in 2014:

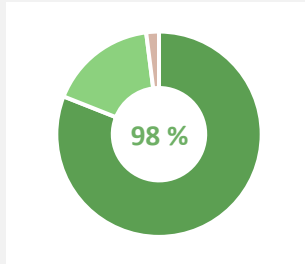
- *The effective implementation of the Industrial Emissions Directive (IED) and how this will overcome the legacy problems caused by historical bad application of the IPPC Directive.*
- *Conclusions on the definitions of Best Available Techniques (BAT) for different industry sectors through the IED that are practical, achievable and enforceable, and deliver a level playing field across Europe. Understanding how the ranges in emission limit values (ELVs) are applied in practice.*
- *Evaluating the impact of emissions from industries on ambient air quality and the achievement of ambient air quality standards, and the implications for setting ELVs (particularly in relation to Article 18 of the IED and the possibility of setting more stringent ELVs than defined by BAT in areas where environmental quality standards are exceeded).*
- *Soil contamination around IED installations and dealing with legacy problems caused by historical contamination.*

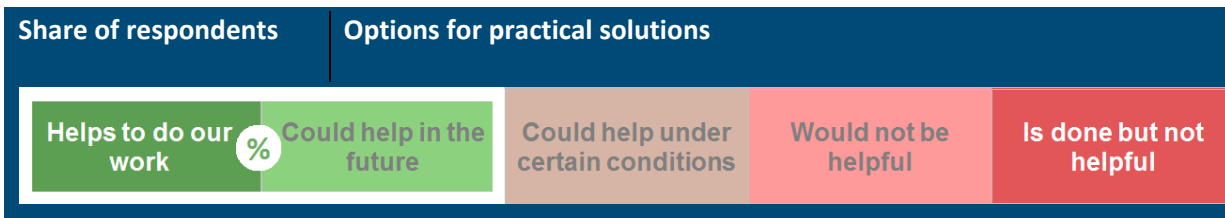


- *Implementing the public access to information provisions in the IED; improving information, public participation and transparency; sharing information on regulatory activities such as inspection reports with the public; improving the handling of complaints.*

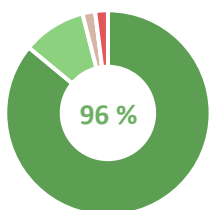
3.2.2 Possible solutions

Question 2.6 asked **what would help to address and overcome challenges in applying and enforcing industry, noise and air quality legislation**. The following table ranks these possible solutions according to the respondents' approval rate (share of respondents answering "helps to do our work" or "could help in the future"). The graphs show the distribution of responses for each possible solution. For each possible solution there is a short summary of respondents' comments regarding the item. These comments are mostly by individual respondents and do not necessarily reflect widely-shared opinions; nevertheless, these ideas and examples can help to operationalize the survey's results into concrete actions.

Share of respondents	Options for practical solutions				
Helps to do our work	Could help in the future	Could help under certain conditions	Would not be helpful	Is done but not helpful	
	<p>Sharing knowledge, skills and good practice <i>between your and other competent authorities</i> (n = 52)</p> <ul style="list-style-type: none"> • IMPEL, national IMPEL networks and other national networks help connecting and sharing knowledge between authorities. Boosting the support for IMPEL is recommended. • Sharing knowledge between authorities of smaller countries is easier because one knows each other if working in the same field. • Two national networks regarding environmental protection are described as good practice examples – one of them links all regional environmental protection agencies by law. • The interconnection of authority databases can help sharing knowledge and practices. • Networking activities should be designed around specific questions to generate a common benefit for participants. 				

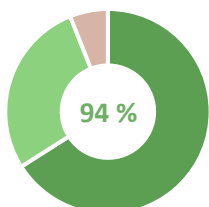


Sharing knowledge, skills and good practice inside your authority (n = 51)



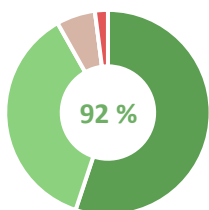
- Several programmes and forums inside authorities are mentioned referring to national and international network structures – especially IMPEL – which provide training.
- Clearly structured exchange is needed for cross media and cross sectoral problems; lack of staff hinders the exchange.
- A national network is named as a good practice example regarding knowledge sharing between authorities.

Establishment of and active participation in networks of environmental professionals to facilitate communication and best practice exchange (n = 50)



- Recommendation of the participation in IMPEL activities.
- Several national networks are named as best practice examples.
- Network activities need to be linked to the work of competent authorities and should produce added value for the authorities' work; otherwise resources are blocked. The establishment of a network for environmental inspectors is suggested.

Receiving application-oriented guidance and training (n = 48)



- Guidance and training services regarding BAT, noise, atmospheric emissions, indoor air quality of buildings, air emissions monitoring, treatment of liquid waste, classification of waste, minimum requirements for waste disposal plants, cross-media monitoring of waste disposal, surveillance of sewer systems are suggested.
- Templates for reconsidering and updating of permits are required.
- Buying training sessions from private companies is possible; the risk of manipulation then needs to be minimized.



Share of respondents		Options for practical solutions			
Helps to do our work	%	Could help in the future	Could help under certain conditions	Would not be helpful	Is done but not helpful

88 %

Cooperation of networks (between the regional, national and European level and across the whole compliance chain) (n = 49)

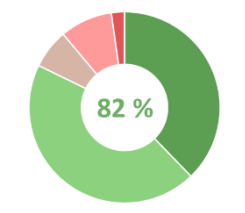
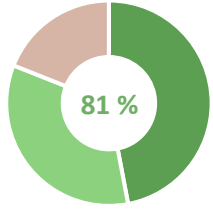
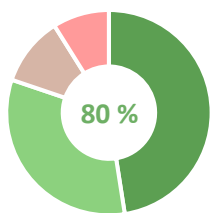
- IMPEL is seen as such a network.
- Cooperation of networks should be implemented in the IMPEL mutual joint visit system.
- Only reasonable if the legal systems of the member states or sectors are comparable.
- Language barrier is seen as a problem for competent authorities' transnational networking activities.

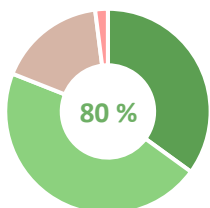
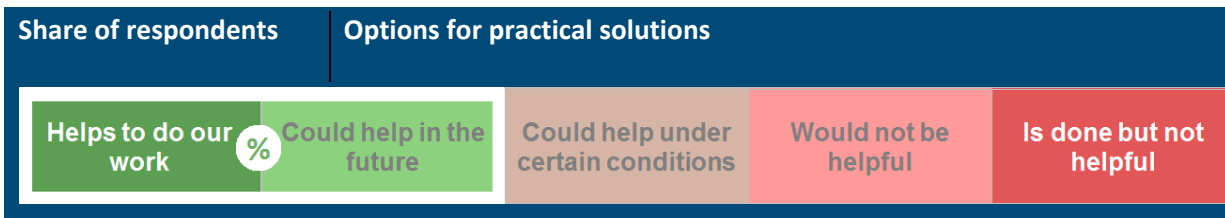
84 %

Access to all available geospatial data relevant for your geographical area of competence (according to INSPIRE) (n = 43)

- Data sources are already used for daily work; complaints are made about the lack of trained personnel and equipment in order to use these sources.
- Access and information exchange on existing platforms are needed. These technologies could be useful in order to identify sources of pollution (small and medium sized industrial sites).
- Staff, equipment and training is needed first.

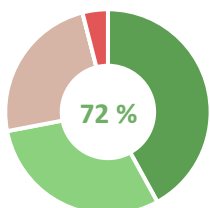


Share of respondents	Options for practical solutions				
	Helps to do our work	Could help in the future	Could help under certain conditions	Would not be helpful	Is done but not helpful
	<p>Access to modern surveillance technologies and earth observation technique (n = 45)</p> <ul style="list-style-type: none"> • Already common practice in some cases. • The necessity for equipment and staff in order to use these technologies is a major problem. • Online data and emission measurements of companies should be available online. • Competent authorities should have free access to these technologies if funded by the EU. • Technologies should be used to monitor the environmental status, identify and locate sources of pollution and collect evidence against polluters. 				
	<p>Coordinated action between different inspection authorities: <u>case-meetings</u> (n = 47)</p> <ul style="list-style-type: none"> • Already common practice in some cases. • Case meetings are useful for operators of installations during the planning and permitting process in order to clarify different requirements of various authorities. • Two inspection networks are named as good practice examples improving coordinated actions. • The implementation of coordinated action is difficult because of different legislations and approaches. 				
	<p>Coordinated action between different inspection authorities: <u>common strategies</u> (n = 46)</p> <ul style="list-style-type: none"> • Already common practice in some cases. • Common guidance document on reporting and controls by one government is named. • The difference of legislations and approaches hinders this strategy. 				



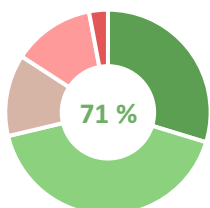
Standing procedures to regularly inform policy makers about practical experiences and work results (n = 46)

- Already common practice in some cases.
- This approach can help producing better legislation and can improve the quality of regulations but should not produce more redundant reporting requirements.



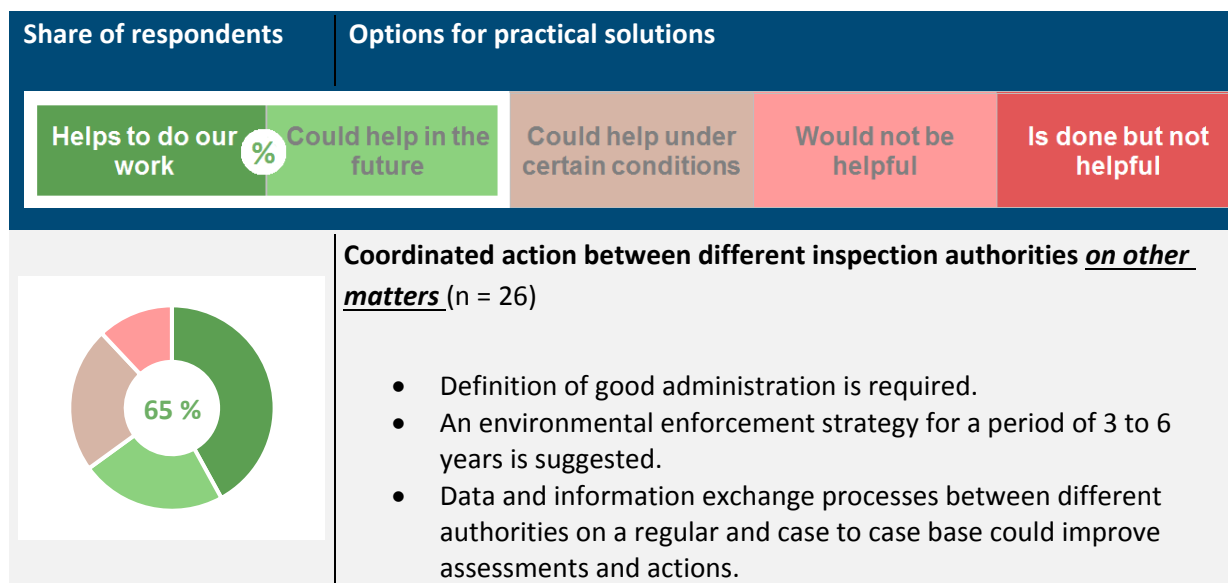
Coordinated action between different inspection authorities: common inspections (n = 50)

- Already a common practice in some cases.
- Makes sense in some cases but could also increase the workload if becoming mandatory and not being effective.
- Synchronized inspection frequencies as well as adequate time is required.
- Too many barriers were experienced while trying common inspections.
- Two inspection networks are named as best practice examples.
- Joint inspections with health authorities (cases of intensive pig and poultry rearing) were helpful to address odour-related complaints.



Coordinated action between different inspection authorities on land use planning (n = 31)

No individual comments on this item.



Overall, the results of this question show that **exchange and communication between different authorities** (environmental as well as others) and cooperation within **networks** are seen as highly important. IMPEL as well as national networks were often named as helpful in order to share knowledge, skills and good practices between authorities. Throughout the survey, however, respondents stressed that exchange with other authorities is only possible with sufficient staff and time resources. Regarding transnational networking activities, respondents saw the language barrier and differences of legal systems between and in the member states as a problem which should be taken into account.

Another central concern of respondents is the importance of **application-oriented guidance and training**. The respondents suggested the following topics for guidance and training services: BAT, noise, atmospheric emissions, indoor air quality of buildings, air emissions monitoring, treatment of liquid waste, classification of waste, minimum requirements for waste disposal plants, cross-media monitoring of waste disposal and surveillance of sewer systems. Another proposal was to provide a template for reconsidering and updating permits. IMPEL is currently working on some of these issues, especially BAT, in its project [Supporting IED implementation 2017](#)³, including the preparation of (online) training materials for competent authorities. The project “Doing the Right Things (DTRT) for IED” is moreover developing step by step guidance for permitting and inspection for IED and assessing training needs in this field.

The **availability and accessibility of data and information** is another important point for respondents. Some of the suggestions were: connecting authority databases, harmonising IT procedures and document management systems, making emission measurements of companies available online and using surveillance and earth

³ [Supporting IED Implementation. IMPEL Project: 2015/01-2016/01 - 2017/01 - 2018/01.](#)



observation techniques to monitor environmental status, identify and locate sources of pollution and collect evidence against polluters.

The respondents' attitude towards **coordinated action between different inspection authorities** through case-meetings, common strategies or common inspections was altogether quite positive. Some respondents, however, pointed to difficulties because of the differences of legislations and approaches. Common inspections could only work out if inspection frequencies were synchronised and time and personnel resources were adequate. Common inspections should only be used if they are beneficial – a mandatory character could increase the workload. Common guidance documents on reporting and controlling as well as common protocols would support joint action. As a best practice example, one respondent named joint inspections with health authorities in cases of intensive pig and poultry rearing to address odour-related complaints. Case-meetings were perceived as useful for operators of installations during the planning and permitting process in order to clarify different requirements of various authorities.

Question (2.7) asked for **information on any other helpful measures**. Only few respondents answered this question and mentioned the following items as helpful measures:

- Common communication strategies;
- Smart tools;
- Technical guidelines;
- Simplifying the legislation;
- Harmonising IT procedures and document management systems;
- Better technical equipment;
- Central support centres;
- Exchange program for professionals to learn from each other;
- Embedding of practitioners in the legislative process;
- Common inspection protocols for each sector;
- Coordinators between different regions and levels.

In Germany the questionnaire was accompanied by a research project which conducted dialogues with implementation and enforcement experts of environmental agencies on the topics of the questionnaire. The following measures were described as useful in the field of industry and air:

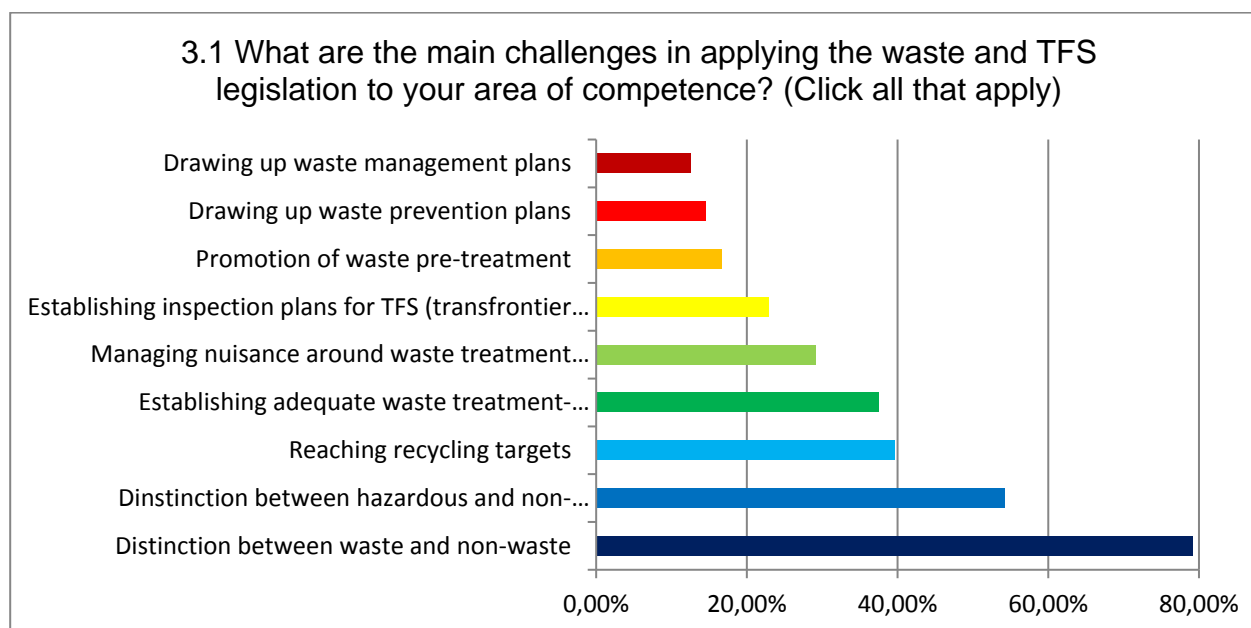
- Prevention of accidents: common inspections of environmental agencies and fire brigades;
- Work coordination of environmental agency and labour protection agency;
- “One face to the customer” approaches with one central contact person for operators are useful for small sites; for bigger sites: team of experts from different environmental areas;
- Providing adjustable digital materials at national level, e.g. an IED risk matrix.



3.3 Waste and Trans-Frontier Shipment of Waste (TFS)

3.3.1 Main challenges

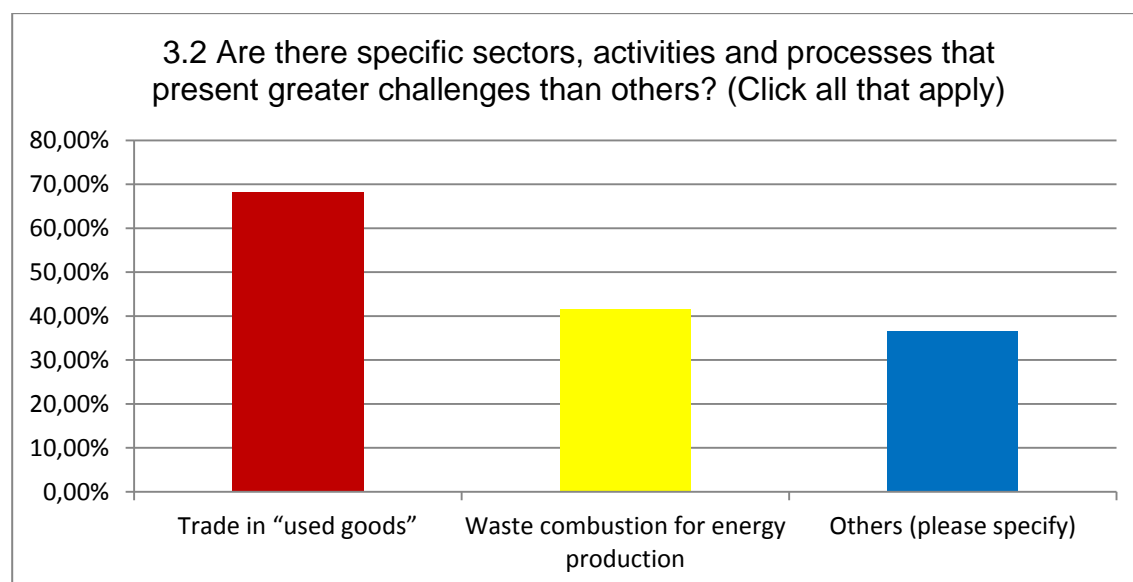
Question 3.1 was about the **main challenges in the implementation of the relevant legislation for waste and trans-frontier shipment of waste**. Only two issues were cited by more than 50%: these were the distinction between waste and non-waste (79%) and the distinction between hazardous and non-hazardous waste (54%). Reaching recycling targets was mentioned by **40%**.



The establishment of adequate waste treatment infrastructure was mentioned by 38% while managing nuisance around waste treatment plants and landfills was mentioned by 29%. The establishment of inspection plans for TFS was mentioned by 23%, promotion of waste pre-treatment by 17% and drawing up waste prevention plans by 15%. The drawing up of waste management plans was mentioned by 13%. One difficulty mentioned was combating illegal disposal practices with a highly implementation-oriented legal basis (end-of-life cars, commercial waste) and establishing a reliable legal distinction between permissible and prohibited waste treatment /recycling. Also mentioned was ensuring that, before new substances are introduced, consideration is given to waste avoidance/treatment/ disposal requirements. Challenges also arise from enforcement of the legal requirements in areas that have been outsourced to 'so-called' certifiers (end-of-life vehicles, waste management companies), but which only exercise their control obligations following pressure from the authorities. There are problems (mentioned several times) with the application of waste codes from the European list and customs. One mentioned a problem with the appropriate management of the waste disposal cessation and of the old municipal waste dumps closure process.



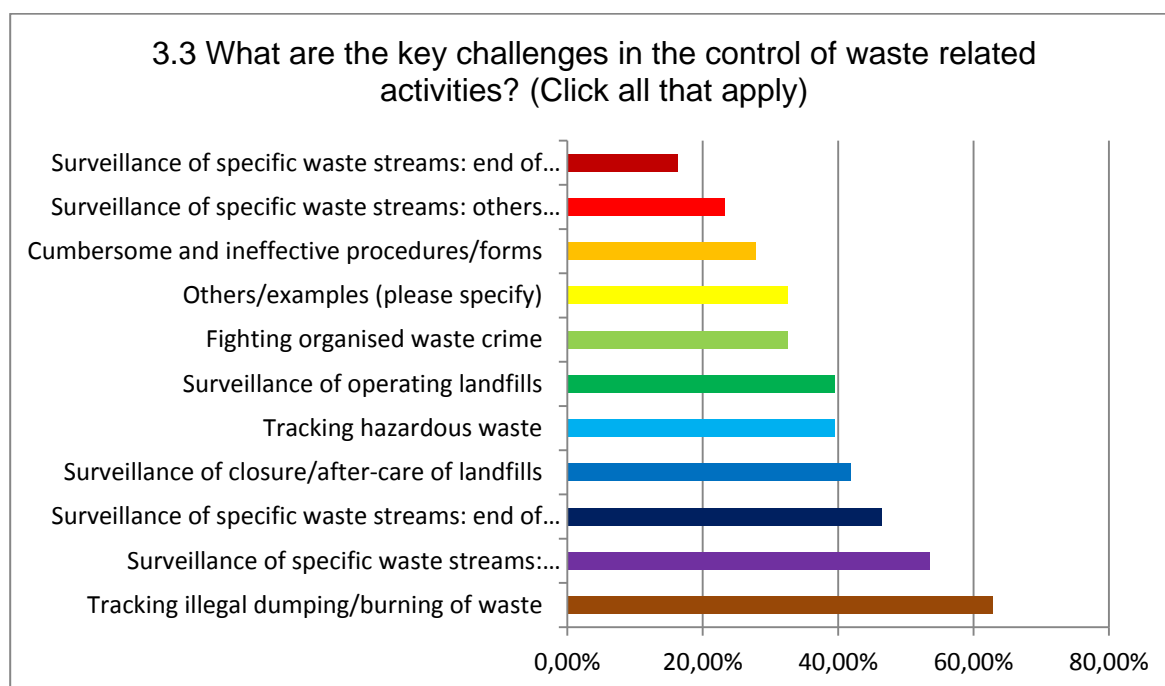
Question 3.2 was about **specific sectors, activities and processes that present greater challenges** than others. The biggest was the trade in used goods (**68%**) with waste combustion for energy production mentioned by **41%**. The 'others' category covered quite a broad spectrum including plastics and WEEE, trans-frontier shipments of inert waste, landfills, treatment of waste before landfilling, treatment of animal by-products in waste treatment plants, illegal waste collecting storage and treatment sites and selective collection of municipal waste. The topics mentioned by more than one included end of life vehicles, alternative treatment (other than landfill which is now not possible) for some organic waste fractions and enforcement of orders, especially in the case of insolvencies of operators of installations.





Question 3.3 asked about the **key challenges in the control of waste-related activities**. The main challenge was the tracking of illegal dumping and the burning of waste (63%) followed by surveillance of electric or electronic waste (53%): next was surveillance of end of life vehicles (47%).

Surveillance of closure and after care of landfills (42%) was next and after that came tracking of hazardous waste and surveillance of operating landfills (both on 40%). Fighting organised waste crime was on 33%: cumbersome and ineffective procedures and forms was on 28% and surveillance of end-of-life ships was cited by 16%. In the 'other' topics raised demolition waste was mentioned by three people and monitoring of construction waste was mentioned by two. Further topics mentioned included green listed waste, particularly in relation to what kind of level is acceptable, illegal collection and sale of metal waste, lead batteries, hospital waste and ships waste.



Question 3.4 was about the **main underlying reasons and causes for challenges in achieving the requirements of EU legislation on waste and trans-frontier shipment of waste**. The reason mostly mentioned was the inadequate range of professional qualifications for efficient implementation and enforcement. One mentioned that EU laws change quickly so training is needed, and another said that his organisation made use of 'general inspectors' who were not always sufficiently skilled for TFS inspections. A third said that competent authorities were often lost in unimportant details (because of the complexity of the legislation) and thus only tackled the surface of real waste problems. Next came insufficient evidence, data and information due to lack of collection and analysis by the authorities. One said that this was very time consuming and difficult and another said that there was a lack of skills in sampling and lab equipment. Following on from this was inadequate urban and land use management and planning. The only common thread in the comments (and then only mentioned by two



people) was that the problem was connected to illegal construction and activities. One said that the location of some treatment plants is associated with complaints and another that the problem is that the competences for this issue are divided between regional and national level. At the same level was insufficient capacity in competent authorities in technical equipment.

One suggestion was that there might be further support on EU best practices on dealing with big data through IT systems, to support data-sharing (also nominal) and intelligence-led action, but also on collection and analysis of self-monitoring and reporting with early detection - with IT alerts - of infringements as well as to take immediate action to investigate and correct situations with (potential) environmental harm. Another mentioned they were working with old and unsuitable equipment. Next was insufficient training and guidance: specific areas mentioned here included environmental/waste legislation; new waste treatment techniques and technologies; waste characterization and classification (including sampling, testing, etc.); economic issues of waste management and guidance (translated), on Waste and TFS regulation, also regarding related areas such as the compliance with financial liability and customs regulations.

After that was insufficient evidence, data and information due to a lack of reporting by the duty holder. There were few comments on this.

One said that, generally, they did not receive all the required information for processing which could be because of complex rules, insufficient knowledge or lack of prioritisation. Another considered that there is a need to improve this reporting to authorities, namely on quality of data and a system that allows data-sharing (also nominal) to follow the wastes through the waste chain and ensure the process to change quantities and quality/codes of wastes (to non-hazardous or to non-waste and with the use of different EU codes). In the comments on whether the legislation was incomplete, unclear or overly complex, there was suggestion that there need to be clearer definitions (especially of end of life vehicles). TFS regulation is seen as quite difficult and one said that the TFS regulation is often inadequate in providing clear guidance on what waste types can be shipped under certain classifications. This can lead to frustration for stakeholders in the industry and increased costs. The final topic mentioned was a lack of human resources.

Question 3.5 sought information about **other main reasons for problems in achieving the requirements of relevant EU legislation**. The complexity and diversity of the legislation was mentioned in a few cases, as was the lack of statistics about the prosecution of waste-related crime on the European level and of transboundary regulation for competencies for prosecution. Other factors mentioned were the poor separation of waste at source, the lack of clarity in permits and the need in one case for the establishment of waste management facilities. One pointed out that operators of small enterprises and sites often lack qualified personnel. These small facilities are often the responsibility of municipalities which do not have enough qualified staff.

Waste and Trans-frontier Shipment of Waste - key implementation challenges as identified in 2014:



- *The definition of waste and achieving a common interpretation and level-playing field for end of waste, particularly where exports/ imports of materials are involved.*
- *Achievement of re-cycling targets in the Waste Framework Directive (and more stretching targets in the proposed amendment).*
- *Managing environmental impacts around closure/after-care of landfill sites.*
- *Understanding and addressing hazardous waste that is unaccounted for.*
- *Dealing with specific problem issues, including end of life vehicles, waste electronic and electrical equipment, waste produced in hospitals, dismantling of ships, bio-waste, treatment and disposal of contaminated soils (for example from oil industries) and management of sludge produced in urban waste water treatment plants.*
- *Compliance promotion in pre-treatment of waste.*
- *Inspection and enforcement of trans-frontier shipment of waste – requirement for inspection plans by 2017. Need for improved information and move to electronic recording.*
- *Growth in illegal activities and serious organised waste crime.*
- *Nuisance problems caused by poor management at waste sites, including dust, odours and litter.*

3.3.2 Possible solutions

Question 3.6 asked **what could help to address and overcome challenges in applying and enforcing legislation on waste and trans-frontier shipments of waste**. The following table ranks these possible solutions according to the respondents' approval rate (share of respondents answering "helps to do our work" or "could help in the future"). The graphs show the distribution of responses for each possible solution. For each possible solution there is a short summary of respondents' comments regarding the item. These comments are mostly by individual respondents and do not necessarily reflect widely-shared opinions; nevertheless, these ideas and examples can help to operationalize the survey's results into concrete actions.



Share of respondents

Options for practical solutions

Helps to do our work

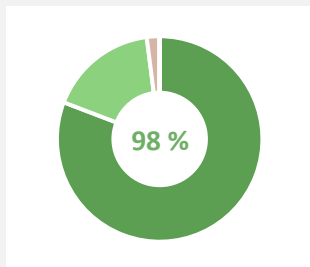
%

Could help in the future

Could help under certain conditions

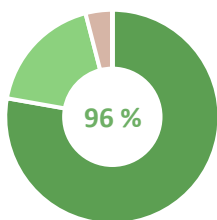
Would not be helpful

Is done but not helpful



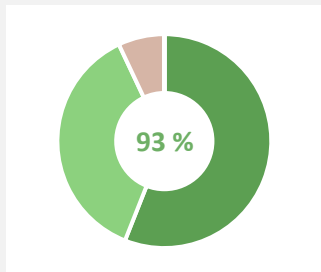
Sharing knowledge, skills and good practice between your and other competent authorities (n = 46)

- The national networks of IMPEL are named as best practice examples.
- Information exchange programs between different authorities (prosecutors, police, and customs etc.) are already installed.
- Such activities (especially with people from different authorities at the same enforcement level) would be useful but the lack of personnel resources is problematic.



Sharing knowledge, skills and good practice inside your authority (n = 44)

- Already common practice in some competent authorities.
- The exchange would be useful if it takes place on a certain level.
- An intranet-forum was set up where questions and exchanges of information on implementation are posted.



Receiving application-oriented guidance and training (n = 43)

- The following topics were suggested: waste classification; difference between waste/non-waste, hazardous waste/non-hazardous waste; waste stream control, cross border waste shipments; waste code numbers; end of waste status; efficiency of waste treatment plants; implementation of plan approval procedures; legal changes; case law; sludge disposal; pre-treatment of waste; enforcement guidelines.
- Budgetary and personnel constraints hinder the participation in training and network programs.



Share of respondents

Options for practical solutions

Helps to do our work

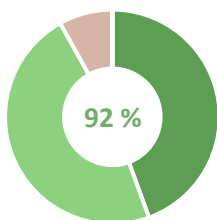
%

Could help in the future

Could help under certain conditions

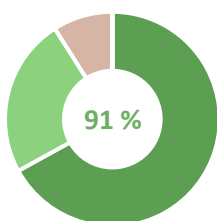
Would not be helpful

Is done but not helpful



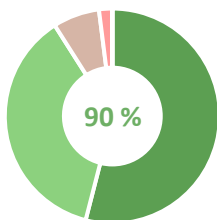
Coordinated action between different inspection authorities: common strategies (n = 36)

- The exchange of best practices is suggested; different legal cultures could be a barrier.
- A common inspection plan is suggested.
- An inspection network is named as a best practice example.
- Understanding the roots of non-compliance is necessary to develop strategies along the compliance chain.



Establishment of and active participation in networks of environmental professionals to facilitate communication and best practice exchange (n = 45)

- During the implementation process such networks would help. The inclusion of the private sector to share best practices is suggested to help private actors to avoid sanctions/penalties by good compliance practices.
- Financial resources of one authority hinder participation in such networks.
- The IMPEL-Guidance on TFS is named as a best practice example for knowledge sharing.

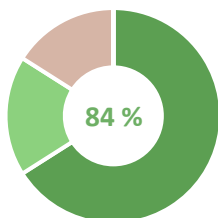
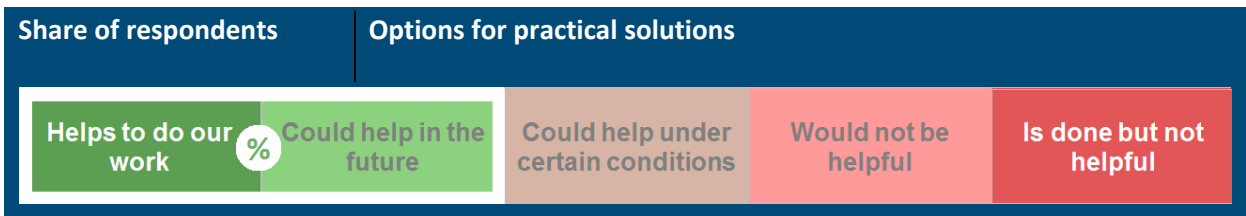


Coordinated action between different inspection authorities: case-meetings (n = 41)

- Already a common practice in some cases.
- The difference of sector-specific legislations hampers such activities.
- Case-meetings or common inspections at the EU level are suggested in order to broaden the understanding of major challenges.

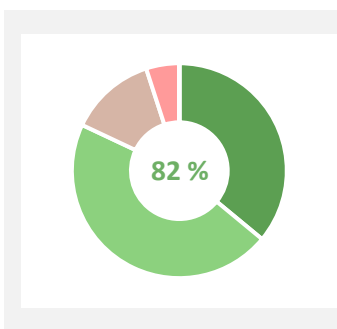


Share of respondents	Options for practical solutions
<div style="display: flex; justify-content: space-between;"> <div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 5px;">Helps to do our work</div> <div style="background-color: #8BC34A; color: white; padding: 5px; border-radius: 5px;">% Could help in the future</div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="background-color: #A1887F; color: white; padding: 5px; border-radius: 5px;">Could help under certain conditions</div> <div style="background-color: #F44336; color: white; padding: 5px; border-radius: 5px;">Would not be helpful</div> <div style="background-color: #C0392B; color: white; padding: 5px; border-radius: 5px;">Is done but not helpful</div> </div>
	<p>Access to all available geospatial data relevant for your geographical area of competence (as intended by INSPIRE) (n = 36)</p> <ul style="list-style-type: none"> • Training and equipment are needed first. • Data can be used to identify illegal dumping sites.
	<p>Cooperation of networks (between the regional, national and European level and across the whole compliance chain) (n = 42)</p> <ul style="list-style-type: none"> • IMPEL, EnviCrimeNet and EUFJE should design a common plan for fighting illicit waste trafficking. • IMPEL is named as a best practice example. • The difference of national and regional legislations hampers such activities.
	<p>Access to modern surveillance technologies and earth observation technique (n = 36)</p> <ul style="list-style-type: none"> • Access to electronic waste registers and emissions remote monitoring systems for waste can be helpful. • The lack of personnel and technological equipment and special training hampers such activities. • The use of these technologies in order to identify illegal dumping sites and landfilling is suggested. • Establishing a European database for TFS waste reporting is suggested. • The transport monitoring system (GIS) is named as a best practice example.



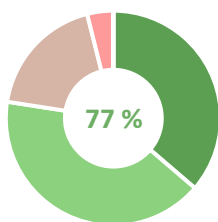
Coordinated action between different inspection authorities: common inspections (n = 44)

- The difference of legislations hampers such activities.
- Some authorities (border police and customs on cross-border-checkpoints) already cooperate on inspections to stop illicit waste shipments.
- Case meetings or common inspections at the EU level are suggested to broaden the understanding of major challenges.



Standing procedures to regularly inform policy makers about practical experiences and work results (n = 39)

- Leading to better legislation if policy makers are willing to learn from practical experience at the implementation level.
- Leading to more reporting requirements without being effective.
- Information exchanges on waste combustion, pre-treatment of waste before landfilling and TFS of waste is suggested.



Coordinated action between different inspection authorities on other matters (n = 26)

- Uniform database solutions; expert exchange and joint task forces are suggested.
- Treatment of animal by-products in waste treatment plants are named as matters.

Overall, the results of the survey show that **exchange and communication between different authorities** (environmental as well as others) and cooperation within **networks** are seen as highly important. IMPEL as well as national networks were often named as being helpful in order to share knowledge, skills and good practices between authorities. Throughout the survey, however, respondents stressed that exchange with other authorities is only possible with sufficient staff and time resources. The following suggestions were made: to foster exchange within and between authorities: setting up an intranet forum where questions can be posted, strengthening the cooperation between IMPEL, EnviCrimeNet and EUFJE to design a common plan for fighting illicit waste trafficking, establishing information exchanges on waste combustion, pre-treatment of waste before



landfilling and TFS of waste. The inclusion of the private sector in information exchange processes can be useful to share best practices and therefore help private actors to develop good compliance practices.

Another central concern of respondents is the importance of **application-oriented guidance and training**. The respondents suggested the following topics for guidance and training services: waste classification; difference between waste/non-waste, hazardous waste/non-hazardous waste; waste stream control, cross border waste shipments; waste code numbers; end of waste status; efficiency of waste treatment plants; implementation of plan approval procedures; legal changes; case law; sludge disposal; pre-treatment of waste; enforcement guidelines; specific information sheets for handling waste. Work on some of these issues is currently done in the IMPEL project [Landfill & Circular Economy](#)⁴ with a focus on landfill and waste treatment plants, pre-treatment of waste, end of waste and by-products.

The **availability and accessibility of data and information** is another important issue for respondents. Among other things respondents suggested: uniform database solutions, using geospatial data, surveillance and earth observation technique to identify illegal dumping sites and landfilling, access to electronic waste registers and remote monitoring systems of emissions and establishing a European database for TFS waste reporting. A transport monitoring system (GIS) and intelligence systems were named as best practice examples. Respondents stressed that access to data and new technologies is, however, only useful if there are sufficient personnel adequately trained to handle the data.

The respondents' attitude towards **coordinated action between different inspection authorities** through case-meetings, common strategies or common inspections was altogether quite positive. Some respondents, however, pointed to difficulties because of differences of legislations between and in member states. Respondents suggested case-meetings or common inspections at the EU level to broaden the understanding of major challenges and common inspections of border police, customs and environmental authorities to stop illicit waste shipments.

Question 3.7 requested a **description of any other helpful measures**. Only few respondents answered this question and mentioned the following items as helpful measures:

- Establishment of NESTs (National Environmental Task Forces);
- New waste legislation for new waste treatment techniques and technologies and waste characterization and classification.
- Software: statistical tools; GIS software; database management systems;
- Collaboration between authorities of different disciplines; cross-cutting exchange of experience on means and methods;
- Streamlining of legislation to the essentials.

⁴ [Landfill & Circular Economy. IMPEL Project.](#)



- The results of relevant research projects (often funded by the EU) should be monitored and effectively communicated to enforcement staff so they can implement the findings (example: project BlockWaste).

In Germany the questionnaire was accompanied by a research project which conducted dialogues with implementation and enforcement experts of environmental agencies on the topics of the questionnaire. The following measures were described as useful in the field of waste and trans-frontier-shipment of waste:

- Annual meetings between environmental agencies and public prosecutors;
- Police academies: Provision of training about waste transport inspections.

3.4 Protection of Water and Land

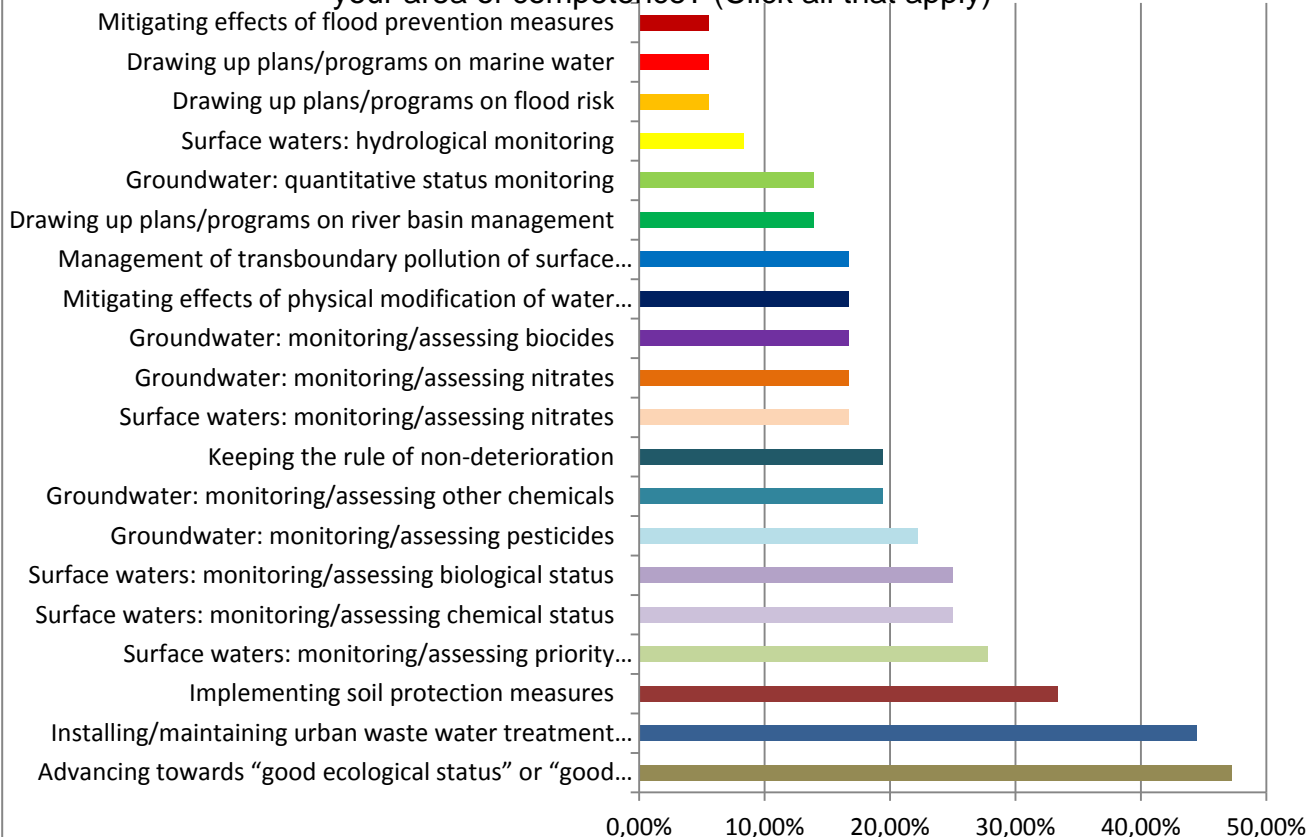
3.4.1 Main challenges

Question 4.1 asked about the **main challenges in applying water and land legislation in the relevant area of competence**. In the replies, **47%** said that the main challenge was advancing towards 'good ecological status' or good environmental status' while **44%** mentioned installing and maintaining urban waste water treatment infrastructure. **33%** mentioned implementing soil protection measures.

28% cited surface waters (monitoring and assessing priority substances) and 25% cited surface waters (monitoring and assessing chemical status and biological status) and 22% groundwater (monitoring and assessing pesticides). The other topics were at or below 20% and can be seen in the table below. In the comments, one referred to mitigating the effects of non-point load and another to the over-abstraction of water sources. Another said that it was more difficult to implement the Programmes of Measures than to draw them up while one mentioned inspection of point sources discharges from industry and other environmental users into urban or industrial collective waste water treatments. One cited enforcement and application of regulatory requirements in water and soil protection, emission requirement and further water-related requirements for waste water discharges (minimum public requirements). One comment was that the information flows related to water matrix are too complex, including both information on the environmental status and analysis of anthropogenic and plants posing pressures on water resources. There was an issue about the definition of drinking water protection zones and also the initial status report for IED plants.



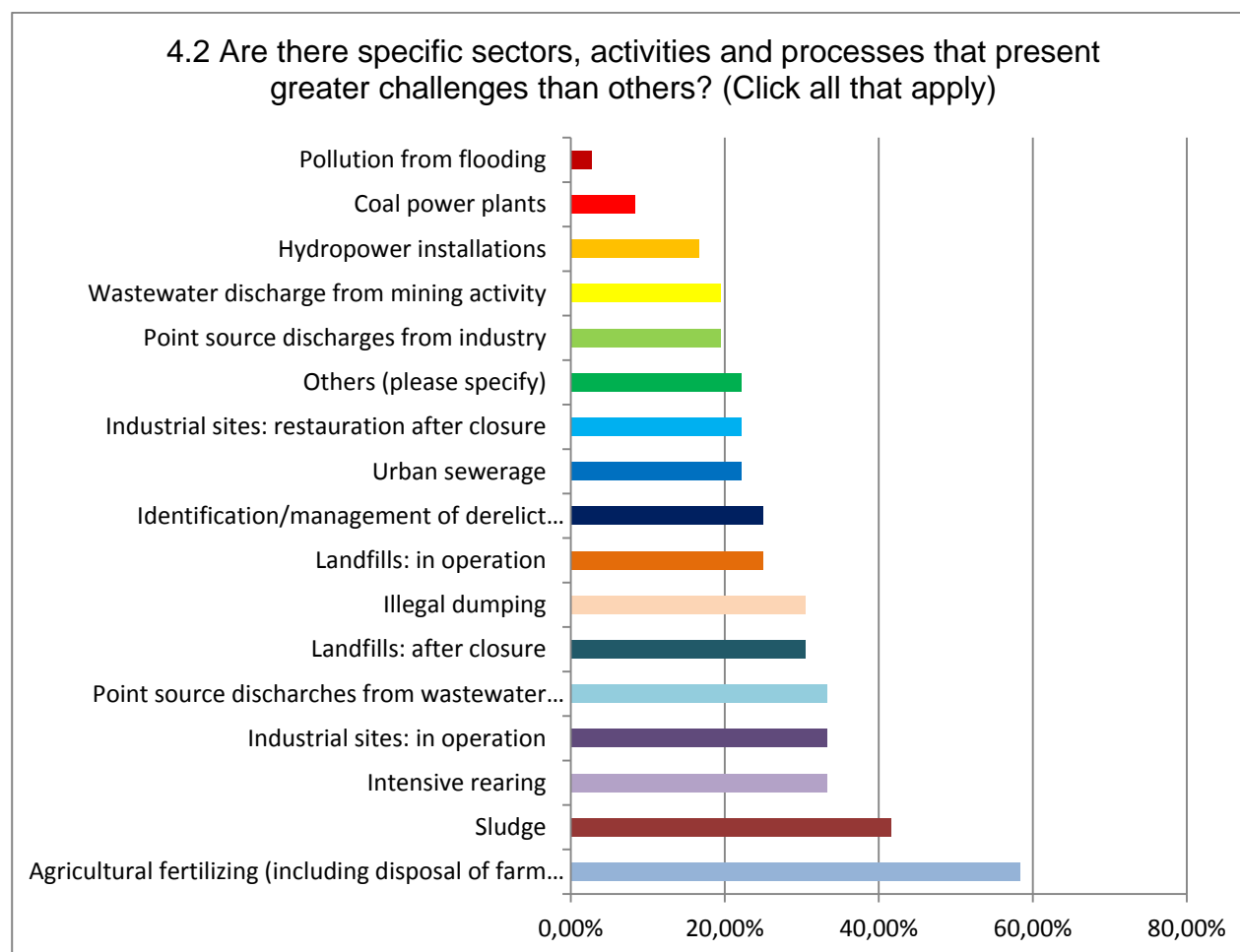
4.1 What are the main challenges in applying water/land legislation to your area of competence? (Click all that apply)





Question 4.2 was about specific **sectors, activities and processes that present greater challenges** than others. Agriculture featured prominently here with **58%** mentioning agricultural fertilising (including disposal of farm effluents), **42%** mentioning sludge and **33%** mentioning intensive rearing, industrial sites in operation and point source discharges from wastewater treatment plants.

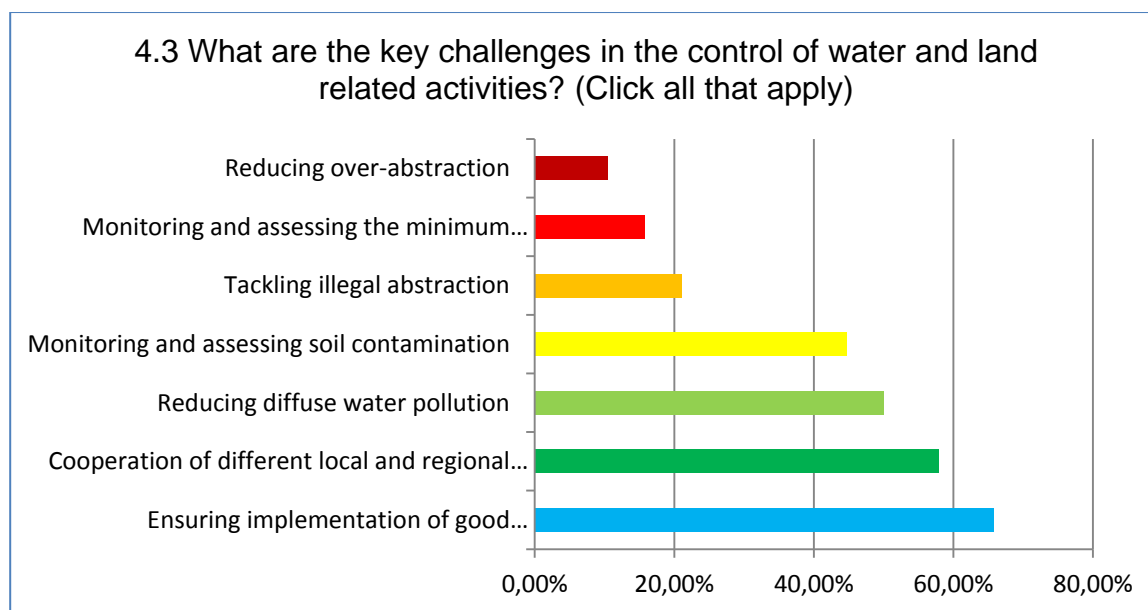
Illegal dumping was mentioned by 31% as was landfills (after closure). 25% mentioned the identification/management of derelict contaminated brownfield land and landfills in operation while 22% mentioned urban sewerage and the restoration of industrial sites after closure. The other percentages can be seen in the table below. Topics mentioned in the 'other' category included waste water from mining after closure, erosion and soil sealing and discharges from the textile industry. A further reply said that there are conflicts of interest between nature conservation, agriculture and water management and competitive land use for water development and flood protection concurring with agricultural and urban development needs.





Question 4.3 asked about the **key challenges in the control of water and land related activities**. In reply, **66%** cited ensuring implementation of good agricultural practice, **58%** cooperation of different local and regional authorities and **50%** reducing diffuse water pollution.

Monitoring and assessing soil contamination was on 45% and tackling illegal abstraction was on 21%: monitoring and assessing the minimum ecological flow was on 16% and reducing over-abstraction on 11%. In the comments, one mentioned accidents with water-endangering substances (usually through improper handling) and fighting the illegal use of water border strips. Another was concerned about ensuring emission discharges and resources consumption values in permits effectively promote the protection of groundwater and surface water resources and a good environmental status considering a long-term period for the future needs, also taking account of the impact of climate change. Another mentioned that groundwater sheds near soil surface are sometimes affected by nitrates. This cannot be changed as long as agricultural fertilizing is practised. One highlighted the guarantee of the monitoring of water pollution from point sources.



Question 4.4 was about the **main underlying causes and reasons for problems in achieving the requirements of relevant EU legislation**. Inadequate range of professional qualifications for efficient implementation and enforcement was the most mentioned. The comments referred to a general lack of training or the use of 'general inspectors' not always sufficiently skilled for the inspections they performed on complex sites. On the question of the complexity and clarity of legislation, two replies mentioned coherence between emission limit values on wastewater derived from Industrial Emissions Directive, in order to meet the need for more stringent limit values to accomplish the goals established by the Water Framework Directive. Another referred to the inadequacy of the dispositions for intensive agriculture under the Environmental Impact Assessment Directive, because there is no definition of "intensive agriculture" and projects can easily be "sliced" in smaller areas so as



not to fall under the scope of the Directive. For unclear technical specifications, there are unclear terms in water law (for example "dyke / dam", "essential" transformation). The application of sewage sludge on agricultural land is deemed politically undesirable: a prohibition, however, is lacking in the law. On training and guidance, a need was identified for training on water treatment plants and on on-site and off-site soil decontamination.

Question 4.5 was about the **main reasons for problems in achieving the requirements of relevant EU legislation**. Two people mentioned that different authorities are involved which needs good coordination and cooperation. Two others said that it was difficult to prove substantial damage and cause-effect in specific pollution cases. One mentioned that there are no practical instructions for the implementation of the Water Framework Directive: furthermore, water management issues are not perceived as sufficiently important, partly as a result of the financial problems of municipalities.

Water and Land - key implementation challenges as identified in 2014:

- *Diffuse-source pollution from agriculture.*
- *Over-abstraction of water (over-allocation of water resources; illegal abstractions).*
- *Continuing water pollution problems caused by inadequate investment and failing wastewater treatment and sewerage systems. High costs of installing and maintaining wastewater infrastructure.*
- *Monitoring and assessment of priority chemicals in water bodies.*
- *Physical modification of water bodies (affecting hydro-geomorphology/ good ecological status); restoration of water and wetland habitats.*
- *Regulation for soil protection.*
- *The environmental impacts of flood protection measures.*

3.4.2 Possible solutions

Question 4.6 was **what would help to address and overcome challenges in applying and enforcing legislation on water and land**. The following table ranks these possible solutions according to the respondents' approval rate (share of respondents answering "helps to do our work" or "could help in the future"). The graphs show the distribution of responses for each possible solution. For each possible solution there is a short summary of respondents' comments regarding the item. These comments are mostly by individual respondents and do not necessarily reflect widely-shared opinions; nevertheless, these ideas and examples can help to operationalize the survey's results into concrete actions.



Share of respondents

Options for practical solutions

Helps to do our work

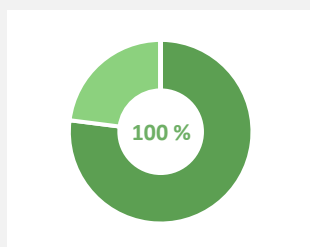


Could help in the future

Could help under certain conditions

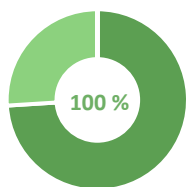
Would not be helpful

Is done but not helpful



Sharing knowledge, skills and good practice: inside your authority (n = 35)

- Time, adequate staffing and the coordination of the sharing partners is needed in order to share information.
- IMPEL National Network has been supportive regarding the integration of participants in IMPEL projects. The participants of IMPEL National Network should provide guidance, methodologies and approaches so as to help implementing knowledge at the national level. This process needs to be validated and accompanied by senior managers joint in a strategic group.
- The establishment of a forum based on the authorities' intranet is named as a best practice example.



Sharing knowledge, skills and good practice: between your and other competent authorities (n = 35)

- National institutions should use this sharing-approach.
- IMPEL National Network has been supportive regarding the integration of competent authorities in IMPEL projects. The authorities participating in IMPEL National Network should provide guidance, methodologies and approaches so as to help implementing knowledge at the national level. This process needs to be validated and accompanied by senior managers joint in a strategic group and annually reported to the Minister of Environment. The integration of different authorities in IMPEL National Networks aims at gathering expertise, competences and the collaboration between authorities as well as the promotion of IMEPL projects.



Share of respondents

Options for practical solutions

Helps to do our work

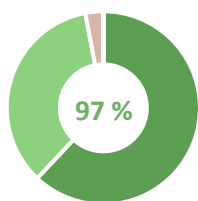
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Could help in the future

Could help under certain conditions

Would not be helpful

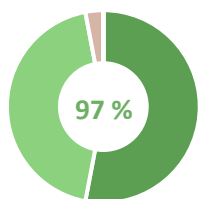
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Establishment of and active participation in networks of environmental professionals to facilitate communication and best practice exchange (n = 34)

- A forum for soil pollution is suggested.
- Staff and time resources are lacking in order to participate in networks therefore exchange processes need to be purposeful. However, water network exchange is assessed valuable. Guidelines should take local solutions along with the provision of local and regional data into account.
- Networks are essential in order to ensure effective implementation of legislation and understand root-causes for non-compliance.
- The IMPEL project on diffuse pollution from farming is described as best practice example.

Cooperation of networks (between the regional, national and European level and across the whole compliance chain) (n = 34)



- Staff time and resources are lacking. In terms of EU-cooperation translation is necessary. Information about and impact assessment of soil quality as well as data at regional/local level is needed in order to cooperate on planning processes. Regular reporting by policy-makers should be a standard procedure but bureaucratic reporting requirements should be avoided. Furthermore guidelines should allow locally adapted solutions.
- Networks are essential in order to ensure effective implementation of legislation and understand root-causes for non-compliance.



Share of respondents

Options for practical solutions

Helps to do our work

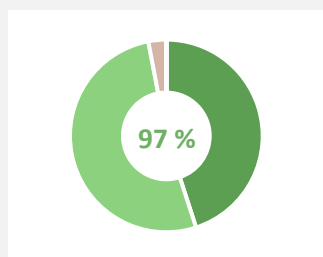
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Could help in the future

Could help under certain conditions

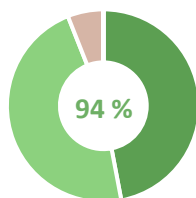
Would not be helpful

Is done but not helpful



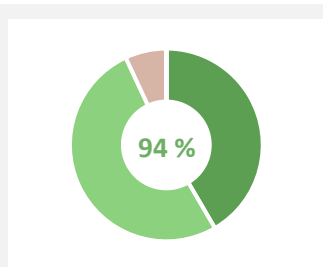
Standing procedures to regularly inform policy makers about practical experiences and work results (n = 31)

- Staff and time resources are lacking for these procedures. Policy-makers dealing with the information and communicating with information providers without further bureaucratic effort is a prerequisite.
- At EU-level translation resources are lacking.
- Issues regarding watercourses, agricultural field irrigation and natural resources should be discussed in these procedures.
- These procedures are important in order to implement legislation appropriately and to understand root-causes of deviation processes. Procedures need to be recognized by all practitioners and be implemented without further bureaucratic burdens for authorities.



Sharing knowledge, skills and good practice: transboundary (n = 32)

- This approach is not applicable.



Coordinated action between different inspection authorities: case-meetings (n = 31)

- Joint case-meetings organised by the EU and sustained with a common framework aiming at identifying and understanding major challenges of a large number of practitioners at the national level are proposed.



Share of respondents

Options for practical solutions

Helps to do our work

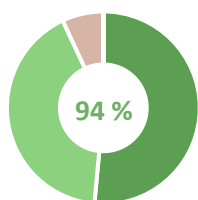
%

Could help in the future

Could help under certain conditions

Would not be helpful

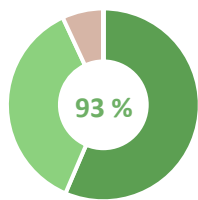
Is done but not helpful



Access to all available geospatial data relevant for your geographical area of competence (as intended by INSPIRE) (n = 31)

(Note: The INSPIRE Directive aims to create a European Union spatial data infrastructure for the purposes of EU environmental policies and policies or activities which may have an impact on the environment. The Directive came into force on 15 May 2007 and will be implemented in various stages, with full implementation required by 2021.)

- Before using these data, a cost-benefit analysis needs to be carried out.
- The transparency and accessibility of INSPIRE is referred to as problematic although using geo-data in general could be useful. In order to use these data further training as well as adequate staffing and technical equipment is required.



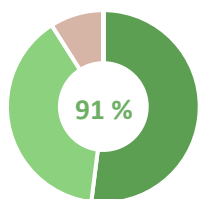
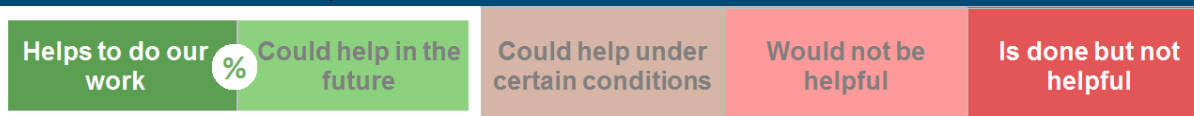
Coordinated action between different inspection authorities: common inspections (n = 30)

- Joint inspections by competent authorities are more effective and should therefore be carried out regularly.
- Joint inspections on industrial sites by two inspections networks is a best practice example; the coordination leads to improvement in waste water discharges.
- Joint inspections (and reporting of these) organised at EU level are requested. A framework for common inspections aiming at identifying and understanding major challenges is needed to reach a large number of practitioners at national level.



Share of respondents

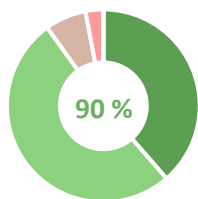
Options for practical solutions



Receiving application-oriented guidance and training (n = 33)

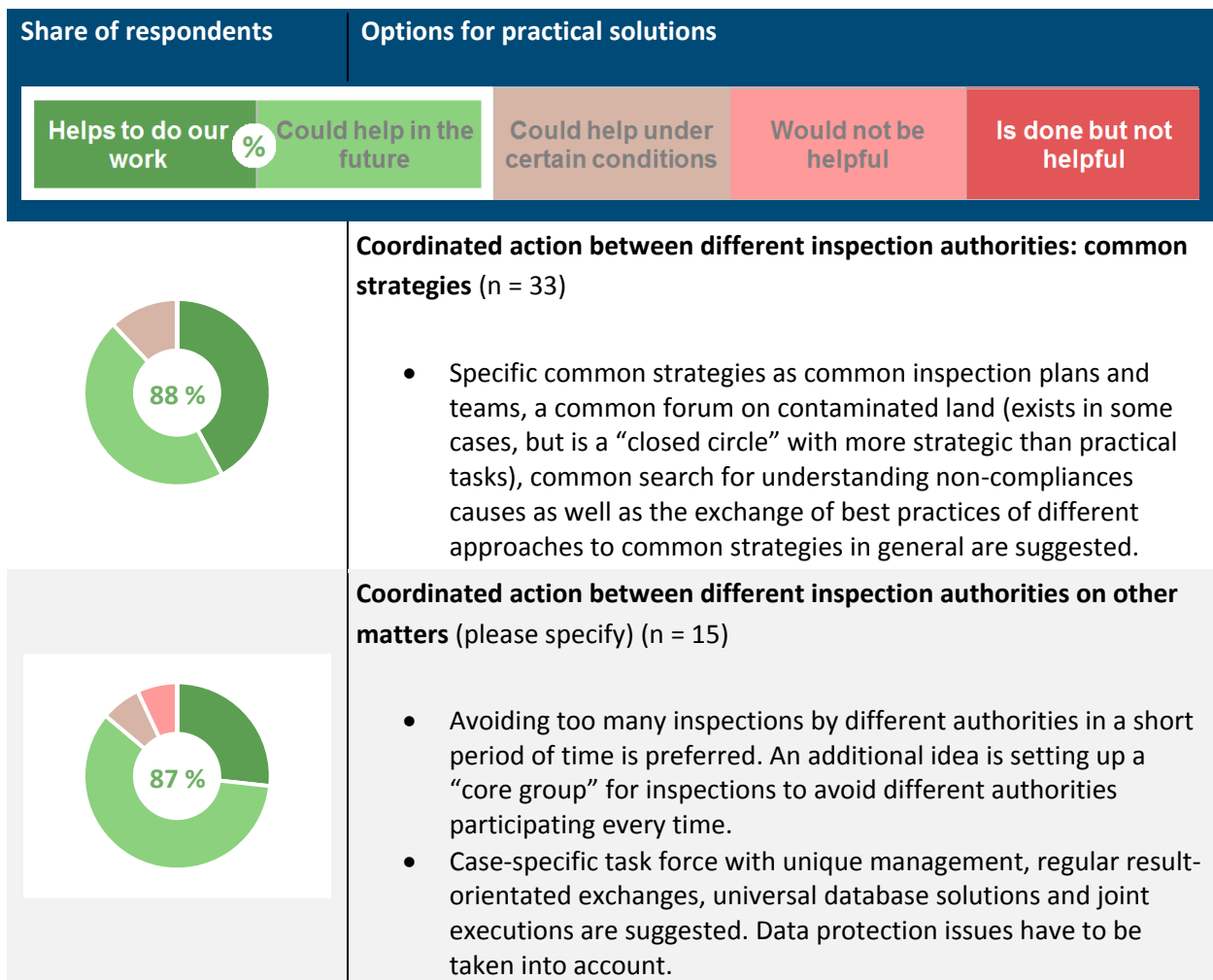
(Note: Please specify the topics for which you would need guidance or training.)

- Training on inspections of different plants is requested.
- The implementation of the WFD is named as a best practice example.
- Specific guidelines and training are requested on the following issues: soil decontamination, contaminated sites and non-deterioration rules, implementation (especially rare water pollutants), assessment of discharges trace substances at federal level, evaluation of primary status reports, incorporation materials into the ground, methods of investigation, drilling and testing methods and compensation of land use, training of farmer complaint handling and procedural manuals for the establishment of drinking water protection areas.
- Clear procedures and responsibilities as well as adequate time relief and staff capacities are needed in order to learn and implement new guidelines.



Access to modern surveillance technologies and earth observation technique (n = 31)

- In order to use these techniques adequate staffing, time budgets and additional training is needed for it could not be achieved with the current headcount.
- The importance of these technologies itself as well as the transfer of these technologies is highlighted.



Overall, the results of the survey show that **exchange and communication between different authorities** (environmental as well as others) and cooperation within **networks** are seen as highly important. IMPEL as well as national networks were often named as helpful in order to share knowledge, skills and good practices between authorities. Throughout the survey, however, respondents stressed that exchange with other authorities is only possible with sufficient staff and time resources. Regarding transnational networking activities, respondents saw the language barrier and differences of legal systems between and in the member states as a problem which should be taken into account.

Another central concern of respondents is the importance of **application-oriented guidance and training**. The respondents suggested the following topics for guidance and training services: soil decontamination, contaminated sites and non-deterioration rules, rare water pollutants, evaluation of primary status reports, methods of investigations, drilling and testing, compensation of land use, complaint management, and on the establishment of drinking water protection areas. IMPEL currently has a project on [Safeguarding the Water](#)



[Environment Throughout Europe \(SWETE 4\)](#)⁵, which deals with some priority issues related to the protection of water and land – one of the envisaged outputs is a web-based framework to host learning material for the water and land community.

The **availability and accessibility of data and information** is another important point for respondents. Some of the suggestions were: to share databases, improve the accessibility and transparency of INSPIRE and to set up databases/GIS of rivers/water bodies at local level.

The respondents' attitude towards **coordinated action between different inspection authorities** through case-meetings, common strategies or common inspections was altogether quite positive. Some respondents, however, pointed to difficulties because of the lack of staff and time resources and the language barrier. Joint inspections of industrial sites are suggested to improve waste water discharge. As a common strategy for contaminated soil, common inspections and a common forum on this issue are suggested. Concerning case meetings joint case-meetings organised by the EU and sustained with a common framework aiming at identifying and understanding major challenges of a large number of practitioners at the national level are proposed.

Question 4.7 asked whether there **any other helpful measures**. Only few respondents answered this question and mentioned the following items as helpful measures:

- Stronger coordination between competent authorities;
- Definite laws, exchange and coordination of environmental and agricultural agencies (a best practice example is named);
- Integration of low-level authorities into process of legislation at an early point is required;
- Databases/GIS of rivers/water bodies at local level would be helpful;
- The administration agencies should commit to implement the WFD;
- Pre-emption rights for competent authorities regarding implementation of measures;
- Systematic surveillance planning of industrial sites should continue;
- Cooperation with scientists especially regarding the issue of water pollution is requested (a best practice example is named);
- Legally relevant material should be provided as open source;
- Administrative costs should not be reduced but rather raising the fee for permits etc.

In Germany the questionnaire was accompanied by a research project which conducted dialogues with implementation and enforcement experts of environmental agencies on the topics of the questionnaire. The following measures were described as useful in the context of protection of water and land:

- Cooperation between different authorities (e.g. water, nature protection) for river basin management;
- Annual meetings between environmental agencies and public prosecutors;

⁵ [Safeguarding the Water Environment Throughout Europe \(SWETE\). IMPEL Project: 2015/25 - 2016/09 - 2017/13 - 2018/09.](#)



- Good practice: Common inspections of veterinary, nature protection, water and agricultural authorities: very efficient through clear rules and by filling in forms immediately on-site; Large-scale sites: joint working through commissions involving representatives of operator and environmental authorities, e.g. regarding soil protection (critique: exists, but is a “closed circle” that has more strategic than practical tasks).

3.5 Nature Protection (Biodiversity and Habitats)

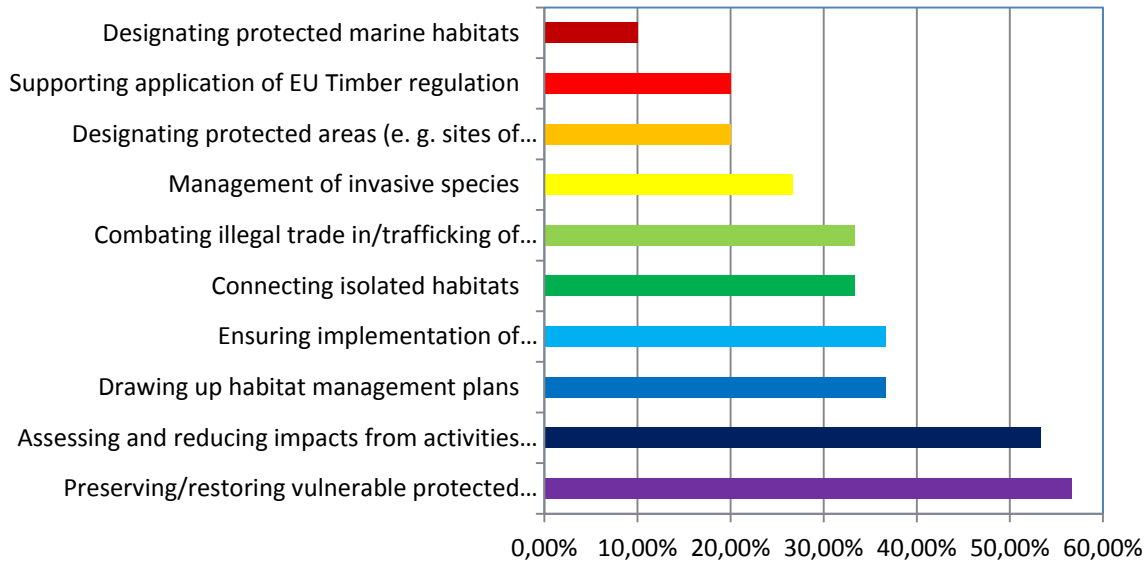
3.5.1 Main challenges

Question 5.1 was about the **main challenges in applying nature protection legislation**. The most mentioned (**57%**) was preserving and restoring vulnerable protected habitats with assessing and reducing impacts from outside protected areas on **53%** followed by drawing up habitat management plans and ensuring implementation of mitigation/compensation measures (both on **37%**).

Connecting isolated habitats was on 33% as was combating illegal trade in and trafficking of protected species. Management of invasive species was on 27%, designating protected areas (e.g. sites of community interest) and supporting application of EU Timber regulation (both on 20%) and designating protected marine habitats on 10%. In the comments, one mentioned issues with forest fires. Especially when the fires are in Natural Protected Areas, there are three potential challenges: first to avoid funds for restoring burnt areas (such as rural development measures) becoming in turn incentives to wildfires to obtain further funds, since they aren't a natural disaster; secondly to provide funds only if forests are sustainably managed; finally, to use the penal law for the enforcement of a binding environmental law. Another mentioned the need to reduce the impacts associated with tourism and the high human presence in the island territory in protected natural areas without affecting natural resources and protected habitats and species. One said that the preservation/restoration of habitats is demanding in regards of the finances and staff. Current needs for management of sites exceed available funding. Connecting of habitats is related to restoration: as the restoration of habitats in sites is already problematic, the restoration outside sites leading to connecting of the habitats is not a current priority. One country had its SAC network in place and sites are legally protected but the final formal designation process is still underway. It has still to complete surveying its marine territory to inform what marine SPAs might be required. This work is underway but is a large task.



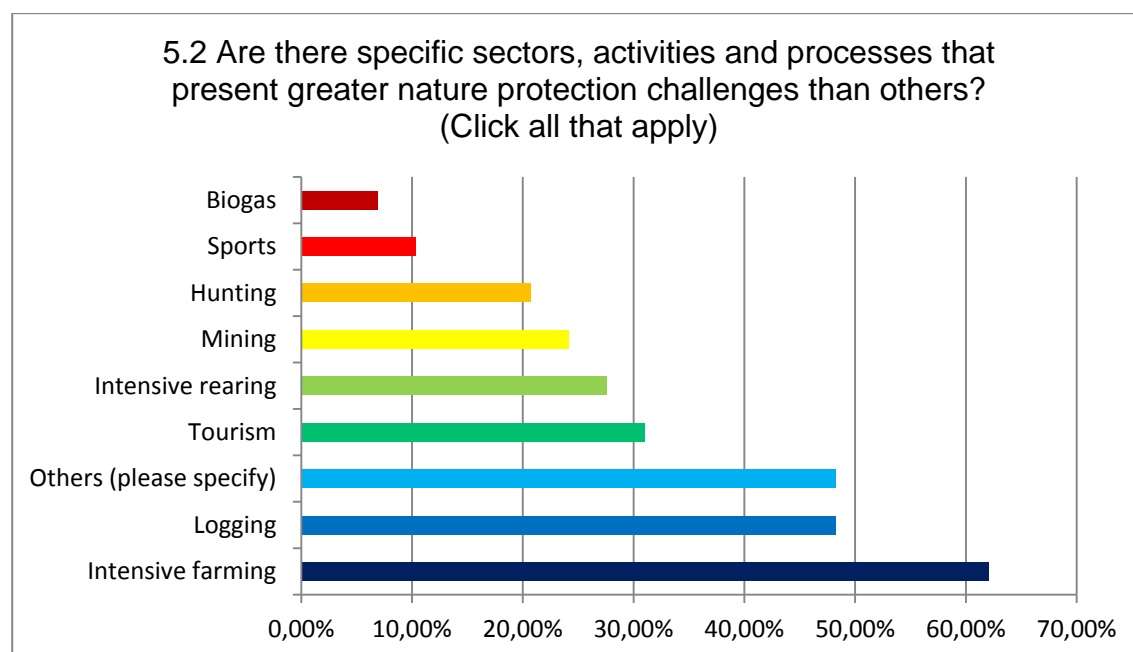
5.1 What are the main challenges in applying nature protection legislation to your area of competence? (Click all that apply)





For Question 5.2, on **specific sectors, activities and processes that present greater nature protection challenges** than others, the most mentioned was intensive farming (**62%**) followed by logging (**48%**) and tourism (**31%**).

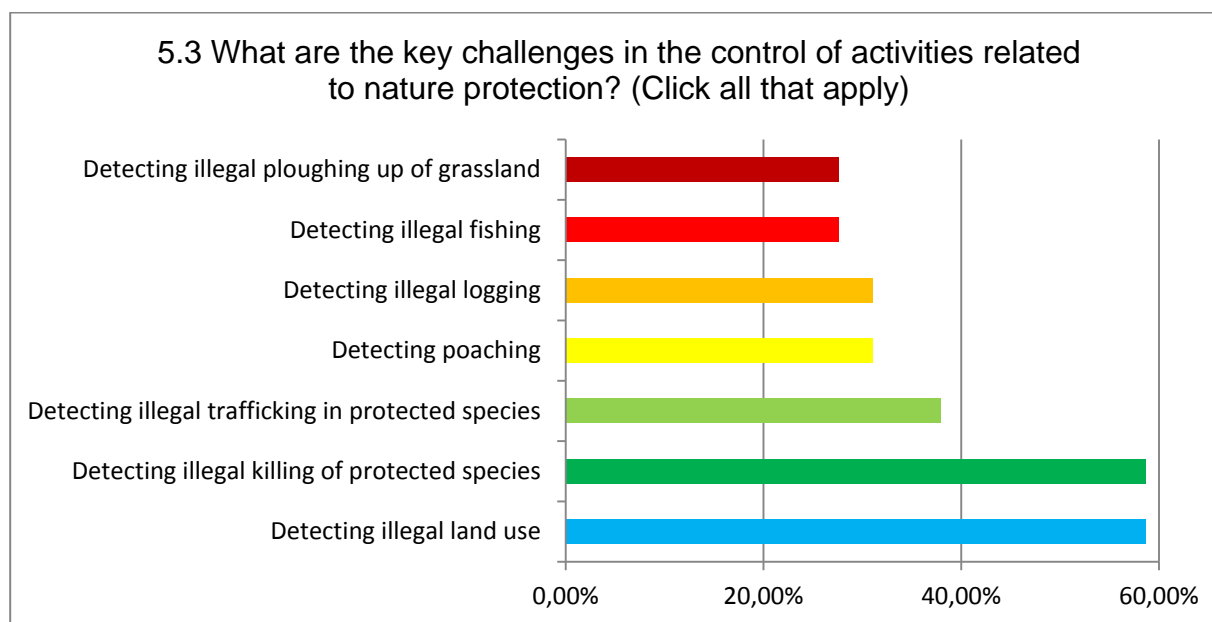
Intensive rearing was on 28% with mining on 24%, hunting on 21%, sports on 10% and biogas on 7%. In the 'others' category construction (including new roads and illegal construction) was mentioned by five people. Also mentioned were industrialisation close to nature protection areas, open cast mining, risk of forest fires, urbanisation of coastal habitats, under grazing and land abandonment and marine fish farms.





Question 5.3 was about the **key challenges in the control of activities related to nature protection**. The most significant, mentioned by **59%** in each case, were detecting illegal land use and detecting illegal killing of protected species. Next was illegal trafficking in protected species (**38%**).

After that came poaching (33%) and detecting illegal logging (both on 31%), followed by fishing and ploughing up of grassland (both on 28%). Amongst the other challenges mentioned were detecting illegal challenges of land use and controlling tourism. One said that there was an issue about the detection of human activities in protected areas, without an impact assessment report, or activities that have an impact assessment report but do not meet the requirements set out in it. Another issue was low acceptance of environmental protection requirements in conflict with personal interests.



Question 5.4 was about the **main underlying reasons and causes of problems in achieving the requirements of relevant EU legislation**. A relatively high proportion said that insufficient capacity in human resources was either correct or mainly correct though there was little further clarification in the comments. Some referred to the complexity of the legislation though in the comments most of the references were to national or regional legislation. One referred to the need for guidance on assessment and significance criteria for plans, projects and actions that have to undergo thorough screening in Natura 2000 regulation (to evaluate if they need an Appropriate Assessment). There was also a reference to the Environmental Crime directive where it was suggested that it was difficult to prove a substantial damage to nature. For the question on unclear technical specifications, terms or definitions one person mentioned the challenge of identifying protected species coming from outside of their country. There was mention of the fact that the guidelines for SAC designation, conservation objectives and measures regarding the Nature Directives do not provide sufficient clarification in that they are too general. It would be helpful if state authorities could prepare information material for citizens



on relevant nature conservation issues so that it is not necessary for every local level nature protection authority to develop everything by themselves.

On the question of inadequate urban and land use management and spatial planning, one mentioned that large infrastructure projects supported from the EU level are sometimes in contradiction with the goal of the Nature Directive which is difficult to resolve. Another said that the competent authorities for spatial planning do not always take into consideration the vicinity of a protected area when they make a decision on a development project. On the question of insufficient evidence, data and information one said that there was insufficient level of knowledge and information flow between scientists and institutions. Several suggested that there was insufficient monitoring of and data on protected species in some habitats. One mentioned the type and extent of specific environmental impacts on the marine and terrestrial environment caused by human leisure uses and activities on species behaviour and survival and on habitat conservation. On the question of training and guidance in regulatory institutions, two mentioned CITES and there was also mention of species identification, timber regulation and guidance for nature protection inspectors related to Natura 2000.

Question 5.5 was about **other main reasons for problems in achieving the requirements of relevant EU legislation**. Insufficient funding and resources were both mentioned as was, in several cases, the lack of a co-ordinated approach between different regulatory bodies, competent authorities and other stakeholders in areas such as invasive species prevention, management and control. There should be more exchange of experience between practitioners.

Political actors have no real interest in detection and prosecution of environmental infringement and they often lack awareness of the problem. Positive engagement by the media is lacking. Natura 2000 management plans in the forest are created by the forest administration, not by nature conservation. Policy makers have a lack of acceptance for the pursuit of nature conservation objectives. Conflicts are decided at the expense of conservation goals. General requirements of agricultural production are counterproductive (e.g., density/intensity/uniform plant stock on arable land versus needs of protected bird species). The rare success in investigation reduces the motivation to pursue environmental infractions more vigorously.

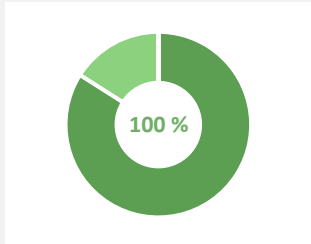

Nature Protection - key implementation challenges as identified in 2014:

- *Lack of progress in enforcement of the EU Birds Directive in achieving protection for key habitats and species in Natura 2000 sites through the Habitats Directive.*
- *Regulation of environmental pressures impacts arising from industry, agriculture, new developments and land use planning in and around nature protection areas designated under the Habitats Directive (particularly sections 6.3 and 6.4).*
- *Supporting the implementation of the EU Timber Regulation.*
- *Tackling wildlife crime.*



3.5.2 Possible solutions

Question 5.6 asked **what would help to address and overcome challenges in applying and enforcing nature protection legislation**. The following table ranks these possible solutions according to the respondents’ approval rate (share of respondents answering “helps to do our work” or “could help in the future”). The graphs show the distribution of responses for each possible solution. For each possible solution there is a short summary of respondents’ comments regarding the item. These comments are mostly by individual respondents and do not necessarily reflect widely-shared opinions; nevertheless, these ideas and examples can help to operationalize the survey’s results into concrete actions.

Share of respondents	Options for practical solutions				
Helps to do our work	Could help in the future	Could help under certain conditions	Would not be helpful	Is done but not helpful	
	<p>Sharing knowledge, skills and good practice <u>between your and other competent authorities</u> (n = 31)</p> <ul style="list-style-type: none"> • The exchange is only possible with sufficient staff and time resources; a direct link to the authorities’ practical work is needed. • The IMPEL national network is seen as a useful tool to create exchange; it helps providing a contribution to IMPEL (European level) and embedding IMPEL outputs and learnings (national level). • Cooperation activities between authorities needed/planned are named. 				
	<p>Coordinated action between different inspection authorities: <u>case-meetings</u> (n = 28)</p> <ul style="list-style-type: none"> • Online meetings could be helpful. • Case meetings and reporting on these at EU level are proposed in order to provide an understanding of challenges and ways to address them to a large number of organisations and practitioners at national level. 				



Share of respondents

Options for practical solutions

Helps to do our work

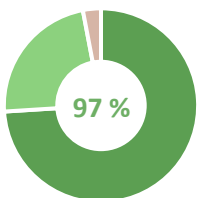
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Could help in the future

Could help under certain conditions

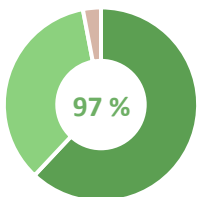
Would not be helpful

Is done but not helpful



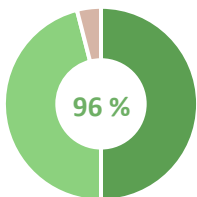
Sharing knowledge, skills and good practice *inside your authority* (n = 31)

- Sharing is only helpful if it does not take too much time, “core business” should not suffer.
- The participation of different units of an authority in a national IMPEL network helps coordinating the units inside this authority.



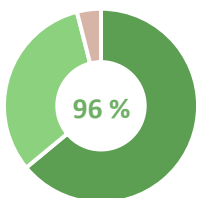
Establishment of and active participation in networks of environmental professionals to facilitate communication and best practice exchange (n = 29)

- Exchange requires sufficient staff and time resources.
- A direct link to the authorities’ practical work, applicability to local conditions and clear targets are required. The establishment should be a bottom-up process.
- Exchange in networks should focus on sharing best practices, guidance and methodologies so they can be embedded into the national/local context.



Coordinated action between different inspection authorities: common strategies (n = 28)

- Understanding the root-causes for non-compliance should form the basis for developing common strategies in order to tackle infringements with the contribution of relevant actors along the compliance chain.

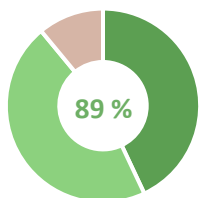
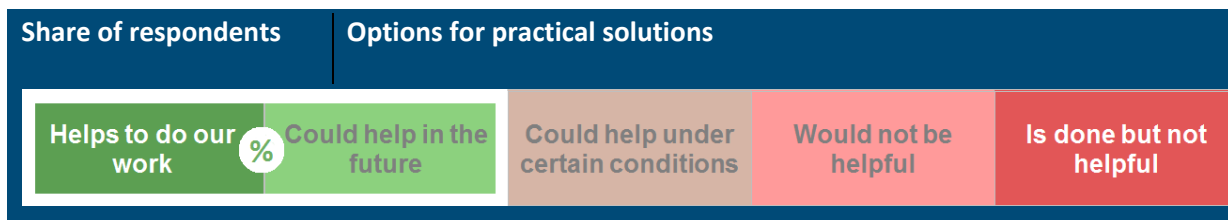


Receiving application-oriented guidance and training (Please specify the topics for which you would need guidance or training.) (n = 28)

- Guidance and training regarding protection of species, information on current case law (especially at local/regional level), CITES and TIMBER regulations are requested.
- Structure of guidelines: simple lists, diagrams, flowcharts etc.

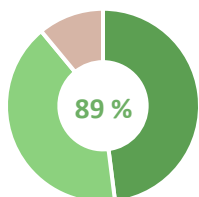


Share of respondents	Options for practical solutions				
	Helps to do our work	Could help in the future	Could help under certain conditions	Would not be helpful	Is done but not helpful
	<p>Access to all available geospatial data relevant for your geographical area of competence (according to INSPIRE) (n = 27)</p> <ul style="list-style-type: none"> • In nature protection, this can be useful to detect poachers, illicit fishing and illegal logging. • Data are partially available, but relatively few are relevant to nature protection and the local level. 				
	<p>Coordinated action between different inspection authorities: <u>common inspections</u> (n = 30)</p> <ul style="list-style-type: none"> • Common inspections can help avoiding redundant inspections carried out simultaneously by different authorities. • Common inspections of environmental authority and forestry guard (led to detection of large amounts of illegally logged timber) or fishing authority (led to high seizures of illegal fishing tools) are named as best practice examples. 				
	<p>Access to modern surveillance technologies and earth observation technique (n = 27)</p> <ul style="list-style-type: none"> • Sufficient staff and time is a precondition to understand and analyse data/information. • Data are available, but they need to be appropriately scaled (e.g. local/regional level) and real time to be useful. • EU investigation centres should work on transferring such technologies to competent authorities. • In nature protection, surveillance techniques (e.g. drones/aerial flights) can be useful to detect poachers, illicit fishing, illegal logging, but also to identify invasive plants (e.g. giant hogweed). 				



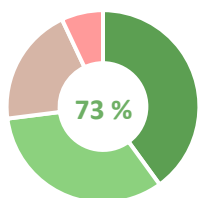
Cooperation of networks (between the regional, national and European level and across the whole compliance chain) (n = 28)

- Sufficient staff and time resources are needed for an exchange.
- Exchange between different networks should focus on sharing best practices, guidance and methodologies by involving a wide number of organisations so they can be embedded into the national and local context.



Standing procedures to regularly inform policy makers about practical experiences and work results (n = 27)

- Informing policy makers about what is really happening “in practice” is important. The procedure should involve practitioners without being a further administrative burden for authorities.
- An exchange of information between permit writers and nature protection inspectors is proposed.



Coordinated action between different inspection authorities on other matters (Please specify) (n = 15)

- Migrant species (birds, marine species), case-specific task forces with single management, regular results-oriented exchanges, uniform database solutions, joint enforcement actions are proposed as matters of coordinated action.

Overall, the results of the survey show that **exchange and communication between different authorities** (environmental as well as others) and cooperation within **networks** are seen as highly important. IMPEL as well as national (IMPEL) networks were often named as being helpful in order to share knowledge, skills and good practices between authorities. Throughout the survey, however, respondents stressed that exchange with other authorities is only possible with sufficient staff and time resources. Moreover, exchange should have a direct link to the authorities’ practical work. One specific proposal was an exchange of information between those writing permits and nature protection inspectors.



Another central concern of respondents is the importance of **application-oriented guidance and training**. The respondents suggested the following topics for guidance and training services: protection of species, information on current case law (especially at local/regional level), the CITES and TIMBER regulations and an improved coordination between construction and nature conservation law guidelines. Guidelines should be structured well and include simple lists, diagrams, flowcharts etc. Furthermore, web portals with keyword search or computer-assisted techniques could provide an easy access to useful information for authorities. Respondents also proposed conferences and seminars (including recorded webinars) for practitioners on common nature protection topics including relevant case studies, e.g. on Art. 6(3) and Art. 6(4) Habitats Directive (mitigation/compensation measures) and on monitoring.

The **availability and accessibility of data and information** is another important issue for respondents. They suggested using geospatial data, surveillance (e.g. drones/aerial flights) and earth observation technique to detect poachers, illicit fishing and illegal logging, but also to identify invasive plants (e.g. giant hogweed). Another suggestion was that EU investigation centres should work on transferring new technologies to competent authorities. Respondents stressed that in many cases data are available, but they need to be appropriately scaled (e.g. local/regional level) and real time to be useful. Moreover, sufficient staff and time is a precondition to understand and analyse data/information.

The respondents' attitude towards **coordinated action between different inspection authorities** through case-meetings, common strategies or common inspections was altogether quite positive. Respondents suggested case meetings and reporting on these at EU level to provide an understanding of challenges and ways to address them to a large number of organisations and practitioners at national level. Also online meetings could be helpful. Common inspections could help avoiding redundant inspections carried out simultaneously by different authorities. Respondents named common inspections of the environmental authority and the forestry guard (which led to the detection of large amounts of illegally logged timber) or the fishing authority (which led to high seizures of illegal fishing tools) as best practice examples. Moreover, respondents proposed other matters for coordinated action: cooperation regarding migrant species (birds, marine species), case-specific task forces with a single management, regular results-oriented exchanges, uniform database solutions and joint enforcement actions.

Question 5.7 sought a **description of any other helpful measures**. Only few respondents answered this question and mentioned the following items as helpful measures:

- Conferences and seminars (including recorded webinars) for practitioners on common nature protection topics including relevant case studies, e.g. Art. 6(3) and Art. 6(4) Habitats Directive (mitigation/compensation measures), monitoring
- Improved coordination between construction and nature conservation law guidelines with regard to the legal interfaces for the enforcement of environmental objectives
- Creation of web portals with keyword search
- More frequent usage of computer-assisted techniques



In Germany the questionnaire was accompanied by a research project which conducted dialogues with implementation and enforcement experts of environmental agencies on the topics of the questionnaire. The following measures were described as useful in the context of nature protection:

- Good practice: Common inspections of veterinary, nature protection, water and agricultural authorities: very efficient through clear rules and by filling in forms immediately on-site
- Information campaigns on species protection in construction activities (birds nesting on buildings) – targeted at the general population and craftsmen (e.g. in cooperation with housing companies or chambers of industry and commerce)

3.6 Challenges across the Compliance Chain

3.6.1 Challenges

Question 6.1 asked about **specific problems or difficulties that created particular barriers to effective application and enforcement of EU environmental law across the whole compliance chain**. No particular areas stood out, but it is fair to say that a few people, but not many, mentioned as problems unclear permits, insufficient self-monitoring and lack of risk assessment. There was some concern about the lack of compliance assurance plans on the side of the duty holder and on the strategic level as there was for insufficient assessment on the effects of certain plans and programmes on the environment. Particular areas of concern were inadequate coverage/financial security for closures, inadequate level of sanctions and fines, low integration and prioritisation of environmental issues, lack of specialisation in environmental infractions in other relevant public authorities and insufficient capacity of other relevant public authorities.

In the comments, two people mentioned that it is a general problem that, even though thorough evidence in a case of non-compliance may have been collected, the police and/or the prosecutor will not further investigate/prosecute unless they consider it to be a serious case. This is because of a lack of resources and insufficient knowledge about environmental infractions since they have neither police nor prosecutors that specialise in environmental issues.

One mentioned that the possibility of sanctions was lacking in the case of non-presentation of waste management concepts or other mandatory planning. There was an issue about difficult cooperation between agricultural and water management authorities. The competent authorities are traditionally specialised and assigned to different ministries. However, for environmental inspections, the permitting and enforcement of surveillance could be concentrated in one authority. A broader issue was the lack of political prioritisation of environmental protection in policy and lacking readiness for conflict at the level of ministries and authorities to implement environmental concerns. Planning and construction law are seen to have priority over environmental and natural protection. Inter-communal cooperation is difficult to achieve since there is no willingness to do so at the political level.

Cross-cutting tools and approaches - key implementation challenges as identified in 2014:

- *Dealing with the complexity of the acquis and potential conflicts between different areas of policy and legislation.*



- *Lack of political will and allocation of the necessary resources for environmental authorities to fully implement the acquis.*
- *Integrating and harmonising regulatory regimes across different environmental media and different sectors, for example nature protection, water and agriculture.*
- *Fragmented approach because of compartmentalisation of environmental issues through separate technical legislation.*
- *Insufficient capacity within implementing authorities (resources and technical competence) to deal with the technical complexity and administrative burden of regulatory requirements.*
- *Insufficient evidence and information for effective planning, operations and regulatory decision-making within environmental authorities.*
- *Responsibility for different parts of the regulatory chain being carried out by different authorities with different regimes and governance arrangements – planning, permitting, monitoring, inspection, enforcement and prosecution – and lack of effective coordination between them.*
- *Lack of coordination between authorities in countries on trans-boundary problems, and different approaches and standards leading to uneven playing field.*
- *Lack of awareness of the consequences of non-compliance and illegal activities and low-levels of fines and other sanctions that do not act as a deterrent.*

3.6.2 Possible solutions

Question 6.2 sought information on **the most important things that could help overcome these implementation problems**. The following table ranks these possible solutions according to the respondents' approval rate (share of respondents answering "helps to do our work" or "could help in the future"). The graphs show the distribution of responses for each possible solution. For each possible solution there is a short summary of respondents' comments. These comments are mostly by individual respondents and do not necessarily reflect widely-shared opinions; nevertheless, these ideas and examples can help to operationalize the survey's results into concrete actions.



Share of respondents

Options for practical solutions

Helps to do our work

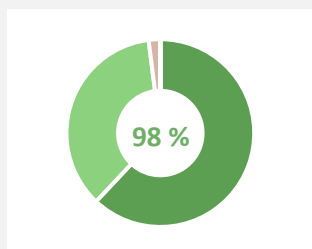
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Could help in the future

Could help under certain conditions

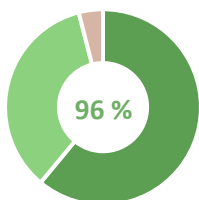
Would not be helpful

Is done but not helpful



Establishment of and active participation in networks of environmental professionals to facilitate communication and best practice exchange (n = 50)

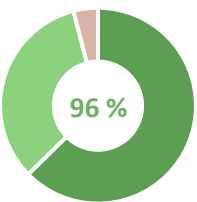
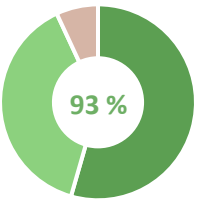
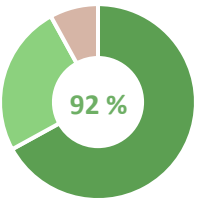
- Would be helpful but requires adequate staff capacities
- Should focus on precise and branch-specific topics. Network needs to be practical (not formalistic) and time- and cost-effective.
- Vertical cooperation hardly takes place because enforcement authorities are not taken seriously. On the communication level mutual understanding between standardization and implementation does not exist. A serious cooperation on equal footing is needed.
- Best practice example: IMPEL network participation at national level; IMPEL guidance on environmental inspections helpful for shaping a national inspection system



Improving availability and accessibility of data on environmental status (n = 49)

- Requires more staff resources, especially for monitoring
- Environmental Protection Agencies should have high-performance monitoring systems that continuously transmit environmental information (including information pointing to potential pollution episodes) to inspection institutions.
- Need for clearer requirements for monitoring standards and financial compensation for the acting municipal level
- The enlargement of the environmental monitoring system is proposed.
- Data provided by volunteers and specialists are not brought together and remain unused.
- Data should be used to identify and understand the level of pollutants' emissions and the consumption of natural resources by environmental users (local level) and their connection to the state of the environment
- Best practice examples: national open data platform, Air Quality Index for Health, website with data on water bodies



Share of respondents	Options for practical solutions
<div style="display: flex; justify-content: space-between;"> <div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 5px;">Helps to do our work</div> <div style="background-color: #8BC34A; color: white; padding: 5px; border-radius: 5px;">% Could help in the future</div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="background-color: #A5886F; color: white; padding: 5px; border-radius: 5px;">Could help under certain conditions</div> <div style="background-color: #F44336; color: white; padding: 5px; border-radius: 5px;">Would not be helpful</div> <div style="background-color: #C0392B; color: white; padding: 5px; border-radius: 5px;">Is done but not helpful</div> </div>
	<p>Improving availability and accessibility of data on environmental enforcement issues (n = 45)</p> <ul style="list-style-type: none"> • Best practice: website where evaluation reports of inspection and enforcement can be found
	<p>Ensuring availability and comparability of relevant reports on environmental assessments (n = 44)</p> <ul style="list-style-type: none"> • Environmental assessment reports (IED installations) are already accessible online. Reports are helpful making adequate decisions on permitting IED installations by early involvement of interested parties. • National guidelines are requested (a reference to a national network system of environmental agencies is made). • Beneficial if proper criteria (regarding the scope) are set. • Availability and comparability should be decided case by case due to quality and depth of information. • Sufficient time and staff capacities are need in order to engage in reports and networks.
	<p>Network cooperation (between the regional, national and European level and across the whole compliance chain) (n = 48)</p> <ul style="list-style-type: none"> • Useful for specific questions; cooperation can be problematic due to specific subject areas and areas of responsibilities involved and discrepancies among legislations – cooperation requires clear criteria and scope • Best practice: IMPEL network • Communication with EC during transposition into national legislation can be improved • The involvement of environmental inspectors in IMPEL and other EU networks is requested



Share of respondents

Options for practical solutions

Helps to do our work

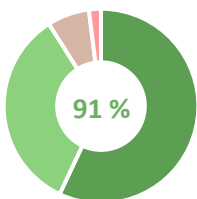
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Could help in the future

Could help under certain conditions

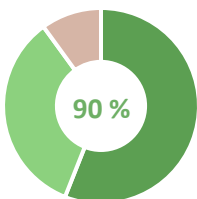
Would not be helpful

Is done but not helpful



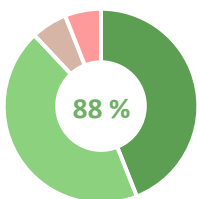
Ensuring availability and comparability of relevant reports on environmental status (n = 44)

- Best practice: national environmental quality objectives
- Adequate staff and time capacities is needed but currently missing
- Boundaries regarding protection of goodwill or personal data can be imposed
- Can be helpful in assessing the enforcement actions and compliance assurance initiatives (planned/in place)



Ensuring availability and comparability of relevant reports on environmental management of sites (n = 41)

- Partial disclosure of data to public due to the protection of wildlife (e.g. location of nesting colonies) already in place



Promoting strategic approaches to compliance assurance (n = 48)

- Bureaucratic burdens need to be limited and practical approaches must be included, sufficient time and staff capacities are required.
- Must consider local conditions (especially protected areas)
- Evaluation of cooperation between authorities (on all levels) is needed.
- Equal access to financial resources is requested (funding programmes).
- More support of EC during law-making process as well as sharing “peer to peer” experience, best practices among member states are requested.
- Approaches should include tools for compliance assurance promotion alongside inspections, the understanding of root causes for non-compliance, preventing re-offences, applying sanctions and promoting correction of environmental harm.



Share of respondents

Options for practical solutions

Helps to do our work

%

Could help in the future

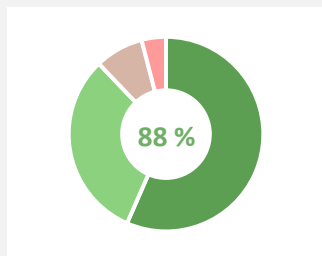
Could help under certain conditions

Would not be helpful

Is done but not helpful

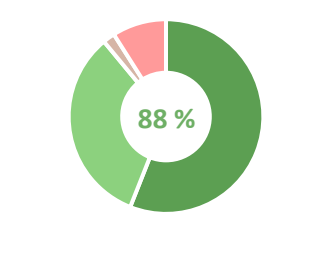
Guidance on how to prepare and facilitate judicial enforcement (e.g. evidence gathering) (n = 48)

(Note: As requirements for probative value in court are much stricter than for evidence in inspections, court enforcement actions may fail because of lacking quality of evidence.)



- Specific training targeting sector legislation requirements and cross-cutting issues is required. Common training with police and prosecutors is possible.
- A national network system for environmental protection is named as good practice for gathering and disseminating information.
- Cooperation within the compliance assurance chain is requested whilst division of power should be maintained.
- The collection of evidence on non-compliance throughout inspections is suggested.
- Common guidelines should have minimum requirements and dispositions still leaving flexibility for local adaption.

Improving availability and accessibility of data on spatial planning (n = 43)



- The selection of environmental data which are provided by authorities to the public via INSPRIE should be regulated.
- Third parties should have free access to environmental data of the authorities (thus, no additional burden for the authorities by charging fees)
- The Public should be involved in the process.
- The availability and accessibility of updated data on the effective use of spatial planning and its legality is required.
- Best practice: national online platform providing spatial information



Share of respondents

Options for practical solutions

Helps to do our work

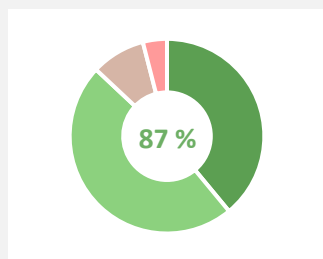
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Could help in the future

Could help under certain conditions

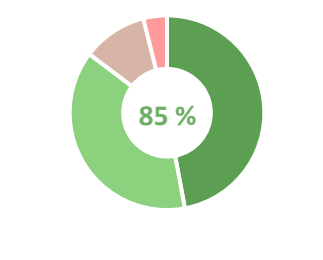
Would not be helpful

Is done but not helpful



Improving availability and accessibility of data on other matters (please specify) (n = 23)

- The following matters are listed: monitoring data, permits, financial status of companies, local and international market prices, financial and economic information, types of ownership, general information on operators available to other authorities, data from impact assessment studies (classified as business secrecy), plant data and data on emission-pollution, conservation of water resources, water quality, documentation on species and habitats, species mapping, landscape plans, biotope monitoring
- Information on regional legislation needs to be improved.
- The reduction of bureaucracy in terms of clear and practicable regulations, manageable guidelines and elimination of extensive manuals is needed in order to have time capacities for enforcement. Guidelines need to be up to date, effective and specified for each branch. Common guidelines should not lead to reduction of environmental standards.



Standing procedures to regularly inform policy makers about strategic compliance assurance issues (n = 46)

- Conditions: sufficient staff; should not create additional workload (re-use existing information); open-mindedness; equality; ability to understand given information and how to use them by policy-makers
- Communication between legislators and executive/regional units would be helpful. More cooperation and information exchange between state and local authorities would improve compliance and enforcement work on both sides.
- Different options of informing policy-makers: email, feedback from regular meeting with shareholders/executive and regional officers/inspection bodies, participation in drafting process.
- Example: periodical reporting to parliament



Share of respondents

Options for practical solutions

Helps to do our work

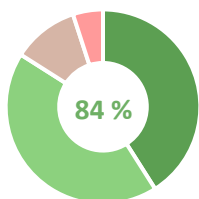
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Could help in the future

Could help under certain conditions

Would not be helpful

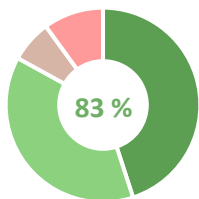
Is done but not helpful



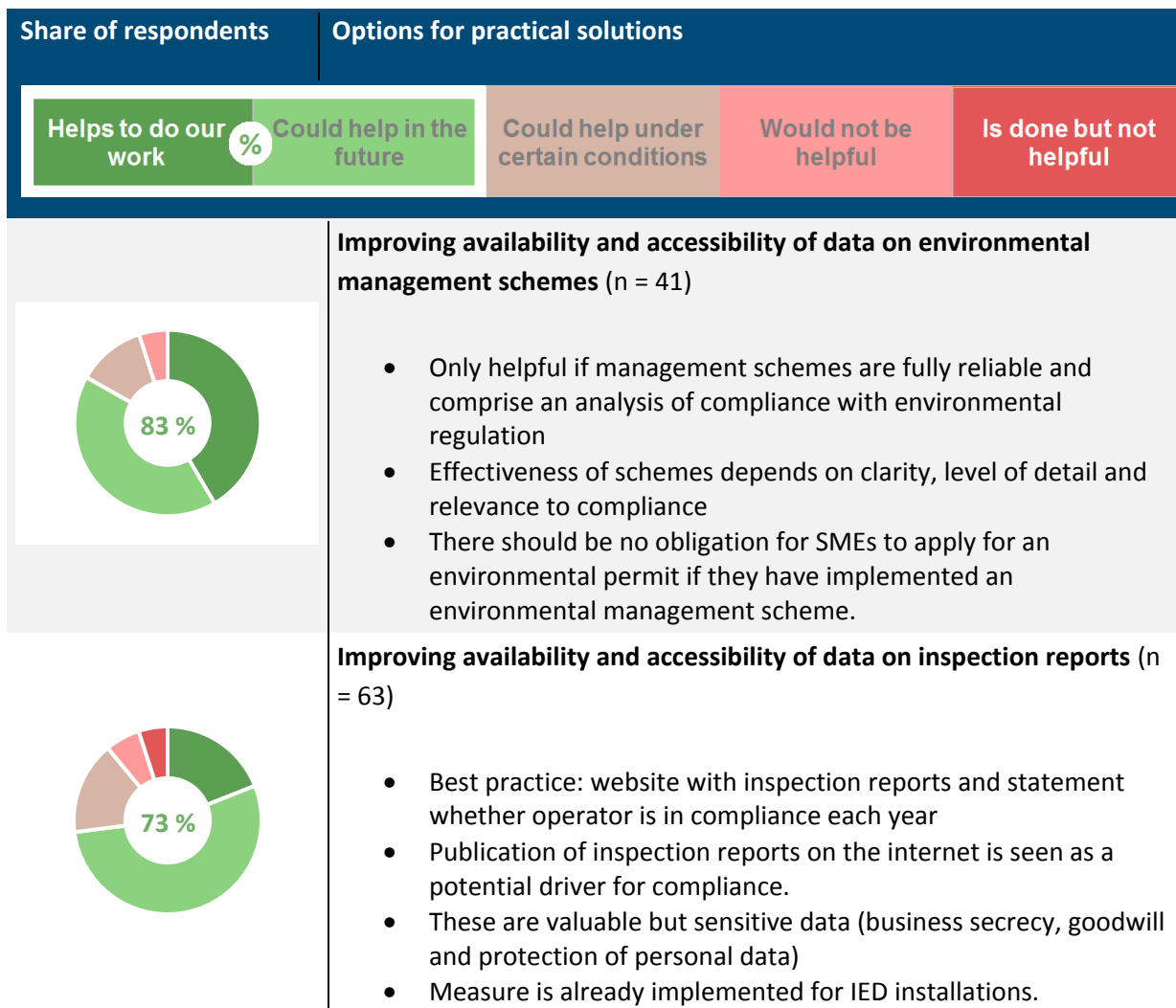
Revolving evaluations of the work of authorities with compliance assurance functions (n = 37)

- Evaluation is effective if the following criteria are met: case-specific, result-oriented, carried out honestly, improvement-oriented and not guilt-oriented, close to reality. These criteria are currently not met. Evaluation should focus on the improvement of the protection of the environment not on administration procedures and cost minimization.
- The importance of control and self-control mechanisms is highlighted.
- The evaluation is assessed as too bureaucratic.

Improving availability and accessibility of data on environmental users (n = 42)



- These are valuable but sensitive data (business secrecy, goodwill and protection of personal data)
- Combination of different databases by public and other sources suggested
- The installation of environment information offices for future investors is proposed.
- Data should be used to identify and understand the level of pollutants' emissions and the consumption of natural resources by environmental users (local level) and their connection to the state of the environment. This should be reflected in the respective limit values focusing on those having major impact.



Overall, the results of the survey show that **exchange and communication between different authorities** (environmental as well as others) and cooperation within **networks** are seen as highly important. IMPEL as well as national networks were often named as helpful in order to share knowledge, skills and good practices between authorities. Throughout the survey, however, respondents stressed that exchange with other authorities is only possible with sufficient staff and time resources. Networking activities should focus on (sector-)specific topics and be practical in nature. In vertical cooperation, all participants should be taken seriously – which, according to respondents, is often not the case. Regarding transnational networking activities, respondents saw differences of legal systems between and in member states as a problem which should be taken into account.

Another central concern of respondents is the importance of **application-oriented guidance and training**. For more specific information on training and guidance needs see the sector-specific results. In reaction to the survey results, one national IMPEL network furthermore came up with the following point: while there are training



offers, these are often not systematically linked and information on existing trainings is incidental. They therefore suggested a systematic design and strategic orientation of vocational training offers and their proactive propagation, inter-agency, cross-sectoral and cross-border training offers, and financial support for self-organised best-practice dissemination.

The **availability and accessibility of data and information** is another important point for respondents – e.g. data on environmental status, environmental enforcement issues, spatial planning, and to a slightly lower degree on environmental users, environmental management schemes and inspection reports. Some of the suggestions were: implementing high-performance monitoring systems that transmit real-time environmental information to inspection institutions, improving the exchange of data between different authorities (e.g. data on operators) and better combining data provided by volunteers and specialists as well as by public and other sources. Respondents also named other matters for which the availability and accessibility of data should be improved: monitoring data, permits, financial status of companies, local and international market prices, financial and economic information, types of ownership, data from impact assessment studies (classified as business secrecy), conservation of water resources, water quality, documentation on species and habitats, species mapping, landscape plans and biotope monitoring. Respondents named the following best practice examples: a national open data platform, websites with data on water bodies or spatial information and a website where inspection reports are published together with a statement whether the operator is in compliance with environmental legislation. Moreover, respondents were favourable about ensuring the **availability and comparability of relevant reports** on environmental assessments, environmental status and the environmental management of sites. Respondents stressed consistently that data and reports are only helpful if there is sufficient staff to analyse and use them. They also pointed out that some data (e.g. on environmental users) would be very valuable for their work, but not easily available due to business secrecy and the protection of personal data.

Question 6.3 asked for a **description of any other helpful measures**. Only few respondents answered this question and mentioned the following items as helpful measures:

- CITES inspector exchange programme among member states would improve capacities;
- Education programmes of police officers, prosecutors and judges should include more environmental law in order to provide background knowledge on environmental issues.

In Germany the questionnaire was accompanied by a research project which conducted dialogues with implementation and enforcement experts of environmental agencies on the topics of the questionnaire. The following measures were described as useful to tackle challenges along the compliance chain:

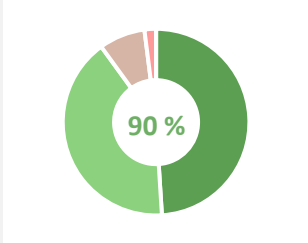
- Establishment of a knowledge database for implementing authorities for the exchange of information, guidelines, interpretation assistance, etc.;
- Offer of online training seminars to reduce the costs of training measures for authorities with limited resources and to allow for the networking of implementation experts;
- Establishment of software tools and databases to fulfil documentation and reporting requirements;
- Coordination of implementation activities with other competent authorities e.g. to conduct joint environmental inspections;



- Regular exchange with public prosecutors, police and customs to achieve a better understanding of environmental issues in the judiciary;
- Support for the networking of implementation experts, e.g. through working groups, regular meetings and the creation of a social media platform to connect implementing authorities;
- Work shadowing/rotation of staff from different authorities to exchange implementation knowledge and develop a common problem awareness.

3.7 Complementary Support of Stakeholders for Compliance Assurance

Question 7.1 asked **which complementary approaches are or could be helpful** to address implementation challenges. The following table ranks these possible solutions according to the respondents’ approval rate (share of respondents answering “helps to do our work” or “could help in the future”). The graphs show the distribution of responses for each possible solution. For each possible solution there is a short summary of respondents’ comments. These comments are mostly by individual respondents and do not necessarily reflect widely-shared opinions; nevertheless, these ideas and examples can help to operationalize the survey’s results into concrete actions.

Share of respondents	Options for practical solutions				
Helps to do our work	Could help in the future	Could help under certain conditions	Would not be helpful	Is done but not helpful	
	<p>Information of the public e.g. about the state of the (local) environment, inspection results and high performers (n = 49)</p> <p>(Notes: Some inspection authorities publish a summarised report on inspection results (after hearing the management of the inspected site and eliminating data covered by trade and business secrecy provisions). In some areas, this has considerably improved compliance. Some administrations or NGOs create awards for the best environmental performances per sector and use official award ceremonies or other means of publicity.)</p> <ul style="list-style-type: none"> • Best practice examples: websites publishing inspection and monitoring reports, periodical press conferences as a tool for public information • The publication of such information could be a driver for compliance. • Participation of public requires sufficient staffing in order to respond to claims. 				



Share of respondents

Options for practical solutions

Helps to do our work

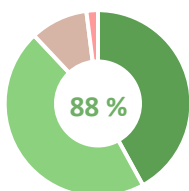
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Could help in the future

Could help under certain conditions

Would not be helpful

Is done but not helpful

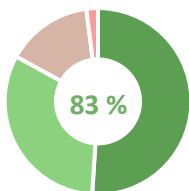


Information/guidance/campaigns on compliance strategies for duty-holders (n = 50)

- Best practice: guidelines on plastic bags
- Human resources are required in order to put campaigns in place.
- Best practice examples: providing information by homepage or via e-mail, through brochures, seminars, and helpdesks; setting up a communication strategy
- Information on new legislation is suggested

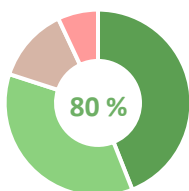
Support for dialogues between site management and their neighbours to reduce possible conflicts and complaints (n = 47)

(Note: This may cover mediation as well as neighbourhood dialogues (see: <http://www.impel.eu/tools/neighbourhood-dialogue-toolkit/>))



- Best practice example: dialogue for nature conservation
- Conditions for effective dialogues: mediation services and procedural framework; administration only arbitrator; willingness to a constructive dialogue between all parties; proper representation of participants; effort not too high
- Dialogue could be especially helpful regarding repeated complaints/incidents.

Additional incentives (e.g. label/awards/promotion) for duty-holders (n = 45)

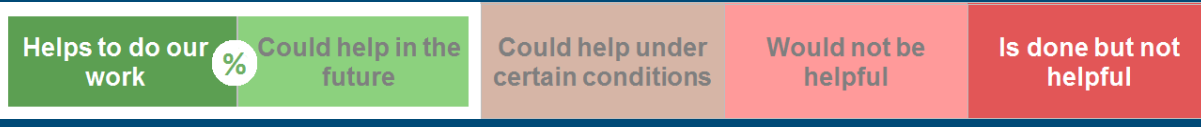


- Best practice examples: website where operators without deviation are labelled, national award system for projects that promote sustainable development, NGO Fund (Environmental Component) of the EEA for financially supporting NGO projects
- Incentives are poorly accepted with citizens (signal for lack of trust in institutions)
- Greenwashing should be avoided. The effectiveness of certification systems depends on the transparency of the process, the design and the control mechanisms; too many systems are not helpful.
- Financial incentives are assessed as most beneficial.



Share of respondents

Options for practical solutions

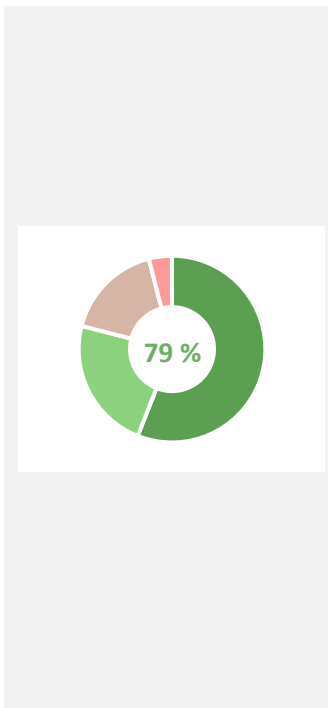


- Incentives could have an effect on waste selective collect and recycling.
- The awarding of schools, companies or individuals acting exceptionally towards environmental protection is proposed.
- Incentives are viewed positively with regard to the reduction of compliance cost maintaining products competitive on the market and the increase in environmental compliance resulting in lower enforce charges.

Effective involvement of local communities and stakeholders in environmentally relevant planning and decision processes (n = 48)

(Note: E.g. early involvement in planning processes, planning conferences.)

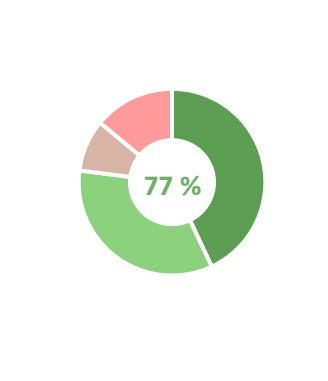
- Best practice examples: Aarhus Convention, forum on integrated water resources management to enhance participation of different stakeholders
- The involvement could be extended. It is a helpful instrument in order to prevent court proceedings and to mediate between different stakeholders.
- Involvement procedures should be implemented at the regional level; the NIMBY principle will emerge on local level.
- The difficulty of processes involving people unwilling to discuss their opinion is stressed.
- The involvement procedure should not lengthen the process and be a non-binding instrument.
- The point of involvement is relevant: It should not be part of permit procedures, but IEA procedures are suitable (already existent in form of a legally-binding instrument).

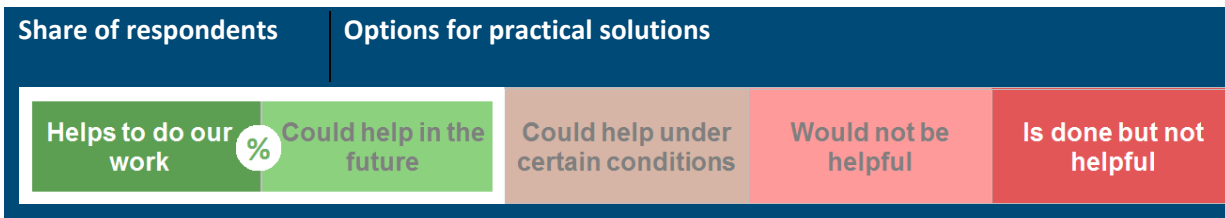


Low threshold- easy access complaint system (with a follow up including procedural rights) (n = 44)

(Note: Such systems would guarantee certain procedural rights to the complainant; e.g. would confirm reception and dealing with the complaint, would offer the complainant a possibility to react to contrary statements of other stakeholders and would communicate an administrative decision regarding the subject of the complaint.)

- Best practice example: national website with complaint possibilities (with name or anonymous)

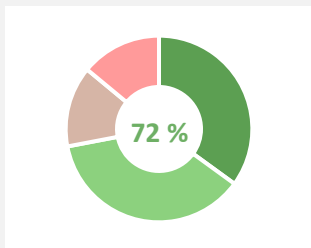




- Causes of complaints are often not of environmental character and rather have other reasons such as neighbourhood disputes. A low threshold system could aggravate that problem and cause unnecessary workload.

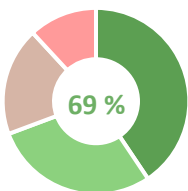
Use of environmental reports (under EMAS or other schemes like ISO 14001) for the compliance control of sites (n = 43)

(Note: ISO 14001 is a worldwide standard on environmental management but has less extensive requirements than EMAS, as it does not require legal compliance as a precondition for certification and has no external accreditation body.)



- The special role of EMAS should be established in order to reduce unnecessary work provided that compliance with administrative rules is given. Furthermore it can be used as a source of knowledge.
- These reports could be used more often.
- The inspection frequency of accredited sites (EMAS/ISO14001) should be lowered.
- Only EMAS but not ISO 14000 should be used.

Integration of interested citizens or NGOs in surveillance and protection of sites or species (through sponsorship/guardianship of areas etc.) (n = 42)



- Conditions for effective involvement: sufficient staff capacities; involvement of third parties does not generate additional work by reporting minor cases or a misuse by political parties; enforcement rights given to third parties
- The integration is only suitable in cases of complaints and as a collaborative non-binding instrument.
- Best practice example: national agency including stakeholders in the field of river areas conservation



Share of respondents

Options for practical solutions

Helps to do our work

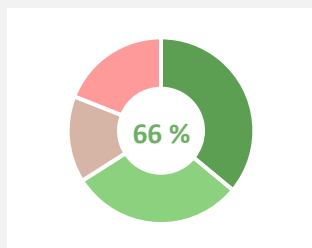


Could help in the future

Could help under certain conditions

Would not be helpful

Is done but not helpful



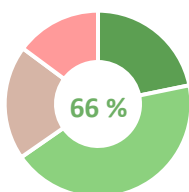
Installation of an online portal where everyone may file notices about infractions or environmental problems (without resulting procedural rights) (n = 47)

(Note: Such systems would offer a possibility for anybody to transfer information about irregularities to the competent administration, without creation of a legal position.)

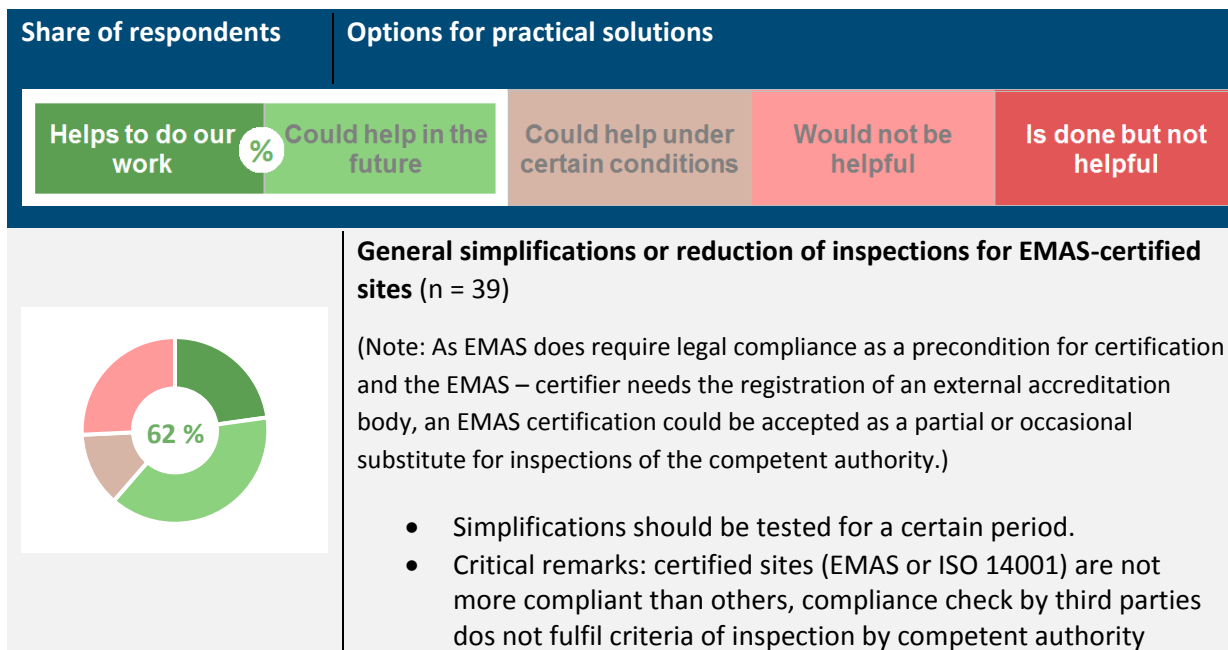
- Sufficient staffing is needed in order to provide service.
- Might lead to additional work due to unnecessary (anonymous) complaints and the lack of information about environmental law
- Best practice example: national system where complaints can be filed

Integration of accredited external experts (including EMAS verifiers) into inspection or surveillance activities (n = 41)

(Note: EMAS (Eco-Management and Audit Scheme) is a voluntary environmental management scheme based on EU-Regulation 1221/2009.)



- The integration of external experts is seen critical with regard to the adjustment of inspection schedules, impossibility to fully proof compliance, high costs of experts, and the possibility of legal restrictions. Furthermore other complementary measures are named which could be implemented by respective authorities themselves like improved technology, advanced training and sufficient staffing.
- Prerequisites for integrating external experts: contracted by duty-holders and accredited by environmental authorities, highly experienced, fully independent from any related economic activity, presenting complete analysis, regularly assessed by environmental authorities.
- Only EMAS but no ISO 14000 verifiers should be integrated.
- External experts could be integrated more often.



Especially regarding complementary measures, respondents stressed that sufficient staff is required to perform such extra tasks (e.g. public information and participation). Overall, suggestions and best practice examples include:

- Providing incentives for operators to comply with environmental legislation by publishing inspection and monitoring reports online (e.g. labelling compliant operators), by holding periodic press conferences or by publishing infractions in the media
- Providing financial incentives for compliance
- Awarding schools, companies or individuals acting exceptionally towards environmental protection
- Providing information (on new legislation) to duty-holders online, via e-mail, through brochures, seminars or helpdesks
- A national website where citizens can file complaints
- Including stakeholders (NGOs and interested citizens) in river areas conservation
- Forum on integrated water resources management including different stakeholders
- Neighbourhood dialogue for nature conservation

Generally, the opinions about integrating citizens, external experts (including EMAS verifiers) and other interested parties (e.g. NGOs) vary. Concerns include the additional workload created by (sometimes irrelevant) citizen complaints and the independence of external verifiers.

Question 7.2 asked for a **description of any other helpful measures**. Respondents mentioned the following:

- The Malcolm sparrow approach is named as a helpful training regarding how to deal with difficult compliance issues. A national training guideline was developed.



- Environmental authorities would benefit from cooperation with investigation/prosecution authorities and cooperation between agencies supervising a company's workplace and environmental protection agencies due to defects in the company's work safety processes.
- Task forces or round tables with responsible authorities are requested. Regular, country-wide exchanges with stakeholders (including industry or sector-related players) and between operators would be helpful.
- Employing rangers for large-scale protected areas
- Defining sectoral priority measures
- Instant presentation of infractions in media

3.8 Trans-Boundary or Trans-Sectoral Application and Enforcement Problems

Question 8.1 asked about the **main outstanding implementation problems in the respondent's area of competence that require trans-boundary or trans-sectoral approaches, technical cooperation and coordination**. In the comments, ten respondents mentioned waste and trans-frontier shipment of waste which was the largest category. Four mentioned border controls and trade in protected and non-protected specimens of endangered species of flora and fauna. Activities in the marine environment were mentioned in two cases. One mentioned different classification of substances according to different international sectoral legislation (such as IMDG Code, IBH Code, Basel convention).

Question 8.2 asked whether there was **awareness of any discrepancies between EU and international legal instruments (e.g. Basel Convention, Hong Kong Convention, CITES, regional seas conventions, etc.) that hamper compliance**. Most of those who replied to this question did not see any such discrepancies. One said that, in general, global, regional and EU legal instruments often have different scopes and definitions which do not facilitate implementation. Applicable general principles of law are also different and may hamper implementation of certain obligations (for example, the precautionary approach or polluter pays principle in the EU Treaties and in the IMO conventions on ships' sources of pollution). Another said that the implementation of the EU directives is very different in the Member States and that more EU regulations could help. In the field of agriculture, there are too many regulations and ongoing changes, so that the staff hardly can keep pace with the implementation. The many agreements (HELCOM, RAMSAR, OSPAR, Basel and Berne Convention, etc.) are often only papers and are not taken seriously enough.

Question 8.3 asked **what could help to overcome trans-boundary or trans-sectoral challenges**. There was already a considerable amount of communication between different authorities but also a view that more could be done. Staff and time constraints were seen as an issue. One said that information exchange must be practical and not formalistic. The replies were similar on sharing knowledge, skills and good practice. One said that the cooperation between the different authorities should be only peer to peer: the basic condition would be a serious cooperation on an equal footing. On the point about using common technical/procedural guidance there was a view that this should take into account constraints deriving from diversities between states.



Another said that the guidance should be not too extensive, but practical and applicable and that coordination is not inflated, but pragmatic which was a point made by another respondent. Establishing information exchange routines was seen as difficult where information has to be shared between states without an international secretariat. Coordinating compliance action between authorities was considered to be generally happening already. One suggested that this was helpful only if there was a common view on actions and another said that some inspections performed by the state could probably be more detailed if an inspector from the local authority, with knowledge of the local area, took part once in a while. On the topic about informing policy with practical experience and expertise there was only one comment, namely that this should only be done in cases, where policy makers are open for arguments and actions.

Question 8.4 asked for a **description of any other helpful measures**. Regular exchange between affected bodies and joint task forces of authorities would help to solve priority problems. One suggestion was setting concrete targets to be met at the international level, not only at the national level. Another suggestion was to rethink the organisation of environmental monitoring and, where appropriate, re-define responsibilities. Language courses would help to improve cross-border communication. There should be a reduction of bureaucratic and statistical costs, shifting the focus from monitoring and reporting to the implementation of measures to achieve the goal.

3.9 Overall Evaluation and Strategies

Question 9.1 was about the top three most important obstacles facing the respondent's organisation as at present. By far the most common obstacle in the first tier cited by fourteen people was the lack of resources, whether in terms of finance or personnel or both. Next, mentioned in six cases, were the increasing requirements of both technical knowhow and EU legislation.

Trans-frontier shipment of waste was mentioned in two instances. Other topics mentioned were management of tourism, regional differences, waste management (tyre recycling), improvement of water quality, implementation of electronic waste tracking system, too many complaints received and need for a strong complaint management system. Yet others mentioned the distribution of responsibility in the environmental sector between too many authorities, Air Quality, BAT-C implementation, lack of environmental monitoring equipment and laundering of illegally acquired wild fauna and flora.

In the second tier, lack of human and financial resources was mentioned in four instances. Alignment and coordination of sectoral EU environmental legislation was mentioned (in slightly different ways) in five instances. The need for of regular and guided experience exchange to learn from others was mentioned in two cases. Other than that, it was difficult to identify any clear trends here. Topics mentioned included targeting inspections efficiently, periods of high demand of certain types of knowhow (for example, after BAT conclusions have been published), management of fish farming, application of waste codes, incoherence between environmental and other sectoral law, avalanche of inappropriate complaints, international

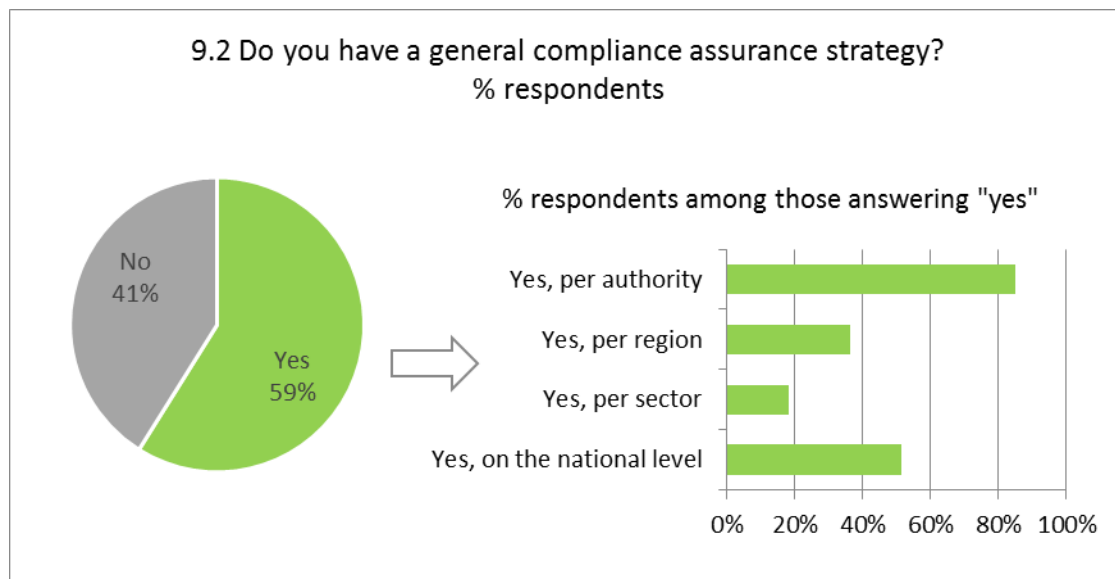


information exchange, improve coordination between institutions, no direct access to permits and self-monitoring and other data held by other authorities, lack of specific knowledge in particular areas.

Other topics included low guarantees in mining, promoting development of holistic response to climate change, identifying and understanding the level of pollutants (including in waste) emissions and consumption of natural resources from environmental users at a local level, and its connection with the state of environment, controlling and mitigating the environmental load from agriculture, high investment costs for installations to comply with legislation, quality of IED permits. In addition there was reference to the length of time to issue them and lack of cooperation with permit writers, lack of software to expedite issuing permits, lack of skills and knowledge in particular areas (REACH, CITES and Timber regulations), lack of specialisation, lack of regular and guided experience exchange to learn from others, guides for stakeholders and tools and protocols for environmental compliance, BAT/BREFs in practice, compliance assurance of data reported by the industries, traffic emissions and control activities of captive breeding/artificially reproduced species.

In the third tier of responses there was also considerable reference to lack of resources, at a general level (5 responses) and specifically the need for continuous training, lack of waste experts and insufficient support for prosecution. In six responses, there was reference to the need to integrate the work of different authorities. One saw a possible solution in building a network with national agencies while another referred to the lack of visibility of their Agency's operating abilities. One described a lack of political will to put the environment at the top level of priority and another that political direction is not specialised in environmental fields. Other topics mentioned were the lack of official rescue centres for seized animals, baseline reports on state of soil and groundwater, implementation of BAT, data collected from different regions, EU reporting requirements not adapted to a country's size, data quality and selecting data helpful for most relevant issues at hand, implementation and improvement of electronic information systems, risk approach of green and amber list waste not well received by most competent authorities, enhancing air protection, growth in production of bio-oils, impact of intense urbanisation on habitats, drought management and light pollution, odours from oil companies and problem with odour not covered by the Air Protection Law and management of new industries (silica plants).

Question 9.2 asked whether the respondent's authority had a **general compliance assurance strategy**. 59% of the respondents have a general strategy, 41% do not. Of those having a compliance assurance strategy, 85% have one at the level of their authority, about half have a national strategy and 36% have a regional one. Sectoral strategies seem to be less common: only 18% said they have a sectoral strategy.



Question 9.3 asked for **specific areas to be identified where EU legislation had been particularly effective** in helping to improve environmental protection in the respondent's area of competence. The Industrial Emissions Directive was mentioned in thirteen instances. Several mentioned the Habitats Directive, Natura 2000, waste incineration, waste management, Seveso Directives, Water Framework Directive, Air Quality, Waste Electronics and Electrical Equipment and Trans-frontier shipment of waste. One said that the EU had been effective in environmental protection in a large scale, specifically in waste management and water protection. One mentioned the introduction of the risk-based approach and another the Recommendation on Minimum Criteria for Environmental Inspections.

IMPEL Member Countries which replied to the questionnaire

- | | | |
|----------------|-----------------|-----------------|
| Albania | Germany | Serbia |
| Austria | Iceland | Slovak Republic |
| Belgium | Ireland | Slovenia |
| Croatia | Italy | Spain |
| Czech Republic | Latvia | Sweden |
| Denmark | Luxembourg | Switzerland |
| Estonia | The Netherlands | Turkey |
| Finland | Poland | United Kingdom |
| France | Portugal | |
| FYR Macedonia | Romania | |



4 Implications of Survey Findings for IMPEL and Recommendations for Future Actions

This section looks at the implications of the survey findings for IMPEL, its member organisations and its ways of working. It identifies the strongest signals coming from the responses to the questionnaire survey and makes a number of recommendations that IMPEL may wish to consider in developing its future programme.

4.1 IMPEL's Role and Response to Implementation Challenges

Overall, the survey shows that organisations are still facing many challenges in implementing environmental legislation in their countries. Their comments suggest that many are continuing to have difficulties in coping with the sheer number and complexity of laws with the resources they have available. A lack of resources (mostly in suitably qualified personnel, and to a lesser extent in technical equipment) is consistently cited as the greatest single barrier to achieving the effective implementation of environmental laws. IMPEL can help to apply available resources in the most efficient and effective way. Accordingly, member organisations recognise that IMPEL has a very important role to play in supporting organisations and practitioners by sharing knowledge, expertise and good practice across Europe. The survey also suggests that IMPEL needs to continuously improve its own ways of working to better respond to these challenges.

Recommendation 1

The IMPEL General Assembly and Board should consider the main signals arising from this survey in the context of [IMPEL's 5 year Strategic Work Programme 2016-2020](#)⁶. Many of the challenges reported in this survey are similar to those emerging from the last survey and the five main priorities of the Strategic Work Programme continue to be very relevant. Additional efforts to propagate and spread IMPEL's freely accessible web-based information, tools and guidance, should be considered. IMPEL's Programme Management Group should encourage more efforts on the greatest identified challenge, the effects of intensive agriculture, in supporting projects and initiatives that address the integrated nature of this challenge, making the appropriate connections between the work of the five Expert Teams as well as between IMPEL and other networks and actors of the compliance chain.

4.2 Engagement of Local Authorities

It is notable that most of the responses to the survey were from national and regional organisations. Only 6 percent were from local organisations. This is probably not surprising, considering the membership profile of IMPEL. However, it does reflect a lack of engagement with local authorities who have a critical role in environmental compliance assurance in many (but not all) countries, for example, in local air quality

⁶ [IMPEL's Strategic Work Programme 2016-2020. April 2016](#)



management plans, river basin management plans, environmental impact assessment, environmental permitting, monitoring and many other functions.

The survey results also reflect the importance that respondents attach to effective cooperation between environmental regulators and the local authorities responsible for land use planning and control, for example, in tackling the problems of water pollution and in addressing land uses that can adversely affect the status of nature protection sites.

Recommendation 2

IMPEL should consider how it can extend its outreach to the environmental protection and land-use planning functions of local authorities. It should look at how its connections with regional organisations could be used to greater effect to help make the links and improve communication with local authorities.

Recommendation 3

IMPEL should look at whether countries have umbrella organisations that represent municipalities and how to engage with such organisations. This aspect is included in the current IMPEL project on [Mapping European Agencies](#)⁷. It should examine who the umbrella authorities are so that it can ask them about the issues and challenges that they face. The umbrella authorities often have environment groups that can be engaged with. National Coordinators have an important role in supporting engagement and cooperation with local government associations and umbrella organisations.

Recommendation 4

IMPEL should also look at how it could develop cooperation with other European networks that represent and bring together local authorities. For example, the Council of European Municipalities and Regions (CEMR) and EUROCITIES Networks both have working groups that are actively working on environmental themes relevant to IMPEL's programme. It could also look at how to further strengthen its links with the EU Committee of the Regions which also addresses local environmental management and planning issues.

Recommendation 5

IMPEL should consider how it can address the barriers caused by language. This is often a particular challenge at local levels. The use of videos and short snapshots of projects and project outputs could be helpful here. Communication technologies and use of online tools could be very helpful in reaching out and engaging with the wider audience of practitioners working in local authorities. IMPEL-Guidelines should be translated and adjusted to the national context.

⁷ [Mapping of the European Agencies involved in implementing the environmental acquis. IMPEL Project: 2017/26.](#)



4.3 Addressing the Environmental Impacts of Agriculture

The survey results indicate that the agriculture sector is consistently the greatest area of concern, in particular for industry and air, land and water and nature protection. Key issues are the impacts of intensive animal rearing installations and reducing the inputs of fertilisers and other agrichemicals.

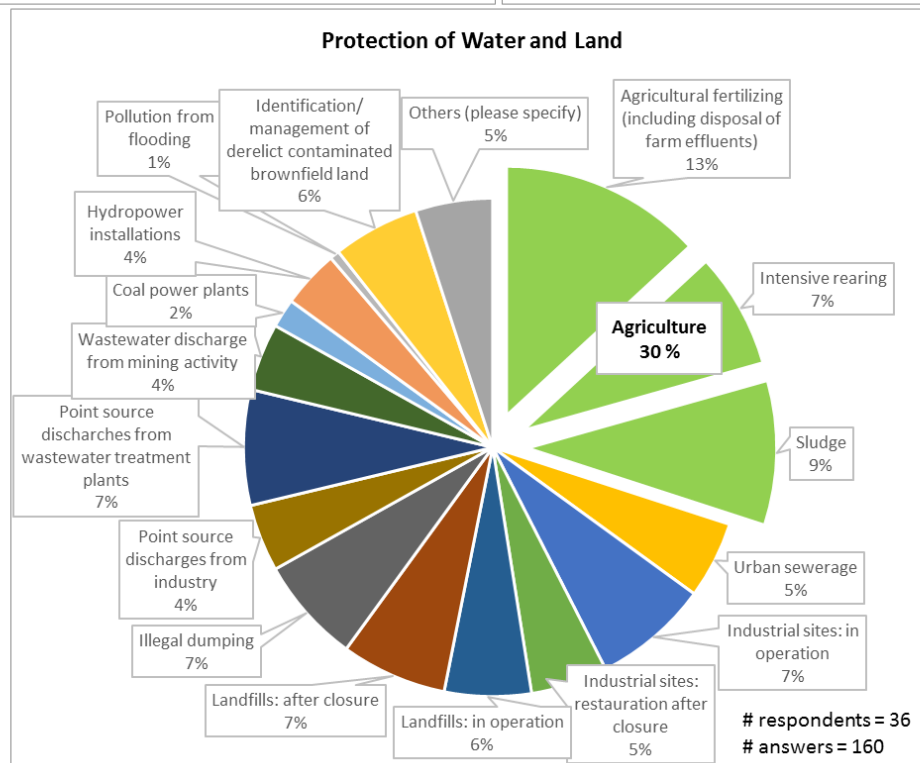
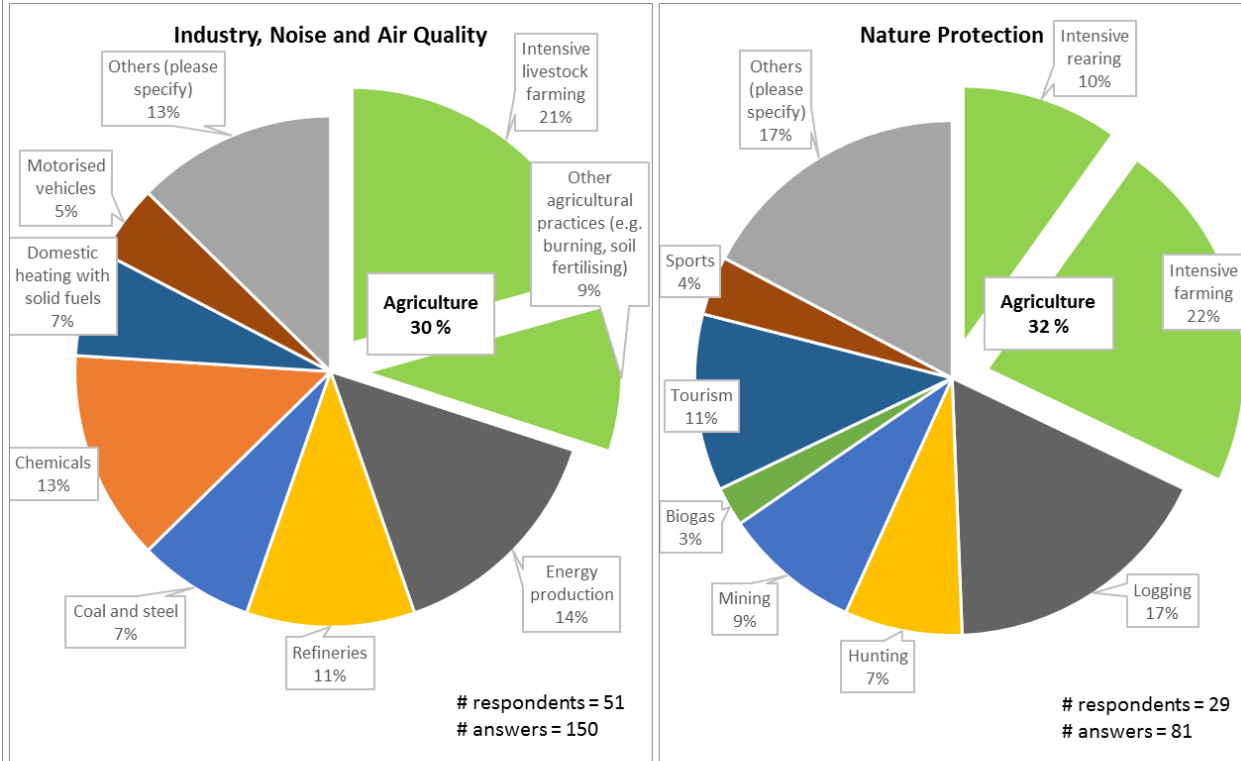
IMPEL has recognised the significance of the agriculture sector in its work programme through several projects that have addressed the environmental impacts of farming, for example, on the regulation of intensive piggeries; reducing diffuse source pollution from nitrates and pesticides; and achieving better compliance in the agricultural sector through networking and partnership working of environmental and agricultural inspectorates.

Intensive livestock rearing was by far the industry sector causing the greatest concern. Nearly two thirds of respondents said this sector presented a significant challenge. There is relatively little detail on the reasons why this sector is particularly problematic, although one respondent cited odours from pig farms as a particular issue.

Agriculture continues to be seen as the sector causing the greatest challenges in the regulation of the water and land environment and one of the main reasons for failure to achieve good status in waterbodies across Europe. Nearly sixty percent of respondents said that use of fertilisers (including the disposal of farm effluents) presented a significant challenge. Two thirds of respondents said that ensuring implementation of good agricultural practice was a key challenge in the control of water and land activities.

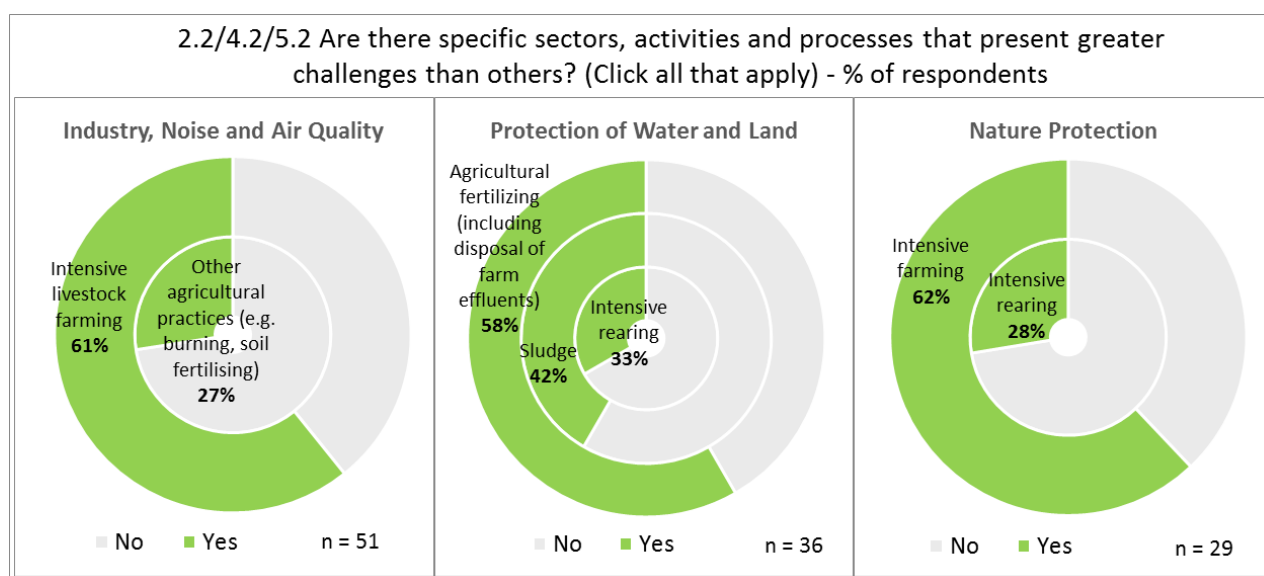
Asked about specific sectors, activities and processes that present the greatest challenges in their field of work, respondents' answers revealed that across different environmental areas, the agricultural sector presents particular challenges. For each of the four fields of work considered in the survey, respondents were asked to choose challenging sectors, activities and processes from a pre-defined set. They were allowed to choose as many as they wanted. The graph below shows the results for the three fields of work where agriculture is a relevant sector (industry, noise and air quality, protection of water and land and nature protection). Each pie chart represents the share of answers (i.e. individual clicks) each response category received. In all three fields of work, roughly 30% of answers stated that agricultural activities present greater challenges than other sectors and activities for implementing environmental legislation.

2.2/4.2/5.2 Are there specific sectors, activities and processes that present greater challenges than others? (Click all that apply) - % of total answers





The graph below takes a closer look at the response categories related to agriculture. It shows the share of respondents who selected that particular answer compared to those who did not. 61% of respondents stated that intensive livestock farming presented a great challenge for the implementation of industry, noise and air quality legislation; 27% of respondents stated the same for other agricultural practices. In the field of the protection of water and land 58% found agricultural fertilizing to be a great challenge, 42% said so about sludge and 33% found intensive rearing to be a great challenge. 62% of respondents selected intensive farming as presenting a great challenge in nature protection and 28% said the same for intensive rearing. By far the largest number of respondents, two thirds of those that answered, were concerned about the effects of intensive farming on nature protection.



Recommendation 6

IMPEL should consider what more it can do to respond to the particular concerns raised about the environmental impacts of agriculture. It should look at how its Expert Teams could work together to tackle the priority concerns across the agriculture sector. IMPEL might consider setting up a dedicated Expert Team to work on agriculture, but as experiences show that new Expert Teams might be hard to fill, an extension of the competences of existing Expert Teams may be more promising. Further work should involve looking at what IMPEL has done in the past, how it can build on this work, and what are the specific priorities for future work in this area. It should also consider how other kinds of organisations involved in the regulation of the agriculture sector, and networks that represent them, could contribute. This should build on previous work carried out by



IMPEL, for example, the project on [achieving better compliance in the agricultural sector through networking and partnership working of environmental and agricultural inspectorates](#)⁸.

Recommendation 7

The continuing problems in the regulation of intensive livestock rearing require further investigation and IMPEL should consider carrying out further work to improve understanding of the specific challenges that regulatory authorities are facing. This should build on the work IMPEL has previously carried out on [the permitting and inspection of intensive piggeries](#)⁹ and the [guidance](#)¹⁰ that has already been produced. IMPEL should therefore seek feedback on how this guidance has been used, how helpful it has been in overcoming implementation challenges and whether it should be updated or improved.

Recommendation 8

IMPEL should continue with its efforts to build its network of practitioners involved in resolving the problems caused by intensive agriculture. This might include consideration of: how codes of good agricultural practice and programmes of measures are being used to prevent diffuse source pollution; the use of farm audits and catchment walk-over surveys; the use of technologies for surveillance of land-use and farming activities; and help for the agriculture sector to target effort to achieve the best environmental outcomes. This should build on previous work carried out by IMPEL, for example, on the guidance that was produced in the project: [Good Practice for Tackling Nitrate Pollution from Farms and Farmsteads](#)¹¹.

⁸ [Achieving better compliance in the agricultural sector through networking and partnership working of environmental and agricultural inspectorates. IMPEL Report 2013/16.](#)

⁹ [Improving permitting and inspection of IPPC pig farming installations by developing practical guidance. IMPEL project 2009/02-2011/09-2012/07.](#)

¹⁰ [Inspection guidance book for inspection of intensive piggeries. IMPEL report 13 March 2013.](#)

¹¹ [Good practice for tackling diffuse nitrate pollution from farms & farmsteads](#)

[A guidance document with examples of good practice. IMPEL Project 2014/13.](#)



4.4 Clarity of Permits

Three quarters of respondents said that clarity of permits was a significant challenge in the control of industrial emissions and ambient air quality. Problems with permitting were also cited in the context of both waste and water regulation. There seem to be several underlying reasons for this. Unclear definitions in policy and legislation; the interpretation of BAT and translation of BAT conclusions; incomplete coverage of BAT guidance and BREFs; uncertainties on the use of derogations; and lack of relevant standards for aesthetic problems such as litter and odour were cited as some of the main problem areas.

Recommendation 9

The reasons for lack of clarity in permitting should be investigated more fully. This could be done as part of the ongoing IMPEL project on [‘doing the right things for environmental permitting’](#)¹² which is currently developing combined guidance that links together the different parts of the regulatory cycle from permitting to inspection to compliance assessment and enforcement. The project should look at the findings of this survey and, if necessary, carry out further work to identify the precise causes of lack of clarity in permitting. It should continue to further involve those organisations that are responsible for granting permits and the inspectorates that are responsible for assessing compliance with them. This provides the basis for a targeted guidance to help implementing organisations overcome the challenges they are facing. This is especially important where permitting and inspection are done by different organisations, where it is essential to have clarity of approach and procedures and effective communication between them. The guidance should be translated and adjusted to the national context to ensure that competent authorities are able to use it.

Recommendation 10

It is important that the experiences of regulatory practitioners in applying BAT prescriptions in permitting of industrial installations are fed back to those that are developing them so that they can be improved on the basis of practical experience when opportunities arise to update them. IMPEL should consider how it can develop closer cooperation with the European IPPC Bureau in Seville.

4.5 Operator Self-monitoring

Problems with operator monitoring regimes were mentioned by a number of respondents and were particularly cited in relation to the regulation of industrial emissions and of waste. Some commented on difficulties in acquiring monitoring data from operators, making it difficult to assess compliance with permit conditions. Lack of adequate monitoring equipment and technical expertise also seem to be a problem in some countries.

¹² [Doing the right things for environmental permitting. IMPEL Project 2016/23 – 2017/21.](#)



Recommendation 11

The specific problems related to operator monitoring warrant further investigation. IMPEL could consider taking forward an initiative to identify how and when operators fail to submit the required monitoring reports; where they are produced; in what form the reports are made available; how quality assurance is carried out; and the adequacy of monitoring reports for proper compliance assessment. This would provide the basis for sharing experience and identifying good practices to help authorities make the necessary improvements. This should build on work already carried out by IMPEL on [guidance for operator monitoring](#)¹³ and the [reporting of operator self-monitoring results under the Industrial Emissions Directive](#)¹⁴. It would be useful to have feedback from practitioners on how this existing guidance has been used, how useful it has been, and whether it needs to be changed or updated to make it more relevant.

4.6 Definition and Classification of Waste

A large number of respondents cited problems concerning the definition of waste as a significant implementation challenge. 78 percent of respondents had difficulties in the distinction between waste and non-waste and 58 percent found the distinction between hazardous and non-hazardous waste to be problematic. Other problems include: lack of clarity in the definition of End of Life Vehicles; inadequate guidance on the application of waste classifications in waste shipments; definitions related to re-use and preparation for re-use; lack of precision in end-of-waste criteria; application of legislation and definitions in hazardous substances and chemicals regulations, such as REACH, in the context of waste regulation; problems stemming from the translation of definitions in EU legislation into languages of the Member States; and the overall large volume and complexity of legislation that touches on waste.

The definition of waste in EU legislation has been the subject of debate for many years. There is a catalogue of previous case law. Individual countries have issued guidance for regulators and businesses to help them in interpreting legal definitions. For example, the [UK government has published detailed advice for organisations](#)¹⁵ such as businesses and local authorities to help them to decide if a material is waste; to identify when waste rules apply; to find out when waste ceases to be waste; and to find out when waste rules do not apply. IMPEL has also produced extensive guidance on this subject, an example being the project Wastewatch.

¹³ [IMPEL report on Operator Self-Monitoring. February 1999.](#)

¹⁴ [IMPEL report on Supporting Implementation of the Industrial Emissions Directive. Project 2016/1, October 2016.](#)

¹⁵ [Guidance on the legal definition of waste and its application. Department for Environment, Food and Rural Affairs, August 2012.](#)



Recommendation 12

IMPEL should consider carrying out a project to identify: the source, nature and consequences of these problems; what kinds of advice and guidance exist in countries and how it is used; whether there are areas of good practice that can be shared among practitioners; and whether IMPEL should develop additional guidance to help its member organisations where particular difficulties are being encountered. This work should address the full spectrum of waste streams and activities and both domestic and transboundary waste management. IMPEL should also consider carrying out a country review to look at specific issues and problems related to the definition of waste. This could take the form of an IRI (a peer review known as the IMPEL Review Initiative).

4.7 Tackling Environmental Crimes

Problems concerning illegal activities were cited by respondents in different areas covered by the survey. Two thirds said that the tracking of illegal dumping and burning of waste is a key challenge. In the context of nature protection, more than half said that both illegal land use and the illegal killing of protected species are key challenges for their organisations.

IMPEL is already involved in some aspects of environmental crime, for example, the ongoing projects on [the elimination of illegal killing of birds](#)¹⁶ and the ongoing project on [Enforcement Actions](#)¹⁷ which is looking at inspection and enforcement in the regulation of trans-frontier shipments of waste.

IMPEL has also initiated closer collaboration with other networks involved in environmental compliance and enforcement notably with the joint conferences signing a Memorandum of Understanding (MOU) between of regulators (IMPEL), police (EnviCrimeNet), prosecutors (ENPE), but also judges (EUFJE).

Recommendation 13

Building on the developing cooperation between the 4 Networks (IMPEL, EnviCrimeNet, ENPE and EUFJE), the results of this survey could be used to help focus further effort to improve coordination across the compliance chain in areas where particular implementation challenges and problems with illegal activities are being experienced. This might involve: specific activities (for example, the illegal dumping of waste and the illegal taking or killing of protected species); tools and techniques required to support better communication and cooperation through the compliance chain (for example, in the sharing of data, intelligence, evidence and case law), or areas where there are particular professional development needs (for example, specialisation in dealing with environmental infractions). It will be useful to develop more integrated programmes of work across the 4

¹⁶ [Contributing to the illegal killing of wild birds. IMPEL Project: 2013/08 - 2014/15 - 2015/17 - 2016/17 - 2017/17.](#)

¹⁷ [IMPEL Enforcement Actions Project. Number: 2015/05 - 2016/04 - 2017/05.](#)



Networks, as agreed upon in the MOU, through joint projects and initiatives that address the specific challenges and areas of concern raised in this survey.

4.8 Insufficient Resources in Implementing Organisations

As with the previous Implementation Challenge survey, insufficient capacity in human resources continues to be seen as the biggest single barrier in achieving effective implementation of environmental laws. This is probably not a surprising finding considering the continuing trend of budget cuts in the funding of environmental authorities in many countries. This is obviously a matter of political choice on funding priorities in individual countries and there is little that IMPEL can do in itself apart from continuing to raise awareness on the importance of adequate funding for sound environmental regulation. However, IMPEL does have an important role in the sharing of information, experience and good practice across countries and organisations on how the limited resources in environmental authorities could be used with greater effect.

The problems related to lack of resources seem to be different across countries and organisations and there is a range of underlying causes. While several administrations report that they suffer from an overall lack of staff, others have problems with a lack of relevant expertise and do not have personnel with the required competences to carry out specific projects. Advanced vocational and in-house training is either not available or cannot be used in practice, because inspecting and permitting personnel are so overburdened that there is insufficient time available to be allocated to their training and development or because their professional background is not appropriate. A lack of reliable and up-to-date environmental and emissions data hampers analysis and assessment. Inadequate administrative and technical support results in insufficient time being devoted to core tasks because time is wasted on organisational matters. Also, slow progress in the modernisation in administrative structures leads to inefficiency in the use of staff resources.

Recommendation 14

IMPEL should consider how it can help to facilitate more efficient and effective use of the limited resources in environmental authorities by sharing of experiences and practices and by developing appropriate tools and guidance. Topics that could be looked at might cover: further development of risk-based approaches to environmental regulation for more effective targeting of effort; reducing and removing unnecessary bureaucracy and 'red tape'; moving away from resource-intensive paper-based systems and replacing them with more flexible electronic ones, taking advantage of opportunities for increasing use of automated approaches; improving organisation design and structure to maximize efficiency of resource use; deploying new technologies for monitoring and electronic data capture reporting and analysis; greater use of the internet and social media for communication and public engagement.

Recommendation 15

Following IMPEL Position Paper on Environmental Compliance Assurance Initiative, IMPEL should consider what more it could do to address the need for improved professional training in the field of environmental regulation.



This should start with a mapping of needs and then go on to the development of curricula for advanced vocational training. The establishment of a ‘compliance assurance academy’ at national or EU-level could also help to address compliance assurance in a more systemic and cross-sectoral manner.

Recommendation 16

IMPEL should consider convincing the European Commission to develop and provide standardized templates and software solutions for monitoring and reporting obligations of competent authorities. A harmonized template and/or software environment could enhance the efficiency of monitoring and reporting activities in the context of environmental inspections and enable IMPEL to offer general guidelines and trainings to use these templates and software solutions in the Member States.

4.9 Sharing of Knowledge, Skills and Good Practice

The importance of sharing knowledge, skills and good practice was reflected in the survey results as one of the highest priorities in helping to overcome the challenges of implementing EU environmental law. Sharing both within and between organisations involved in the compliance chain was seen to be very important. This lies very much at the heart of IMPEL’s mission and ways of working and is a key priority in IMPEL’s Strategic Work Programme.

Recommendation 17

IMPEL should continue to develop and strengthen its role in facilitating the sharing of knowledge, skills and good practice across its membership. It should focus on improving the engagement of its members in the Network’s activities and decision-making and in participation in Expert Teams and Projects. It should continue to seek feedback on how organisations benefit from participation in its activities and promote further sharing of experience and expertise across the Network. , e.g. by supporting the establishment or strengthening of national IMPEL networks within its Member States and by intensifying the propagation of its web-based information.

Recommendation 18

Following IMPEL Position Paper on Environmental Compliance Assurance Initiative, IMPEL should consider how it can further develop its important role in supporting the professional development of practitioners in its member organisations. This could involve placing increasing emphasis on the development and delivery of supporting materials, aimed at nurturing specific technical skills, applying new tools and methods, and using technical guidance. It should look at extending its work on sharing professional expertise, for example, through activities such as joint inspections and in facilitating staff exchanges. It should also consider how it can further foster peer to peer learning through the IMPEL Review Initiative (IRI) programme. It should use the information from this survey to focus IRIs on issues and organisations where there are clear implementation challenges and look at how peer to peer support can help in overcoming them.



Recommendation 19

IMPEL should consider providing guidance, supporting materials and training services to practitioners. Guidelines should be structured well and include simple lists, diagrams, flowcharts etc. Guidelines could be provided in an adaptable format that can easily be distributed electronically, so that they can be translated and adjusted to the national context. In order to facilitate translations and reduce the language barrier, IMPEL could also consider providing structures for an internal glossary relying on experts' input and indicating translations of specialist terms, indicating inconsistencies in the use of those terms among languages. In the survey, respondents voiced the following training needs among others:

Industry, noise and air quality: BAT, noise, atmospheric emissions, indoor air quality of buildings, air emissions monitoring, minimum requirements for waste disposal plants, cross-media monitoring of waste disposal and surveillance of sewer systems.

Waste and TFS: waste classification; difference between waste/non-waste, hazardous waste/non-hazardous waste; waste stream control, cross border waste shipments; waste code numbers; end of waste status; efficiency of waste treatment plants; implementation of plan approval procedures; sludge disposal; treatment of liquid waste; pre-treatment of waste; enforcement guidelines; specific information sheets for handling waste.

Water and land: soil decontamination, contaminated sites and non-deterioration rules, rare water pollutants, evaluation of primary status reports, methods of investigations, drilling and testing, compensation of land use, complaint management, establishment of drinking water protection areas.

Nature protection: protection of species, CITES and TIMBER regulations, improved coordination between construction and nature conservation law guidelines, Art. 6(3) and Art. 6(4) Habitats Directive (mitigation/compensation measures).

Recommendation 20

IMPEL should consider analysing national and/or regional vocational training structures for staff in environmental authorities, because training offers are often not systematically designed and actively communicated. IMPEL should consider supporting structures for self-organised best practice dissemination, exchanges and trainings. It could be worthwhile to analyse whether IMPEL can make available training support through webinars or technical tools which would have to be easily adaptable to national or regional conditions and easy to translate.

Recommendation 21

IMPEL should consider developing and support electronic platforms and networks for knowledge sharing and information exchange because the lack of financial and time resources often hinders practitioners to participate in networks and training activities. In this context IMPEL could provide online training courses for practitioners. Furthermore, web portals with keyword search or computer-assisted techniques could provide an easy access to useful information.

Recommendation 22



IMPEL members should consider how they could become more actively engaged to reap the benefits of IMPEL's programme. They should look at how to encourage senior-level involvement in decision-making to ensure that the work programme is focused on the real priorities of its members and the outputs from its work are taken up and embedded into the member organisations. IMPEL's National Coordinators have an important role in increasing senior-level engagement in their countries and in the promotion and embedding of outputs from projects and programmes, while preserving IMPEL's unique focus on practitioners on the ground and their needs.

4.10 Participation in Networks

The survey results reflect a high level of support for participation in professional Networks as an important part of overcoming implementation challenges. Many respondents commented on the need to improve coordination between different organisations involved in the compliance chain. There are good examples of Networks operating in some countries that bring together organisations operating at national, regional and local levels. IMPEL has already done a great deal to extend and diversify its membership to reflect its new areas of work and the further development of its Network remains a key priority in its 5-year Strategy. The feedback from this survey suggests that there is strong support for the further development of all these initiatives.

Recommendation 23

The IMPEL National Coordinators should look at how they could do more to share information and experiences of Networks for environmental protection authorities operating in their countries. This would help to identify and promote areas of good practice in networking. It would also help those countries that don't yet have such Networks think about how they could be set up most effectively.

4.11 Unclear, Incomplete or Overly Complex Legislation

Many respondents commented on problems caused by unclear, incomplete or overly complex legislation as a barrier to effective implementation of EU environmental law. The interpretation of some definitions, for example, the definition of waste, seems to be a common problem. In many cases, problems seem to be associated with national legislation or institutional structure. For example, some respondents commented on unclear and sometimes overlapping responsibilities between national and regional authorities. There were several comments on the overall number and complexity of laws and the size of the task to implement them with few resources.

Recommendation 24

It would be helpful to have more specific examples of exactly where and how practical implementation problems are being experienced because of unclear, incomplete or overly complex legislation. It is important to differentiate between problems that arise from national laws and those that originate from EU legislation. IMPEL should continue to invite its member organisations – as a part of all exchanges of experience and best



practice, to come forward with specific examples on where EU legislation is deficient, and to make suggestions on how improvements could be made.

Recommendation 25

IMPEL should consider establishing a reporting template on its website for unclear, incomplete or overly complex legislation to support the identification and systematization of such implementation problems.

4.12 Access to Data and Information

Many respondents said that better access to data and information – especially environmental information – was important in overcoming implementation challenges. This includes information on the state of the environment to help with the integration and prioritisation of environmental issues, and to support compliance strategies and regulatory decision-making.

Many felt that making the results of inspections and compliance assessment available to the public was an important complementary measure in promoting better compliance.

Respondents stressed that in many cases data are generally available, but are not accessible to authorities or not useful because they are not appropriately scaled (e.g. local/regional level) or real time. Moreover, raw data are difficult to understand: analysing those takes time and is often not doable without sufficient staff and appropriate training.

Recommendation 26

IMPEL should consider carrying out a project to identify and share good practices on making environmental information available to the public in a way that is interesting and useful to the needs of different users. This could involve seeking the advice and expertise of the European Environment Agency and its networks that have a great deal of experience in this area.

Recommendation 27

IMPEL should consider exploring the possibilities of earth observation techniques. Specific suggestions from the survey are: using geospatial data, surveillance and earth observation technique (also drones/aerial flights) to monitor environmental status, identify and locate sources of pollution and collect evidence against polluters, to identify illegal dumping sites and landfilling, to detect poachers, illicit fishing, and illegal logging or to identify invasive plants. The current IMPEL project [Assess the use of Copernicus Satellite images in environmental and nature conservation inspections and their evidential value](#)¹⁸ is already assessing possibilities for the use of earth

¹⁸ [Assess the use of Copernicus Satellite images in environmental and nature conservation inspections and their evidential value. IMPEL Project: 2018/18.](#)



observation techniques in inspections. A European “knowledge and innovation centre”, which is envisaged by the Commission’s Action Plan on Environmental Compliance Assurance could work on transferring such new technologies to competent authorities and on training them how to use these technologies.

4.13 Reducing Nuisance, Conflicts and Complaints

Many respondents thought that support for dialogues between site managers and neighbouring communities aimed at reducing conflicts and complaints would be helpful as a complementary approach to regulation. Especially regarding such complementary measures, however, respondents stressed that sufficient staff is required to perform such extra tasks.

Potential public health risks and incidents/ accidents are key areas of concern. The problems of aesthetic pollution - such as noise, odours and littering - were raised by several respondents in different parts of the survey questionnaire. These are often contentious issues and the source of conflicts and complaints with local communities. They are not amenable to regulation in the same way as other kinds of pollution. Some commented on the lack of standards and criteria to support the regulation of aesthetic pollution.

Recommendation 28

IMPEL could consider carrying out further work to investigate the sources of conflicts and complaints experienced by its member organisations and how different approaches are used to address and resolve them. This might involve looking at good practices in the use of local interest groups; the management of neighbourhood dialogues; the facilitation of public meetings; and the provision of local environmental information. This should build on the work IMPEL has previously carried out on the [resolution of environmental conflicts by neighbourhood dialogue](#)¹⁹ and the development of a [toolkit](#)²⁰ to support organisations in this area of work.

4.14 Compliance Assurance Strategies

Many respondents said that they have a general compliance assurance strategy. These may relate to individual authorities, regions, sectors or countries. However, 40 percent said they did not have one. There is very little information from the survey on the nature of compliance assurance strategies and how they are used in practice.

¹⁹ [IMPEL Project on resolution of environmental conflicts by neighbourhood dialogue. Project Nos: 2005/05 - 2006/18 - 2007/01 - 2009/01 - 2010/04.](#)

²⁰ [Establishing neighbourhood dialogue: Toolkit. IMPEL report, November 2007.](#)



It seems that part of the problem is that there is no common understanding of the term ‘compliance assurance strategy’. Different kinds of strategy exist at different levels - organisational, regional, country – and they relate to different things. Respondents to the questionnaire survey may have elements of a compliance assurance strategy in place in their strategies, programmes and plans but this may not have been fully captured in their responses to the survey.

Recommendation 29

IMPEL should consider carrying out further work to identify the different kinds of compliance assurance strategies that are in place in its member countries and organisations and how they are being used to guide regulatory decision-making and to inform those that are regulated. This might involve looking at how compliance assurance strategies help to integrate environmental policy, legislation and management priorities; how they work across sectors and across the whole compliance chain; how they help to bring together different actors and organisations; how they are used at different levels of governance – national, regional and local; and how they make use of complementary approaches to promote and assure compliance. This work would help to identify good practices and to develop guidance where needed.

Recommendation 30

Following Recommendation 16, IMPEL should consider what it could do to support the training of professionals who are involved in developing strategy in their administrations. This is a key element in improving overall awareness of the importance of compliance assurance strategies, raising the quality of their content, and improving the communication and coordination between relevant administrations across the compliance chain.

Recommendation 31

Following IMPEL Position Paper on Environmental Compliance Assurance Initiative, IMPEL’s peer review approach through IRIs could be adapted and extended to look at compliance assurance strategies across organisations, regions, sectors and at national level. It would also be helpful to engage senior managers who are experienced in organisational leadership in this process. This might be done in cooperation with the EU Heads of EPAs and the EU ENCA Networks whose membership consists of the most senior leaders of environmental and nature protection authorities across Europe.

4.15 Dissemination and Uptake of IMPEL’s Work and Outputs

Many of the areas that respondents cited as the source of continuing implementation challenges have been the subject of previous work by IMPEL. Some of these projects have produced practical tools and guidance to help member organisations overcome these challenges. Despite this, problems are still being reported. There is little information on how IMPEL’s work programme outputs are being used and by whom. There is little feedback from users on their experiences in applying IMPEL’s products, how effective they are and whether they need to be reviewed and revised in the light of practical experience.



Recommendation 32

IMPEL should step up its efforts to understand how its work programme outputs and guidance are being used and by whom. It should do more to promote its work and improve communication with practitioners to improve feedback on the usefulness and effectiveness of its tools and guidance. It would be very worthwhile for IMPEL to take some time to refresh and evaluate the back catalogue of its work and to re-promote key outputs where necessary. The Expert Teams would be the appropriate groups to do this. The IMPEL website could be used for inviting and recording feedback, both qualitative and quantitative, perhaps with some sort of rating or scoring system. Basecamp could be used as a forum for recording of experiences of implementing project outputs. The Annual Report from member countries also provides a useful opportunity to gain feedback on what is beneficial. The Communications Group could look at the development of short videos and case studies on how countries have used tools and guidance. This would help to disseminate practical experiences on how countries have benefitted from IMPEL's work. The weekly newsletter could also be used as a channel for promoting case examples and it could be considered to carry out projects which primarily focus on dissemination.

5 Conclusion

The previous projects, carried out in 2014 and 2015, confirmed that there were significant challenges in the implementation of EU environmental law in the thematic areas in which IMPEL is working: water and land; waste and trans-frontier shipment of waste; industry and air; and nature protection. This project reaffirms that such challenges remain, though not always in the same areas, and that there is a continuing risk that key commitments, standards and targets in existing legislation will not be met unless progress is accelerated.

The nature of the specific implementation challenges varies in different sectors and involves different problems and actors. However, there are some common underlying factors which are significant causes of poor progress with implementation, including: lack of resources, insufficient capacity in the organisations responsible for environmental regulation and enforcement, and inadequate sanctions and low level of fines for those that breach the law.

In some cases, challenges have been identified in areas where IMPEL has already carried out projects which should be beneficial in helping to overcome those challenges. This suggests that there may in the past have been issues around the way in which the results of those projects were communicated or indeed that the projects might need to be looked at again to see whether they might benefit from being updated. This project has looked again at the findings and analysed them in greater depth. As a result, it has enabled some of the major challenges identified in it to be taken forward through IMPEL's work programme. It has also improved some of the tools used so that they can be used more effectively in the future both in the network and by member organisations within the network. It would clearly be beneficial to repeat this exercise on a regular basis both to see whether existing challenges identified are being tackled and whether new ones are arising.



Actively disseminating the survey to practitioners at local or regional level would be worthwhile to gain more feedback and specific examples.

A challenge already identified on several occasions is the need to improve communication and cooperation between organisations responsible for different parts of the implementation chain, including those responsible for environmental planning, permitting, monitoring, compliance promotion and assessment, enforcement, prosecution, and the judiciary. IMPEL has already done much in this field and should continue to play an important role in bringing together different actors in projects and building relationships with other networks within and outside the EU. The most recent example was the very successful joint conference held in Oxford, UK, in September 2017.



Annexes

*A SURVEY ON PRACTITIONERS' VIEWS ABOUT THE IMPLEMENTATION CHALLENGES WITH
EU ENVIRONMENTAL LEGISLATION, THEIR UNDERLYING REASONS AND WAYS TO
IMPROVEMENT: 2017*