European Union Network for the Implementation and Enforcement of Environmental Law

IMPEL SWETE Project

Safeguarding the Water Environment Throughout Europe

Date report: December 2015

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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IMPEL has been asked by the European Commission to expand and apply its regulatory capability into the water and land environment area, having previously focussed on industrial emissions and associated processes under IPPC and IED Directives. Effective water resource management, (both quality and quantity,) relies on good forward planning and delivery based on data, information and professional judgement.

Implementation of the Water Framework Directive (WFD) is dependent upon good regulatory practice to produce good River Basin Management Plans and to implement the Programmes of Measures in a timely and effective way. Attention is needed to make good regulatory practice available across the EU, using both conventional permits ('hard'regulation) and 'softer'non-regulatory measures separately or in combination.

The WFD challenges Member States to manage their water resources at catchment and waterbody level. In many cases this cuts across existing institutional boundaries, requiring new thinking and ways of working in order to achieve the Directive's requirements.

This project aims to assess regulatory capability and to use this to specify development need and indentify good point source regulatory practice. It will provide the information needed to specify potential training workshops needed to increase regulatory capabiltiy needed to better implement the WFD. The workshops and future engagement will be undertaken in later phases, scheduled for 2016, subject to funding.

Acknowledgements

The team would like to thank the IMPEL Water and Land Expert Group for commissioning this project and the IMPEL Secretariat for providing administrative support and assistance with the electronic version of the questionnaire.

Thanks also to the Environment Agency in England for providing project management support. Paul Hickey for acting as Project Executive and Barrie Howe as Project Manager. Also thanks specifically to Rob Hayes and Elen Strale for their help with the international elements and survey configuration.

The project was initiated following discussions between John Seager, IMPEL Chairman, and Prof. Giuseppe Sgorbati, IMPEL Water and Land Expert Group Chairman. We thank them both for developing these ideas and formulating this project with us.

Finally, thanks to the IMPEL Water and Land Expert Group members, and to the individuals filling in the questionnaire.

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Executive Summary

The effective implementation of the Water Framework Directive (WFD) and attainment of the planned outcomes is important for all Member States (MS). To date, much emphasis has been placed on the WFD River Basin Plans, but less on the regulatory implementation elements critical for delivery. As we come to the end of the first planning cycle and enter the second, concerns have been raised about the regulatory approaches to the implementation of the 'Programmes of Measures' and the levels of capability required to do this well.

IMPEL has commissioned this exploratory study to gain an overview of the regulatory methods used by MS to implement the WFD. This has been undertaken by this project, via a questionnaire on the regulatory approaches to the implementation of the WFD. This has been commissioned through the IMPEL Water and Land Expert Group in the final quarter of 2015. It is a small project with a technical input of 16 days, plus project management and MS response to the questionnaire.

The study provides individual opinions on regulatory approaches for the purpose of improving capability and structuring a workshop to determine development need and good practice. It is not a definitive statement of MS progress and to ensure confidentiality responses have been anonymised.

The questionnaire and the analysis of the responses has been focussed around the IMPEL regulatory cycle demonstrated in Figure 1.

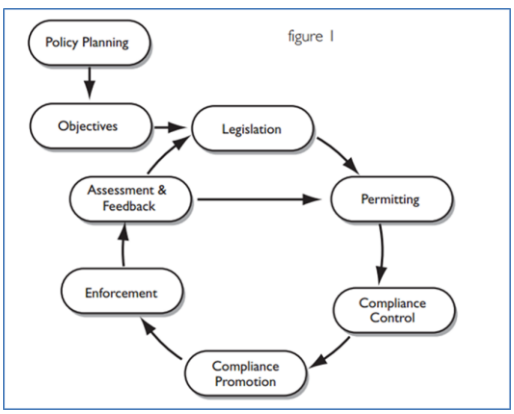


Figure 1- The IMPEL Regulatory Cycle

The analysis shows that, in general terms, the policy planning and legislation elements are in place. For point-source discharges, most permits are in place, but there may be inconsistencies in the numeric standards and the self-monitoring elements of the permits, which may not relate to the WFD objectives set in the rivers. In many cases, inspection and monitoring, permit compliance assessment and enforcement might be improved. Communication and feedback to the permit holders and the public could also be improved. Diffuse-pollution was the subject of one question and all respondents thought that regulatory capability and tools could be improved.

The study provides a structured overview of the current regulatory approaches being used by MS to implement the WFD. Gaps and opportunities for improvement are identified. The report recommends that a two day workshop is arranged early in 2016 to discuss the findings and to agree a way forward to improve regulation. This would form the basis for a SWETE Phase 2 initiative and possibly other actions to improve regulatory capability for the second and third WFD implementation rounds.

Introduction

1.1 Study Scope

This is a small first phase study designed to gain an overview of the regulatory methods and capabilities used by MS to implement the WFD. It seeks to identify areas of good practice and potential gaps in capability which may reduce the effectiveness of attainment of the WFD agreed outcomes. This information will be used to inform a proposed workshop in early 2016 to determine the way forward and potentially scope a second phase to this project, or other options for improving regulatory capability across the EU.

The project was commissioned in September 2015 with completion of the report scheduled for end of December 2015. The study was limited to 16 man days of technical input, plus project management provided by the Environment Agency of England. The Terms of Reference (ToR) for the project are included in Annex 2.

Information for the overview was collected via a questionnaire sent by the IMPEL Water and Land Expert Group to all member states. This took the form of 'quick fire' high level questions (Yes, No, Don't Know) focussed around the logical IMPEL Regulatory Cycle. This was added to by some narrative questions and explanatory boxes.

The responses from MS provided the high level overview required to structure the report and will provide the basis for the workshop planned for early 2015.

The project **does not** seek to form a definitive view on individual MS's regulatory approaches or their implementation of the WFD. It provides a neutral forum to look progressively at good practice, gaps and the need to increase regulatory capability and networks for future WFD implementation rounds.

2 Background

2.1 IMPEL Water and Land Expert Group

IMPEL has been asked by the European Commission to expand and apply its regulatory capability into the Water Environment Area, having previously focussed on industrial emissions and associated processes under IPPC and IED Directives. Effective water resource management, (both quality and quantity,) relies on good forward planning and delivery based on data, information and professional judgement.

The IMPEL Water & Land Group has been set up to build networks and improve regulatory practice. The effective implementation of the the WFD is essential to implement EU policy in this field and to protect and improve water resources across Euope. It will build on the regulatory principles established in previous IMPEL work and refine and adapt these to the water environment.

Box 1 Provides an overview of the IMPEL Water and Land Expert Group activity.

Box 1: The IMPEL Water and Land Expert Group - focus and challenges[1].

Consciousness of the threat represented by quality and quantity degradation of water resources has increased over the years. As well as problems related to poor management of land and soils. The presence of a number of different administrative and enforcement structures operating in a single thematic area, the need to operate in a defined strategical line set up by framework directives and insufficient evidence, data and information, are reported as major causes for implementation gap. This consequently can endanger the capability of Water Managers in planning adequate interventions.
In order to deal with these challenges, the Water and Land Expert Team is taking into consideration two approaches:

[1] IMEL Water and Land Expert Group - http://www.impel.eu/topics/water-land/

- *a traditional one, from IMPEL's point of view, to Environmental protection, based on inspection and promotion; and*
- *a relatively innovative one, which looks at environmental monitoring as instrument to support strategic planning required by Framework Directives*

The topics of the activity, in this view, will be enforceable duties directly or indirectly related to directives such as Water Framework Directive, Nitrates Directive, Marine Strategy directives; also, projects related to Water and soil protection in IED will be taken into consideration. Agricultural issues will be considered with a special focus, due to the direct potential impact of this human activity on the water environment and on soil, and the complex framework of enforcement responsibilities.
Key areas

- *Permitting, monitoring and inspection in water and land areas*
- *Water Management*
- *Promotion of best and innovative practices, support to their development*
- *Support to Planning Managers in implementation of Framework and Strategy Directives on W&L topics*
- *Agriculture*
- *Cross Compliance in CAP*

2.2 Water Framework Directive

The EU Water Framework Directive (EU WFD) provides the framework for future improvement and protection of the European water environment.

The EU WFD provides a consistent water management framework across Europe. It builds on best practice and forms a platform for the future sustainable management of the water environment. Integrated river basin management lies at the heart of the Directive. It recognises that a long term approach is needed and that water and land planning need to be considered together in the context of river basins.

Much of the focus of the WFD has been on the development and agreement of the River Basin Plans. The first planning cycle has been completed and the second planning cycle is nearing completion. Almost all River Basin Plans are in place and the water planners have generally delivered to meet statutory WFD timetables. In terms of implementation and realisation of WFD environmental outcomes the Programmes of Measures (PoMs) are the critical component. They must 'aim to achieve the outcomes in the environment' outlined in the river basin plans. Implementation of the programmes of measures is tested by the EU Commission and action may be taken by the Commission if these are not followed. This requires regulatory and institutional application and buy-in from all stakeholders. However, the

skills needed for planning may be different from implementation and planners may not be sufficiently competent in implementation. We should aim to ensure that the full WFD cycle is joined up and constantly improves.

Attention is needed to make good regulatory practice available across the EU, using both conventional permits ('hard'regulation) and 'softer'non-regulatory measures separately or in combination.

The implementation of the WFD PoMs is via three six year plans. The first planning and implementation cycle finishes at the end of 2015 and we can now begin to evaluate the improvements made to the water environment. Initial Informal views suggest that more could have been achieved if good regulatory practice had been more widely applied and if implementation was more effectively carried out.

The WFD challenges Member States to manage their water resources at catchment and waterbody level. In many cases this cuts across existing institutional boundaries, requiring new thinking and ways of working in order to achieve the Directive's requirements.

2.3 Regulatory Principles

IMPEL have established a core framework of good regulatory practice and implementation, initially aimed at the effective delivery of the IPPC Directive. The key regulatory principles are applicable to all environmental regulatory activities, including the implementation of the WFD.

The well-established IMPEL regulatory cycle[2] (Figure 1) will be used as a logical model with which to assess current regulatory approaches to the implementation of the WFD. Each component of the regulatory cycle can be examined against Member State's implementation of the WFD and a questionnaire has been developed using this model.

We hope that this approach will provide an overview of current practice and allow an overview of development need and potential best practice.

[2] Reference. IMPEL Environmental Inspector's Handbook 1999 : This can be found at http://impel.eu/wp-content/uploads/2010/02/1999-02-refbook-FINAL-REPORT.pdf

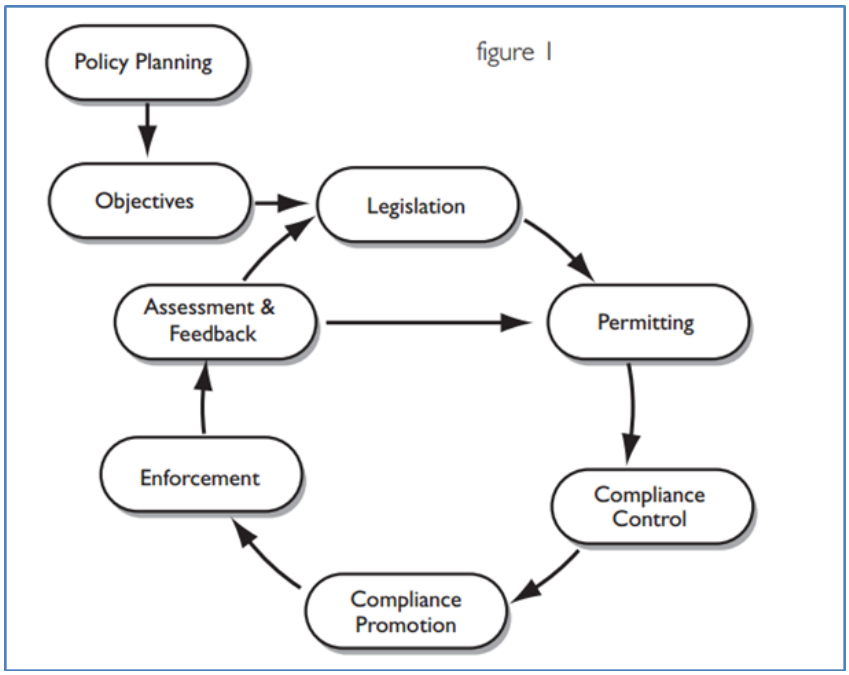


Figure 1 – The IMPEL Regulatory Cycle

2.4 Good Practice and Development Need.

Initial discussions and feedback from the Water and Environment Group suggested that regulatory knowledge and capability was variable across Member States and that the implementation of the WFD could be more effective. We are entering the second cycle of WFD implementation and this could be an important opportunity to improve this capability.

In order to validate this assumption of regulatory knowledge and capability, this project set out to collect evidence in a structured way. The findings will be used to focus discussion at a future workshop to understand the issues across MSs and assess good practice and future training needs. In addition it will provide an opportunity for MS to work together and develop networks to improve WFD implementation across river basins

3 SWETE Project and Questionnaire

3.1 SWETE Project Overview

The SWETE project has been developed to assess and develop best practice in the use of regulation to achieve Water Framework Directive objectives. It has been based on an initial dialogue with Water and Land Group members and the submission of an initial project plan to IMPEL.

A first phase has been commissioned to take place between September and December 2015. It has to draft and circulate a fact finding questionnaire to identify current regulatory practice in point source discharge regulation to deliver WFD water quality outcomes.

Subsequently it is expected that the SWETE project will establish a communication and collaboration network under IMPEL providing a rolling programme across all IMPEL Members to optimise and consolidate current point source discharge permitting and regulatory effort, identify new skills needed, and the skills required to deliver them.

A later phase, to be authorised separately, would be to build on the point source experience, broadening the programme to include best practice in diffuse pollution control, water resources regulation and flood risk management.

There is scope to use the 'Regulation for Water Quality' book http://www.fwr.org/WQreg/index.htm as a stimulus for discussion and to help identify and further develop and disseminate best practice regulation in the water sector from across the EU.

YEAR 1

In Year 1 an initial questionnaire will be circulated within the IMPEL Water and Land Group, aimed at identifying point source regulatory capabilities, current practice, and common issues.

The report from this questionnaire will be used in preparing for a first IMPEL Workshop to be held early in Year 2. There will be a second IMPEL Workshop later in Year 2 if authorised.

The initial IMPEL questionnaire is intended to stimulate debate within the Water and Land group of IMPEL Members:

- about the current state of play regarding point source discharge planning and regulation,
- identify where there are examples of good or best practice, (particularly approaches to monitoring and discharge permitting, statistically derived quality objectives and permit limits, use of statistics in assessing compliance, risk analysis, and measuring 'success')
- where there are clear gaps, and
- How to proceed to increase competence and implement training needs.

The output of the YEAR 1 Project Report will be to identify the different approaches to point source discharge control adopted for implementation of the WFD, and to provide the basis for a larger and broader programme of work within IMPEL to be developed in Year 2, and in subsequent years, – via Workshops and collaboration to develop a strong IMPEL network delivering the necessary good practice, skills and techniques needed to ensure an effective water regulatory cycle.

3.2 Aims of SWETE Project

At project initiation the project team identified the following high level aims for the overall project. The project has been split into an initial first phase which has been limited to the exploratory questionnaire, so for this phase aims are limited. However, it is useful to see the full potential aims for the project, even though they will not be realised unless future phases are competed.

Full project aims

- Identify how each IMPEL member undertakes discharge permitting activities. (e.g. WQ & development planning, applications, determination, subsistence, monitoring, enforcement, reporting, review, etc.)
- Identify the areas of common interest and best practice
- Identify 'Hot Topics' of common interest/emerging concern, with a view to developing good practice in addressing them.
- Establish a strong WQ regulatory network within IMPEL membership to facilitate knowledge exchange.

- Recommend to IMPEL Board programme of future action to promote, and where necessary to develop Regulatory Good Practice in delivering intended WFD outcomes through (mainly) Point Source Regulation.
- Plan initial IMPEL Network Workshop to disseminate survey results, test recommendations, and firm-up on priorities for future good practice development and dissemination in delivering point source regulation.
- Dependant on outcome of the project to propose parallel development, within or outside IMPEL, of water resources and flood risk management delivery good practice in order to provide integrated water security.

3.3 Aim of Questionnaire

The aim of the questionnaire was to understand the current status of regulatory measures used across Member States to implement the Water Framework Directive (WFD) and protect and improve the water environment. This information will be used to enhance regulatory competence and identify development needs, through spreading best practice and making good regulatory principles available to all via the IMPEL Water & Land Network.

4 Project Methodology

4.1 Project outline for Phase 1

A formal project has been set up under IMPEL governance.

- The Project Executive is Paul Hickey from the Environment Agency, and UK representative to the IMPEL Land and Water Group.

- The Project Manager is Barrie Howe from the Environment Agency

The technical expertise has been supplied by Chris Chubb and Martin Griffiths, both acting as independent consultants. Other support has been given by the Environment Agency.

4.2 Development of the Questionnaire

The questionnaire has been developed to survey IMPEL Network Membership on current WQ Regulation Practice for point source discharges in relation to WFD implementation. An exploratory short question was added to assess future diffuse pollution issues. A full copy of the questionnaire is given in Annex 1.

The questionnaire utilised the logical approach taken by the IMPEL regulatory cycle. This can be found at
http://impel.eu/wp-content/uploads/2010/02/1999-02-refbook-FINAL-REPORT.pdf

Initially a hard copy version of the questionnaire was developed and tested. The majority of questions were presented in a “Yes / Don’t Know/ No” format, with space for narrative comments or explanations. It was taken with a covering paper to the IMPEL land and water group for approval in October 2015. Some responses were made to via the hard copy paper. Requests were made to Member States, via IMPEL national co-ordinators, to fill in the questionnaire at the meeting with a view to receiving responses by 20th November.

Following the meeting and during November 2015 the questionnaire was loaded into electronic format, using 'Survey Monkey' software, with the help of the IMPEL Secretariat. The majority of the responses were returned in this way.

The electronic format allowed full data compilation and basic statistical presentation of data. Narrative components of questionnaire were tabulated and analysed by the Project Team and are given in Section 5.

4.3 Response to the Questionnaire

19 responses from 14 MS to the questionnaire were received via the electronic Survey Monkey web based system, or the paper system. The paper responses were manually uploaded onto Survey Monkey. All data were downloaded onto an Excel spreadsheet allowing analysis and graphical presentation seen in the report.

There were some MS that did not respond in spite of being given extra time. It is hoped that their views might be captured before, or during, the proposed workshop, in the second phase project.

In order to ensure anonymity countries have been given a random number and country names substituted with 'Country No. X Response'. Other key acronyms giving country identity have been removed or substituted with XX.

5 Analysis of the results

The results were quality assured by the Project Team to remove largely incomplete, or blank responses and “All Data” and “Question by Question” spreadsheets were extracted. For each Question a histogram, a table of the answers and a high level comment was produced. These are presented in Section 5 below.

It is important to ensure the context and limitations of the data are understood. These are not formal statements of the regulatory status of individual MS. They are the views of individual practitioners, sought to inform the need for IMPEL engagement in establishing best practice, networks and increased competency. To maintain this neutrality, the personal data are anonymised as far as practicable, and the questionnaire answers reported as the IMPEL Member State

Using the results of the questionnaire analysis the Project will plan a 2-day IMPEL Network Workshop, to be held (subject to funding availability) in early 2016, to develop further and prioritise initiatives to address areas identified as in need of good practice guidance.

Results from Questionnaire

The results are summarised here according to question number.

5.1 Question 1 - Personal Details

5.1.1 Numeric Results

There were 19 responses, from 14 countries, listed below in alphabetical order.

- Austria 2
- Bulgaria 1
- Cyprus 1

- Czech Republic 1
- Germany 3
- Ireland 1
- Italy 1
- Latvia 1
- Poland 1
- Portugal 2
- Romania 1
- Slovenia 1
- Sweden 1
- United Kingdom 3 (England 1, Northern Ireland 1, Wales 1)

5.1.2 Graphic representations

No graphic applicable to Question 1. All respondents provided their Name, Country and Role.

5.1.3 Overall findings and comment on Question 1

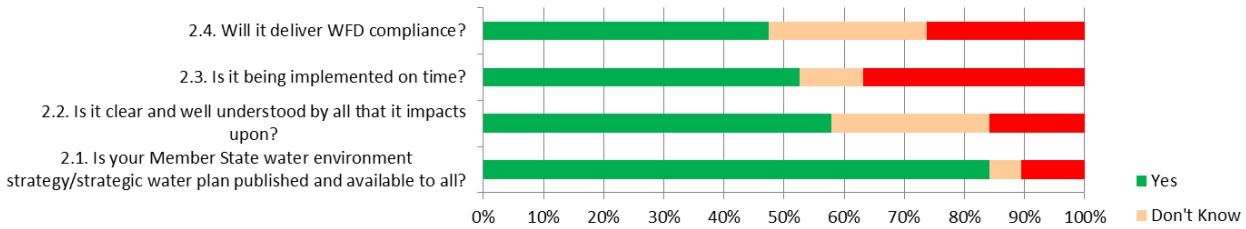
There was a limited but reasonably representative response across MS. 14 out of 28 EU MS responded from a variety of roles and governance positions within each MS. In a survey of this type a 50% return would be seen as good. It makes it possible to take a reasonable overview for the required purpose, but makes a detailed analysis inappropriate.

There are some important MS that have not responded. We would like an opportunity to build on this report with information from these countries as we believe that they may have some innovative approaches to regulation. This information could be added as part of Phase 2 to better inform the workshop.

5.2 Question 2 - Policy Planning

This question aimed to establish information about knowledge of the WFD plans and their availability to regulators and the public. The plans are a crucial driver of the regularly cycle and wide knowledge of the plans by regulators and the regulated provides essential context in terms of approach and agreed outcomes.

5.2.1 Policy Planning - Graphic and Data Table.



	2.1. Is your Member State water environment strategy/strategic water plan published and available to all?	2.2. Is it clear and well understood by all that it impacts upon?	2.3. Is it being implemented on time?	2.4. Will it deliver WFD compliance?
Yes	16	11	10	9
Don't Know	1	5	2	5
No	2	3	7	5

5.2.2 Policy Planning - Narrative Response Summary

Box 5.2.2

Question, 2.5 If you answered "No" to 2.4, (Will it deliver WFD compliance?) what are the 3 most important constraints on delivering compliance

Several answered Yes but also commented describing their RB Planning process.
Other elements of responses:-

- lack of awareness by affected parties,
- In some cases the evidence is not available to explain non-compliance,
- Some MS have decentralised organisational frameworks ,
- River continuity, Morphological conditions, Nutrient conditions,
- inadequate specification in RBMPs,
- Country No 5 Plan not yet published,
- delays in UWWTD delivery,
- Insufficient analysis of impact on the waterbodies. It is not clear which criteria are applied to choose the objects of monitoring and the type of monitoring.
- not clear enough in source apportionment of significant pressures; not clear enough in basic and supplementary measures and who have responsibilities for actions; not clear enough in funding of measure s
- 2nd cycle RBMPs will not be produced until December 2017. This was due to inadequate governance arrangements and resources

5.2.3 Overall findings and comment on Question 2 – Policy Planning

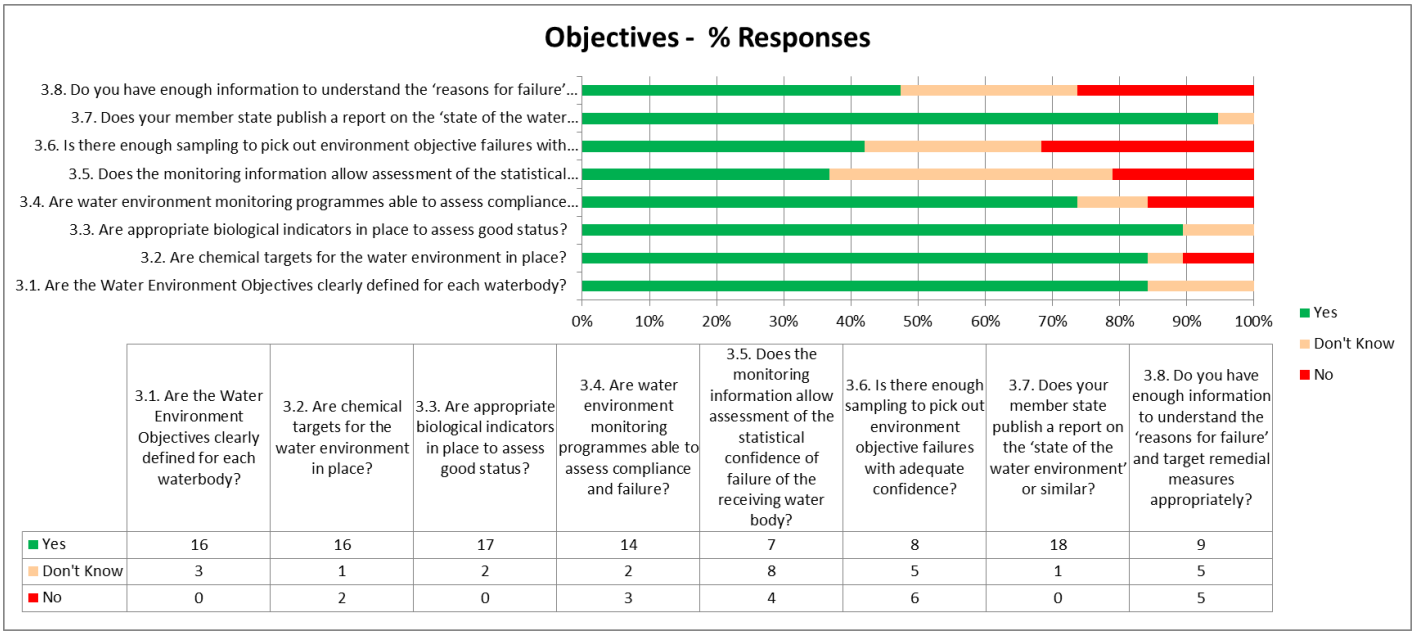
Box 5.2.3 Summary of respondent's opinion

- Most MS have a National Plan
- Around 50% think it will deliver compliance, be delivered on time and is well understood
- ~35% don't think it will be delivered on time
- ~25% don't think it will deliver compliance
  - Water Plan published & available? 85% Yes, ~10% No
  - Clear & well understood? ~60% Yes, ~25% Don't Know, ~15% No
  - Implemented on time? ~50% Yes, ~35% No
  - Deliver WFD compliance? ~50% Yes, 25% Don't Know, 25% No.

5.3 Question 3 – Objectives

The purpose pf this question was to understand the links between the WFD plan and the needs of the receiving environment.

5.3.1 Objectives - Graphic and Data Table



	3.1. Are the Water Environment Objectives clearly defined for each waterbody?	3.2. Are chemical targets for the water environment in place?	3.3. Are appropriate biological indicators in place to assess good status?	3.4. Are water environment monitoring programmes able to assess compliance and failure?	3.5. Does the monitoring information allow assessment of the statistical confidence of failure of the receiving water body?	3.6. Is there enough sampling to pick out environment objective failures with adequate confidence?	3.7. Does your member state publish a report on the 'state of the water environment' or similar?	3.8. Do you have enough information to understand the 'reasons for failure' and target remedial measures appropriately?
Yes	16	16	17	14	7	8	18	9
Don't Know	3	1	2	2	8	5	1	5
No	0	2	0	3	4	6	0	5

5.3.2 Objectives – Narrative Response Summary

Box 5.3.2
Question 3.9 (Objectives) Any other Comments?

General common issues: Assessing statistically robust compliance, resources, and investigations.

Individual comments:

- **Country No 15 Response**
  - Clear objectives are set for each waterbody and are monitored using biological indicators and chemical quality. Compliance with the objectives is assessed using statistical tests and confidence of failure. In some cases we carry out investigations into why waterbodies do not comply with the objectives, if this is not already known and obvious. We publish various reports on the state of the environment and this includes assessment of the water environment. There are published every year and are available on the internet. In some cases we find it difficult to identify the reasons for failure and further investigations may be needed. As our resources are limited prioritisation of investigations is essential.
- **Country No 7 Response**
  - 2.5 – 2.6 among the reasons for low confidence is contemplated the large number of poor sampling It is not always possible to obtain balance between adequate number of samples to have statistical significance and therefore good level of confidence (available resources for sampling, climatic conditions, be borderline between good and not good state etc.) 2.8 It is not always clear the cause of failure.

- **Country No 13 Response**
  - For some water bodies, the exceptions from good chemical status were required to 2016-20121, because of the huge impact generated by closed mining activities, especially. Every year the basin synthesis of water protection quality is developed, and is related to the progress in achieving good ecological and chemical status of all water bodies from the hydrographical space. Those documents are not published but can be accessed from the basin unit on request.
- **Country No 14 Response**
  - 3.7 In Country No 14we will be required to publish a state of the environment report in future and we will be publishing a River Basin planning progress report for Country No 14 in Dec 2015. 3.8 Further investigations are taking place and new failures have been identified that require investigation.
- **Country No 2 Response**
  - Some objectives are too general only. Chemical targets are given by law and permits. Biological indicators are quite general too. Through the monitoring information is possible to assess general compliance with the state and EU

standards of water quality, not the compliance of particular operators where further investigations are necessary.

- **Country No 9 Response**
  - 2.3 few are still under development 2.4 yes on bigger scale, but not in smaller rivers and streams 2.6 not jet, but the situation has improved a lot since RBMP I cycle, due to longer data sets 2.7 yes in majority of cases
- **Country No 7 Response**
  - The role of lag times in achieving good ecological status is poorly understood.
- **Country No 14 Response**
  - Comment if there are environment objective failures additional samplings, measurement and assessment are carried out. In some cases we find it difficult to assess compliance and failure and further investigations may be needed. As our resources are limited prioritisation of investigations is essential.

5.3.3 Overall findings and comment on Question 3 - Objectives

Box 5.3.3 Summary of respondent's opinion

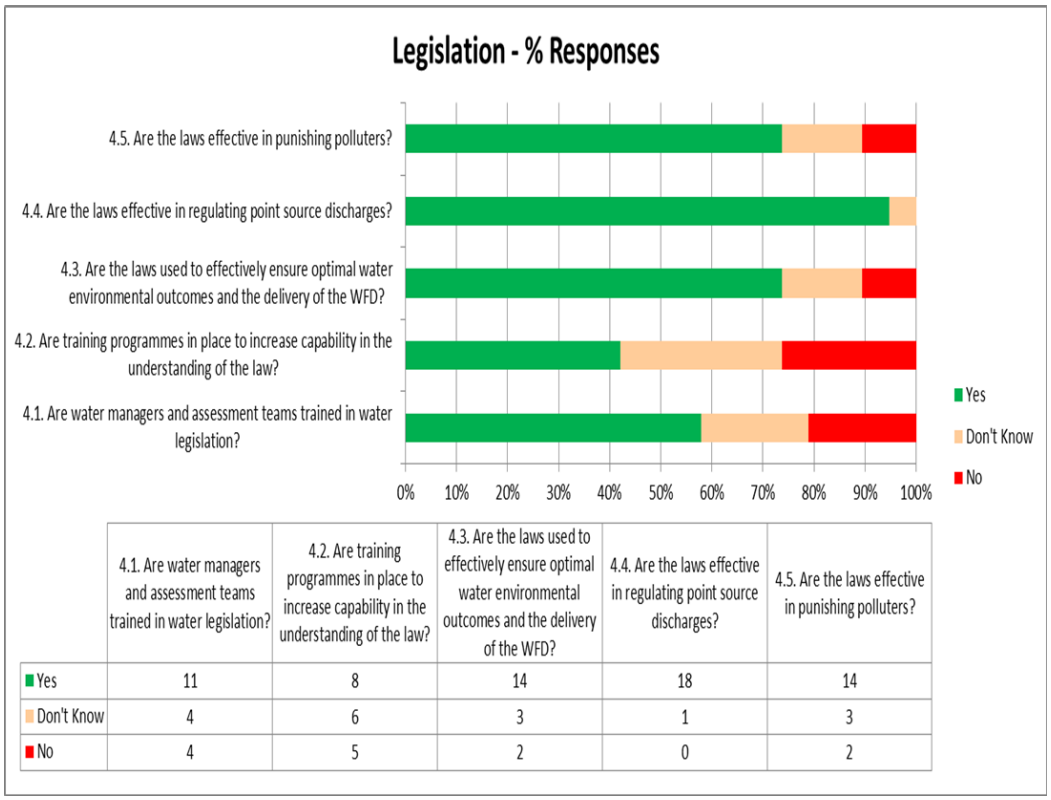
19 answers

- Mostly 'Yes' answers.
- Objectives, Chemical targets, biological indicators and state of water environment reports generally in place
- Much fewer answered 'Yes' on statistical confidence(20-30% No , 20 -45 % Don't Know) & Reasons for failure (25% no, 25% Don't Know)

5.4 Question 4 – Legislation

The purpose of this question is to understand the appropriateness of the MS water and environment laws to address the delivery of the WFD.

5.4.1 Legislation – Graphic and Data Table



	4.1. Are water managers and assessment teams trained in water legislation?	4.2. Are training programmes in place to increase capability in the understanding of the law?	4.3. Are the laws used to effectively ensure optimal water environmental outcomes and the delivery of the WFD?	4.4. Are the laws effective in regulating point source discharges?	4.5. Are the laws effective in punishing polluters?
Yes	11	8	14	18	14
Don't Know	4	6	3	1	3
No	4	5	2	0	2

5.4.2 Legislation - Narrative Response Summary

Q 4.6 (Legislation) Any Other Comments?

General common issues: Law in place and working reasonably well

- **Country No 15 Response**
  - Water Managers have a good understanding of water legislation and we provide training on new legislation and emerging issues. The legislation is used effectively although we do not have enough people to always use the powers granted, particularly in carrying out enforcement following non-compliance with legislation.
- **Country No 13 Response**
  - Almost integral, the Country No 13 water legislation transposes the 2000/60/EC Directive. It is well implemented the polluter pays principle through the penalties applied for non-compliances with quality standards of water resources and by the sanctions as a tool of enforcement to water legislation.

- **Country No 11 Response**
  - Country No 11 has long standing legal instruments with regard to water uses and water protection, on Federal and federal states level.
- **Country No 2 Response**
  - The system is set well, people sources (number of inspectors insufficient)
- **Country No 6 Response**
  - Add 3.5: laws exist, but fines are low. And – as part of our culture – often, punishment is not applied but consensual solutions are sought
- **Country No 9 Response**
  - 3.1 with the exception of authorized providers of operational monitoring 3.2 with the exception of inspection services, which have to provide for continuing education by the Law on inspection

5.4.3 Overall findings and comment on Question 4 – Legislation

Box 5.4.3 Summary of respondent's opinion

19 Answers

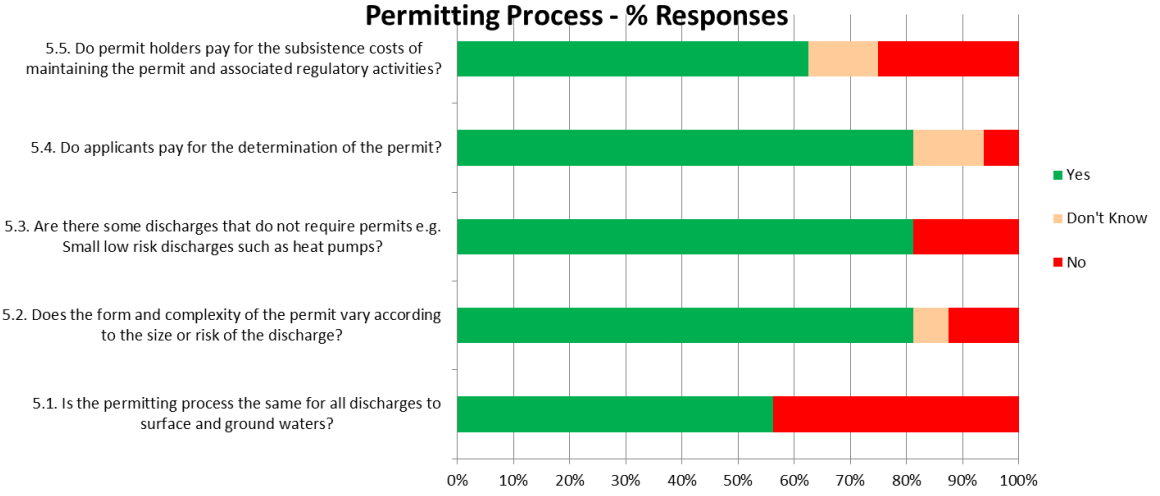
- Mostly 'Yes' Answers to.
  Environmental Law is in place and being used.

- Fewer 'Yes' responses on 'trained teams' (20% No, 20% Don't Know), & 'training programmes'(25 % No, 30% Don't Know)

5.5 Question 5 - Permitting Process

This question is to understand the extent of the permitting process, any charges and links to risk and water media.

5.5.1 Permitting Process – Graphic and Data Table



	5.1. Is the permitting process the same for all discharges to surface and ground waters?	5.2. Does the form and complexity of the permit vary according to the size or risk of the discharge?	5.3. Are there some discharges that do not require permits e.g. Small low risk discharges such as heat pumps?	5.4. Do applicants pay for the determination of the permit?	5.5. Do permit holders pay for the subsistence costs of maintaining the permit and associated regulatory activities?
Yes	9	13	13	13	10
Don't Know	0	1	0	2	2
No	7	2	3	1	4

5.5.2 Permitting Process – Narrative Response Summary

No Narrative responses requested

5.5.3 Overall findings and comment on Question 5 – Permitting Process

Box 5.5.3 Summary of respondent's opinion

16 Answers

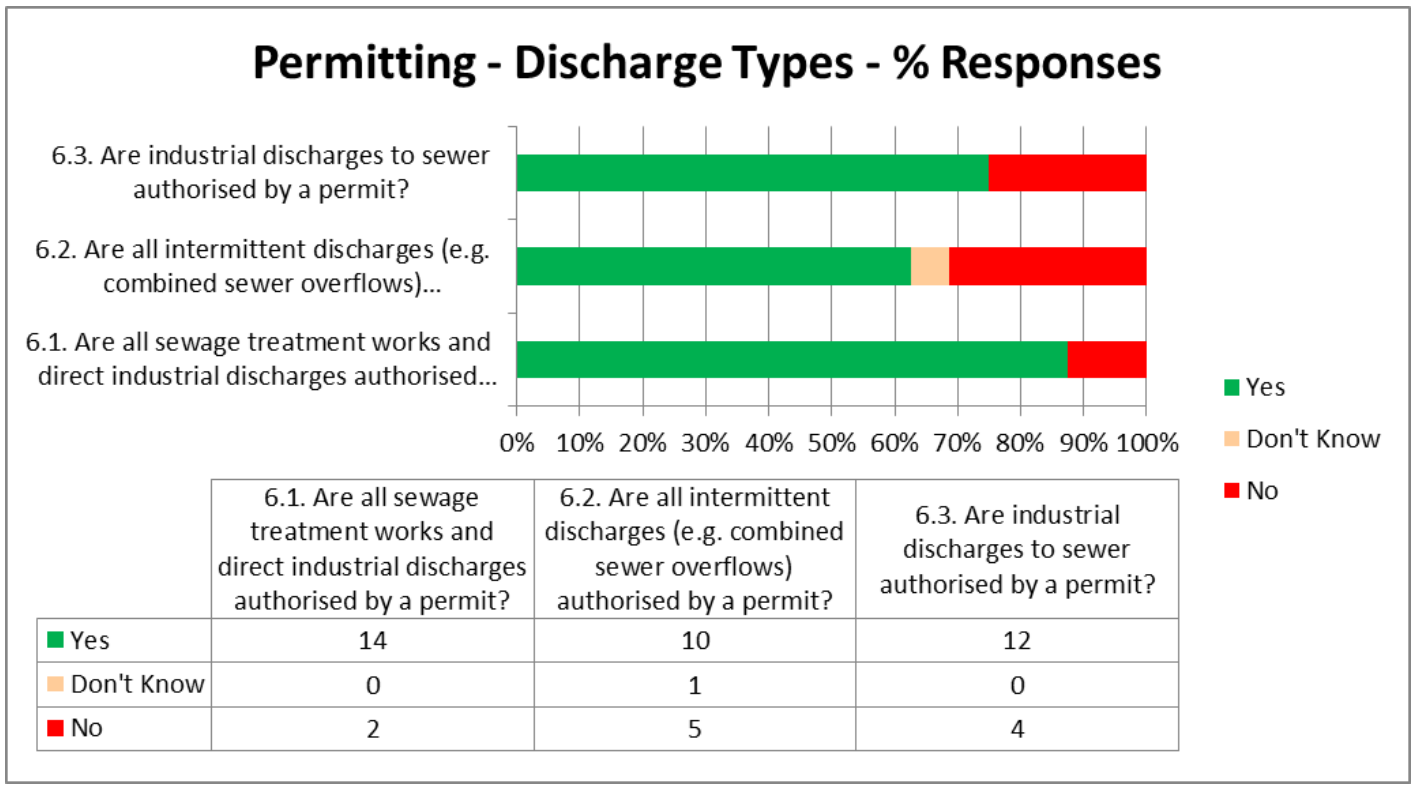
- Mostly 'Yes' responses. Permitting processes are in place for many types of discharge.

- Fewer 'Yes' responses on 'same permitting approaches for surface & groundwater' (45% No), '
- permit subsistence charge' (25% No, 12% Don't Know),
- 'no requirement for permits for some low risk discharges' (20% No)

5.6 Question 6 Permitting - Discharge Types

This question was aimed to understand the role of industrial discharges and municipal STW in the permitting process, including the permitting of intermittent discharges.

Permitting - Discharge Types - Graphic and Data Table



	6.1. Are all sewage treatment works and direct industrial discharges authorised by a permit?	6.2. Are all intermittent discharges (e.g. combined sewer overflows) authorised by a permit?	6.3. Are industrial discharges to sewer authorised by a permit?
Yes	14	10	12
Don't Know	0	1	0
No	2	5	4

5.6.1 Permitting- Discharge Types – Narrative Response Summary

No narrative responses requested

5.6.2 Overall findings and comment on Question 6 – Permitting – Discharge Types

Box 5.6.3 Summary of respondent's opinion

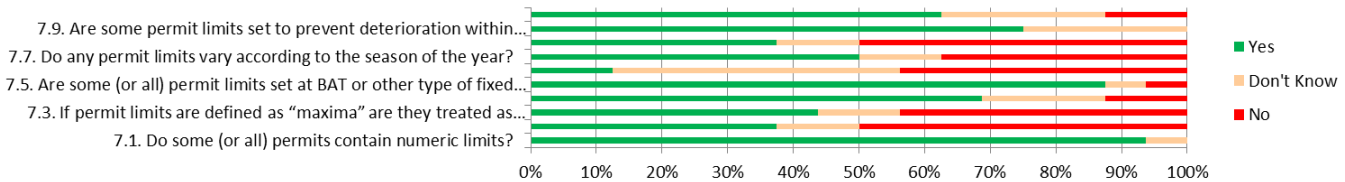
16 Answers

- Mostly 'Yes' responses. Most sewage and industrial direct discharges are subject to permits.
- 'Permitted Intermittents': - 30% "No";
- 'Permitted Industrial discharges to sewer' - 25% "No";

5.7 Question 7 Permitting – Numeric Limits

This question aims to establish use of numeric limits in permits and their use to optimise protection of the receiving environment and the operation of the treatment works

5.7.1 Permitting – Numeric Limits- Graphic and Data Table



	7.1. Do some (or all) permits contain numeric limits?	7.2. Are the numerical limits in the permits defined as summary statistics allowing calculation of the statistical confidence of compliance...	7.3. If permit limits are defined as "maxima" are they treated as summary statistics that allow a statistically confident assessment of...	7.4. Are some (or all) permit limits calculated according to the pollutant assimilation capacity of the receiving water?	7.5. Are some (or all) permit limits set at BAT or other type of fixed emission limit?	7.6. Are/will any permit be based on 'bio-availability' in the receiving water?	7.7. Do any permit limits vary according to the season of the year?	7.8. Do any limits on individual permits vary according to the flow of the receiving watercourse?	7.9. Are some permit limits set to prevent deterioration within WFD class boundaries or towards an EQS?	7.10. Do some (or all) permits include specific conditions to protect bathing or shellfish waters?
Yes	15	6	7	11	14	2	8	6	12	10
Don't Know	1	2	2	3	1	7	2	2	4	4
No	0	8	7	2	1	7	6	8	0	2

5.7.2 Permitting- Numeric Limits – Narrative Response Summary

No narrative responses requested

5.7.3 Overall findings and comment on Question 7 – Permitting – Numeric Limits

Box 5.7.3 Summary of respondent's opinion

16 Answers

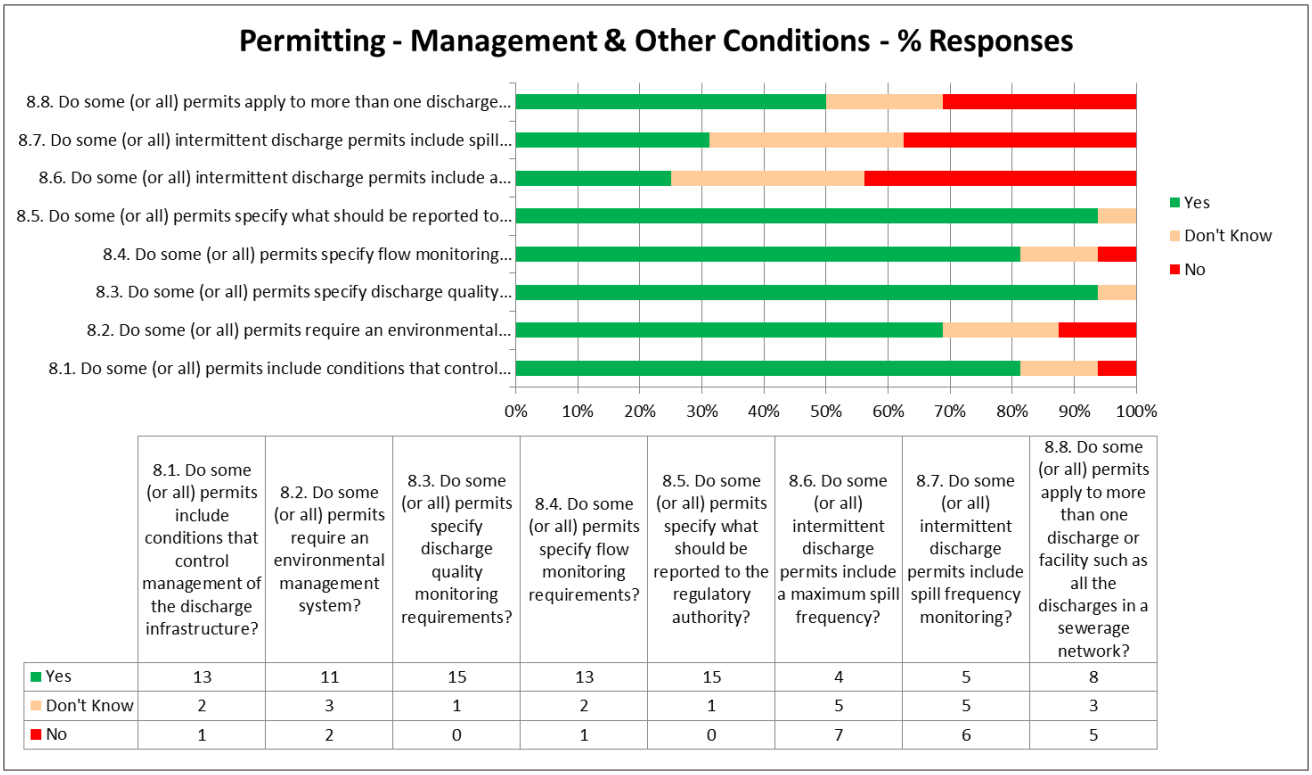
- Mostly 'Yes' responses but lots of variation/uncertainty evident in approach to numeric limits
- Only ~40% answered "Yes" for statistically robust approach and ~45% answered "No"

Receiving water capacity limits? 70% Yes
BAT or fixed emission limits? ~90% Yes
Bioavailability? ~10% Yes, 45% Don't Know, 45% No
Seasonal? 50% Yes, 35% No
Limits varying according to receiving water flow? ~40%Yes, 50% No
Prevent deterioration within Class or towards EQS? 75% Yes, 25% Don't Know
Bathing/Shellfish Waters?~ 60% yes,~30% Don't Know

5.8 Question 8 Permitting – Management & Other Conditions

This question aims to understand the use of management controls and other non-numeric conditions incorporated into permits.

5.8.1 Permitting – Management & Other Conditions- Graphic and Data Table



	8.1. Do some (or all) permits include conditions that control management of the discharge infrastructure?	8.2. Do some (or all) permits require an environmental management system?	8.3. Do some (or all) permits specify discharge quality monitoring requirements?	8.4. Do some (or all) permits specify flow monitoring requirements?	8.5. Do some (or all) permits specify what should be reported to the regulatory authority?	8.6. Do some (or all) intermittent discharge permits include a maximum spill frequency?	8.7. Do some (or all) intermittent discharge permits include spill frequency monitoring?	8.8. Do some (or all) permits apply to more than one discharge or facility such as all the discharges in a sewerage network?
Yes	13	11	15	13	15	4	5	8
Don't Know	2	3	1	2	1	5	5	3
No	1	2	0	1	0	7	6	5

5.8.2 Permitting- Management & Other Conditions – Narrative Response Summary

No narrative responses requested

5.8.3 Overall findings and comment on Question 8 – Permitting – Management & Other Conditions

Box 5.8.3 Summary of respondent's opinion

16 Answers

- Mostly 'Yes' answers on discharge management, environmental management systems, discharge quality monitoring and discharge flow monitoring. Fewer 'Yes' answers on intermittent discharge spill frequency aspects.
- At least 50% have permits that apply to more than one discharge.

Discharge management? 80%Yes
Environmental Management Systems? ~70% yes, ~20% Don't Know
Discharge Quality monitoring? 95% Yes
Discharge Flow monitoring? ~80% Yes
Specify reporting requirements? 95% Yes
Intermittent maximum spill frequency? ~25% yes, 30% Don't Know, 45% No,
Intermittent spill frequency monitoring? ~30% Yes,~30% Don't Know, ~40% No
Apply to more than one discharge? 50% Yes, 20% Don't know, 30% No

5.9 Question 9 – Explanation of Permitting Process

Narrative Question only - Please could you briefly explain your permitting process below? Please include in general terms which organisations issue permits and which are the permit holders.

5.9.1 Individual Responses

Box 5.9.1 Individual responses

- **Country No 15 Response**
  - Water quality objectives are set for waterbodies. These include meeting environmental quality standards for priority hazardous and priority substances. Our regulation is risk based, depending on the size and

risk of pollution from the discharge. For larger sewage treatment works discharges and industrial discharges we calculate the discharge quality required to meet the water quality objectives and set numeric limits in the permits taking account of the capacity of the environment through dilution. Some limits are set to prevent deterioration within a WFD class boundary or towards an EQS. We also include conditions that control the flow to treatment. Permits also include conditions that require action from the operator, for example, a condition that requires a management system to identify and minimise risks. For smaller sewage treatment discharges we do not include numeric limits but specify that the discharge should not have a significant visual or aesthetic effect plus including conditions that require action from the operator. Some permits are set as an emission limit at BAT for installations regulated under IED. We do have permits that vary seasonally, with tighter ammonia limits required for summer compared to winter as long as the overall annual average limit is met. We assess compliance against numeric limits by taking account of the statistical confidence and require 95% confidence of a failure before it is confirmed. We require the operator to monitor the discharge for flow and quality and report the results to us. Where necessary we have specific conditions to protect bathing and shellfish waters such as conditions requiring UV treatment.

- **Country No 7 Response**
    - Under the Water (Country No 7) Order 1999, it is an offence to discharge trade or sewage effluent to waterways or groundwater without the consent of the Country No 7 Environment Agency. Discharge consents lay down conditions relating to the quality and quantity of effluent that may be discharged. The conditions are formulated using scientific protocols which ensure that the discharge can be sustained by the receiving waterway without damage to the aquatic environment and without breaching national or EU Directive standards. When consent conditions are being drawn up, account is taken of: • the composition and volume of the proposed discharge; • the water quality target for the receiving water; • the existing quality of the receiving water; • available dilution; and • relevant EU Directive requirements or international agreements. Most discharge consents include numerical conditions for certain parameters of the effluent, which enables a quantitative assessment of compliance to be made. Formulation of numeric consent conditions for discharges usually requires mathematical modelling and they are normally set as absolute limits, i.e., maximum figures that must not be exceeded at any time.
- **Country No 2 Response**
    - Water resources uses are licensed under the provisions of the Water Law (Law n. º 58/2005, 29 December), which transposed the Water Framework Directive (WFD) into national law, and of Decree-Law no. 226-A/2007, 31 May. Country No 2 Environmental Agency is both the National Water

Authority and the competent authority for the permitting process for water abstraction, wastewater discharges and hydromorphological modifications, except for uses integrated in port areas. However the issue of water permits is always based on the same legislation. Several other entities intervene in the permitting/licensing process, such as: local and regional authorities, Nature Conservation and Forestry Institute, among others. When applicable, an environmental impact assessment is carried out in which a WFD-compatibility assessment is undertaken. In these cases, only after a favourable environmental impact statement can the water permit be issued. Furthermore, the conditions set out on permits/licenses require compliance with the guidelines and requirements of the WFD. According to the Water Law (article 56),"Under the principle of precaution and prevention, activities that have a significant impact on water status can only be developed under a permit issued within the terms and conditions defined in the Water Law and Decree-Law nº. 226-A/2007". All water abstractions, even from the private domain and hydromorphological modifications are subject to licensing/permitting. An authorisation is not required for wastewater discharges into the soil for less than 10 habitants (isolated houses without connection to public sewerage system), but only if there is no impact for GWB. All issued licenses must comply with the requirements of the WFD, i.e. they must be compatible with the status of the water bodies affected. ELVs are set accordingly, using a combined approach. New uses that include changes of water bodies (mainly hydromorphological changes) need to be assessed in accordance with Article 4 (7) of the WFD. If a permit it is not compatible with the WFD environmental objectives the license will not be issued. Decree-Law n.º 226-A/2007 (article 10) determines that "The issuance of a license for water resources uses is subjected to compliance with the provisions of Law No 58/2005 of 29 December [the Water Law]". The Water Law (article 63) also determines that the emission of a license depends on the compliance with: the provisions of the river basin management plan; the provisions of land management plans; specific water management plans and with the environmental objectives and ELVs set. The Water Law also stipulates that: "The license must determine that users of water resources should refrain from acts or activities causing degradation of the status of water bodies and that may produce other negative environmental impacts or impede other uses considered as priority."

- **Country No 7 Response**
  - The public authority shall issue the permits, after the technical advice of another public authority; the permits holder is the "integrated water services manager" We have some seasonally permits, for example E coli limits required for summer. Where necessary we have specific conditions to protect bathing waters such as conditions requiring disinfection treatment. We assess compliance against numeric limits by taking account of the

statistical confidence. We carry out samples and analyses and manages the results of self-monitoring of the manager

- **Country No 13 Response**
  - Especially for industrial activities that are under incidence of IED or SPP Directives, the water permits are emitted for the discharges in sewer. Besides technical aspects, the water permit covers in the same time quantitative and qualitative issues, for which are established maximum limits depending on the capacity, the field of activity, the requirements of the Directives, the status of the receiving water body. In my opinion, the water legislation need to be close linked with other directives concerning the contaminated sites, the environmental liability, and the protected areas. The dynamics and innovation of European legislation must be reflected through improvements makes to water legislation, in the same rate. In this way arise gaps in implementation.
- **Country No 14 Response**
  - Applications received from perspective dischargers. Regulator has 4 months to determine, major applications are advertised as part of a consultation process. Flows and loads are assessed against their proposed impact on the environment. Permits are then issued or refused**.**
- **Country No 6 Response**
  - Application at competent authority with detailed project plans Hearing with concerned parties and authorities Preliminary permit (basic permit and detailed permit in case of huge projects) with deadline for finalisation Approval of project Final permit (simplified procedure for small projects) Permits are issued by competent governmental authorities (local, regional authorities, ministry depending on the type, size and/or location of the project, competence is regulated in the Country No 6 water act) Permit holder = applicant
  - Permit holder applies to administration. Depending on the size of the plant and the specific law that applies, the administration to apply to is on a local (district admin.), regional (governor of federal state) or national (ministry) level. Permit holders are those who discharge water to the environment or to public sewer systems, e.g. private persons, municipalities, industry, etc. –

- **Country No 2 Response**
  - Permits are necessary for water abstraction and waste water discharging and other activities according to the law. Process depends on the size of facility. Limits are set according to the law by responsible authorities – Municipality or Regional Authority. In some cases are assessments necessary.
- **Country No 8 Response**
  - The authority competent to issuing a water permit is: county commissioner, Marshal and Director of the Regional Water Management Authority. The authority responsible for issuing water permits is competent for ruling about

expiration, revocation or restriction of this permit.

- **Country No 5 Response**
  - 4.7 and 4.8 No permit but authorization by sewerage boards. • Applicants submit the application and pay the equivalent amount for the examination of the application. The Department of Environment publishes the fact of submission of the application to the Official Journal of the Republic of Country No 5. After that it prepares a draft of the permit terms, which is then examined by a Technical Committee (relevant government departments, Technical Chamber of Country No 5 and Federation of Environmental Organisations of Country No 5). The final draft is approved and signed by the Minister of Agriculture, Rural Development and Environment. • The Department of Environment is responsible for issuing permits for discharges to water and soil. • The permit holder is the natural or legal person responsible for the proper operation and maintenance of the plants.
- **Country No 9 Response**
  - Environmental Permit (according to Environmental Protection Act) are issued by Country 9 Environmental Agency for point source pollution. The requirements for obtaining an environmental permit for discharge of wastewaters are defined in Law on Environmental Protection (for installations, which can cause large-scale pollution and other installations or activities, which result in emission of substances and heat in the water). Operators who wish to obtain an environmental permit must provide measures to prevent pollution during the operation and the establishment of a satisfactory state of the environment after the definitive cessation of its operation. Detailed measures for the prevention of water pollution are defined in the implementing regulations in the field of wastewater discharge (Decree on the emission of substances and heat in the discharge of wastewater into waters and public sewers and ca 35 other regulations governing a particular activity). The validity of environmental permits is 10 years. Before an authorization following criteria and conditions for the discharge of waste water into the environment, are verified: - Whether discharge in a given area are not subject to certain prohibitions. - Whether the operator carries out or will carry out all measures to prevent or reduce emissions and heat and adequately treat waste water (cleaning of waste water, prevention of discharges of certain pollutants, use less environmentally controversial materials or pollutants, re-use of water, etc.). - Whether emissions parameters achieve the prescribed limit values for discharges directly into the water or into the public sewage system - Whether the waste water is discharged into an appropriate recipient - if this stream must have sufficient flow and should not be excessively burdened by pollutants. - Whether the result of the discharge of effluents will lead to a significant increase in levels of pollutants (a change in classification in a lower quality class) and, if necessary, impose stricter emission limits - Whether an adequate operational monitoring of waste water is implemented.

For new installations the appropriate program is stipulated in the environmental permit. Case of indirect discharges to groundwater (in areas where no watercourses exist) are especially carefully examined concerning the impact of wastewater on groundwater, soil and drinking water resources

- **Country No 4 Response**
  - Procedure of setting conditions in permits is determined in national legislation - Law on Pollution and Republic of Country No 4 Cabinet Regulation No.1082 Adopted 30 2010 Procedure by Which Polluting Activities of Category A, B and C Shall Be Declared and Permits for the Performance of Category A and B Polluting Activities Shall Be Issued. The operator shall fill a submission for the receipt of a permit. State Environmental Service deals with permitting and inspection. Permitting division has cooperation with other institutions that provide proposals to permit. Permits are public available to everyone who are interested in.
- **Country No 12 Response**
  - Operators are applying for permits at permitting authority. Depending on the type and extent of the pollution, the permitting authority will be a municipality, in some cases the county administrative board.
- **Country No 14 Response**
  - Application documents to the organisation responsible for issuing permit, incl. proposal for quantity and quality limits, based on characteristic parameters and limits of BAT used in place. The permit limits are set applying combined approach, taking into account statements from the controlling authorities on the status of receiving water body and proposals for permit limits and requirements, the EQS for the receiving water body, etc. The responsible organisations for river basin management are issuing permits. Permit holders are industries, public water supply and sewerage companies, farming, etc. discharging treated waste water into surface water bodies

5.9.2 Overall findings and comment on Question 9 - Explanation of Permitting Processes

Box 5.9.2 Summary of respondent's opinion

- The responses indicated a wide range of regulatory structures for discharge permitting. Some MS have a single environmental or water regulator that undertakes all water quality planning & permitting of discharges. Others have water quality planning & permitting spread amongst tiers of national, regional and local government.

- Little information was provided on the mechanics of the permitting processes.

5.10 Question 10 – Current Permitting Problems

Narrative Question Only - Please could you highlight any current problems that you have with discharge permitting?

5.10.1 Individual responses

Box 5.10.1 Individual Responses

- **Country No 15 Response**
  - Many permits remain to be modified from the former "discharge consent" format to the current "water discharge activity" format, although all the significant sewage and industrial discharges have been updated.
- **Country No 7 Response**
  - Full discharge consent is required for all discharges regardless of size, including domestic septic tanks. This is inconsistent with the rest of the UK.
- **Country No 2 Response**
  - Intermittent discharges; illegal discharges of industries and livestock
- **Country No 7 Response**
  - There are no particular problems since authorizations are granted in compliance with the current legislation
- **Country No 13 Response**
  - insufficient correlation between the quality status of the river, its flow and effluent load
- **Country No 14 Response**
  - Sheer volume of applications and the time to determine permits against the

costs received.

- **Country No 6 Response**
  - The combined approach is sometimes not applied in full extent in practice due missing detailed local information and complexity of assessment, especially with regard to micropollutants.
  - Complex legal situation Open or hidden political pressure on executives of permitting authorities Anticipatory obedience of executives of permitting authorities or their superiors
- **Country No 2 Response**
  - In some cases are missed limits for some discharged pollutants or some limits are difficult to check. Sometimes receiving watercourse has lack of water. Self-monitoring in some cases allows manipulation with results. Sometimes difficult to inspect discharging into groundwater
- **Country No 5 Response**
  - Setting of discharge limits; Lack of human resources.
- **Country No 9 Response**
  - Lack of human resources Lack of detailed criteria to determine emission limit values for more pollutants according to assimilation capacity of the receiving water
- **Country No 4 Response**
  - The problem is to apply in practice the term "appropriate treatment". The problem is to apply the specific conditions of sewage treatment plants to achieve quality objectives of waterbodies.
- **Country No 12 Response**
  - The assessment of the single operators' contribution to the significant pressure threatening the objectives of the water body.

5.10.2 Overall findings and comment on Question 10 – Current Problems with discharge Permitting

Box 5.10.2 Summary of respondent's opinion

Common problems:

- Pressure on public sector human resources;
- Receiving water capacity calculation in order to set discharge limit;
- Lack of data generally.

5.11 Question 11 – Future Permitting Problems

Narrative Question Only - Please highlight any future permitting problems that you foresee?

5.11.1 Individual responses

Box 5.11.1 Individual Responses

- **Country No 15 Response**
  - Approach to chemicals permitting including how to permit PBT substances that are ubiquitous and subject to use restrictions. How to adapt permitting processes to reduce costs but still achieve water quality objectives.
- **Country No 7 Response**
  - It is likely that NI will be moving towards an Integrated Permitting process similar to EPR in the rest of the UK. Some consideration will need to be given to the different permitting levels contained within the legislation, and which class of discharge falls into which type, eg GBRs, registrations, simple and complex permits.
- **Country No 2 Response**
  - The reduction in river flow due to climate changes and the construction of dams difficult the definition of emission limit values compatible with the sustainability of economic activities and ensuring good status of water bodies
- **Country No 13 Response**
  - non-existent admissible limits for organic micro-pollutants in industrial effluents
- **Country No 2 Response**
  - No permitting procedure for small municipal sewage plants, foreseen the possibility of irrigation with waste water – difficult to check quality and amount.
- **Country No 6 Response**
  - Same as today + the current generation of executives involved in permitting has “grown up” with the increase in complicity of law. For the next generation it will be quite difficult to work themselves in. Also the pressure on the public sector to reduce costs – therefore less and less human resources available for permitting.
- **Country No 5 Response**
  - There is a significant increase regarding the obligations permit holders are obligated to comply with and the cost is high given the current economic crisis.
- **Country No 9 Response**
  - Lack of human resources
- **Country No 4 Response**
  - Determination of mixing zones in the surface waters

- **Country No 12 Response**
  - The assessment of the single operator's contribution to the significant pressure threatening the objectives of the water body.

5.11.2 Overall Findings and Comment on Question 11- Future Permitting Problems

Box 5.11.2 Summary of respondent's opinion

General concerns:

- Pressure on public sector reducing human resources;
- Increased complexity of decision making and permits;
- Generation of standards for "new" chemicals.

5.12 Question 12 - Any other Comments?

5.12.1 Individual responses

Box 5.12.1 Individual Responses

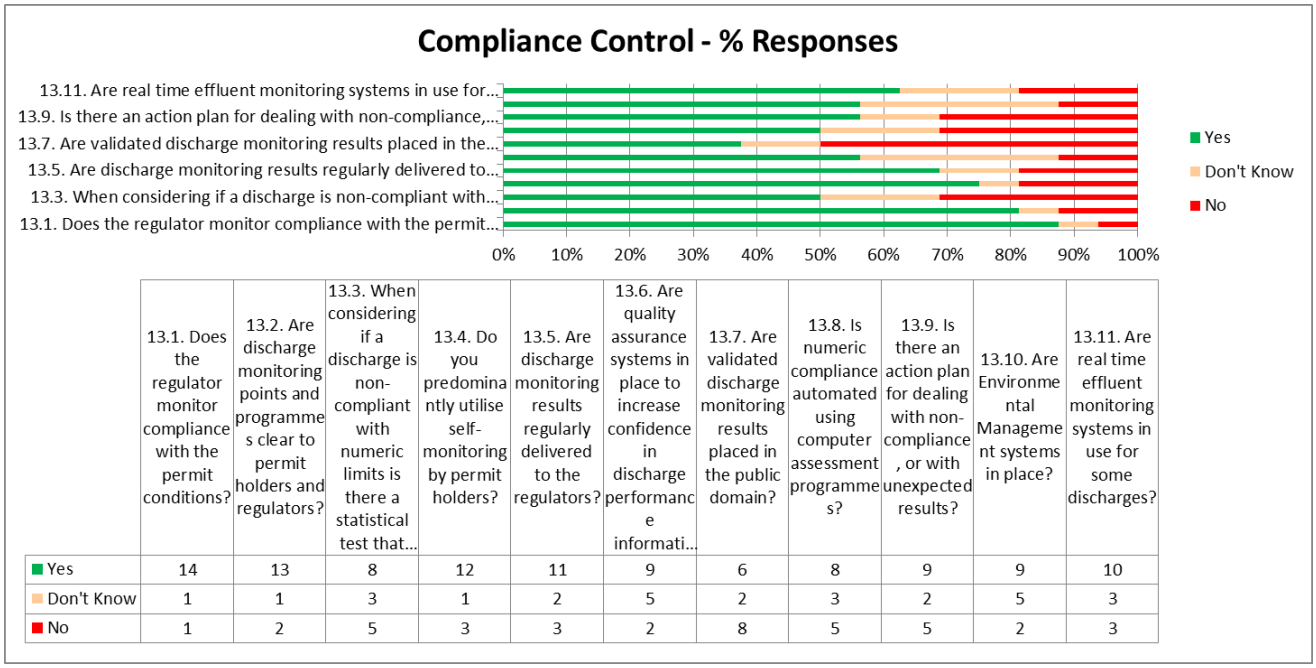
- **Country No 7 Response**
  - The likely review of the permitting process highlighted in the answer to question 11 will need to be undertaken with the ongoing significant reductions in resource, both personnel and budgetary, and will need to deliver against the targets set in the next cycle of River Basin Management Plans.
- **Country No 2 Response**
  - Industrial discharges to sewer need in some cases permit (water pre-treatment, dangerous substances). Permit includes usually numeric limits, maximal and average. The maxima limits may not be exceeded.
- **Country No 9 Response**
  - 4.2 The only difference is in public consultation phase for IPPC installations 4.4

administrative fee 4.6 We are not sure what is meant by sewage treatment works. 4.8 with some exceptions 4.10 and 4.11 As part of the evaluation of the results in the annual report, which is exactly prescribed, also derogation from the maximum values laid down in the environmental permit is possible, which means that possible analytical errors or sampling errors can be taken into account, if they occur. 4.12 direct discharges 4.16 limits of the annual quantities of pollutants are linked to the flow of the watercourse 4.20. We are not sure what is meant by environmental management system. 4.26 yes for the same operator on the same location.

5.13 Question 13 Compliance Control

This question aims to understand the information available on the performance of discharges impacting on the water environment and the level of validation and confidence that this information provides to the regulator and the regulated.

5.13.1 Compliance Control - Graphic and Data Table



	13.1. Does the regulator monitor compliance with the permit conditions?	13.2. Are discharge monitoring points and programmes clear to permit holders and regulators?	13.3. When considering if a discharge is non-compliant with numeric limits is there a statistical test that...	13.4. Do you predominantly utilise self-monitoring by permit holders?	13.5. Are discharge monitoring results regularly delivered to the regulators?	13.6. Are quality assurance systems in place to increase confidence in discharge performance informati...	13.7. Are validated discharge monitoring results placed in the public domain?	13.8. Is numeric compliance automated using computer assessment programmes?	13.9. Is there an action plan for dealing with non-compliance, or with unexpected results?	13.10. Are Environmental Management systems in place?	13.11. Are real time effluent monitoring systems in use for some discharges?
Yes	14	13	8	12	11	9	6	8	9	9	10
Don't Know	1	1	3	1	2	5	2	3	2	5	3
No	1	2	5	3	3	2	8	5	5	2	3

5.13.2 Compliance Control – Any Other Comments? -Narrative Responses

- **Country No 15 Response**
  - We regulate compliance with the permit conditions. However for water and sewerage companies the operator carries out the monitoring and reports the results to us. We continually assess monitoring results and much of this is automated. Confidence of failure is included in compliance assessment. Environmental management systems are in place for some discharges. Real time effluent monitoring is used for operational reasons and for investigations but are not used for compliance assessment.
- **Country No 7 Response**
  - We regulate compliance with the permit conditions. However for water and sewerage companies the operator carries out the monitoring and reports the results to us. The environmental control is also carried out through direct verification and analysis of waters
- **Country No 13 Response**
  - The Country No 13 water authority (National Administration XX) assures the surveillance monitoring to all the discharges in surface water resources based on his operating module. Also the operator of sewage infrastructure reports the result of their monitoring to us. All of this data are used in qualitative and quantitative assessment of the discharges in water resources and to establish the compliance measures when the admitted limits from permits are exceeded.
- **Country No 2 Response**
  - Statistical evaluation used at “average” limits. Discharge monitoring results delivered only in some cases. Action plans for discharging could be a part of obligatory “accidental action plans” or a part of operating plans at more complicated facilities. EMS or EMAS are voluntarily used.

5.13.3 Overall findings and comment on Question 13 Compliance Control

Box 5.13.3 Summary of respondent's opinion

16 answers

- Mostly "Yes" responses but plenty of "No's" and "Don't Knows"
- Fewer "Yes" responses in:
  - Use of statistical compliance test & automated compliance checks,
  - EMS and QA systems,
  - Public domain results publishing,

Regulator monitors compliance? ~90% Yes

Clear discharge monitoring points? ~80% Yes

Non-compliance statistical confidence test? 50% Yes, 20% Don't Know, 30% No

Predominantly self- monitoring? 75% Yes, ~ 20% No

Results regularly delivered to regulator? ~70% Yes, ~20% No

Quality assurance schemes? 55% Yes, ~30% Don't Know

Monitoring Results in public domain? ~40% Yes, 50% No

Automated compliance assessment? 50% Yes, ~30% No

Action Plan? 55% Yes, ~20% Don't Know, ~30%No

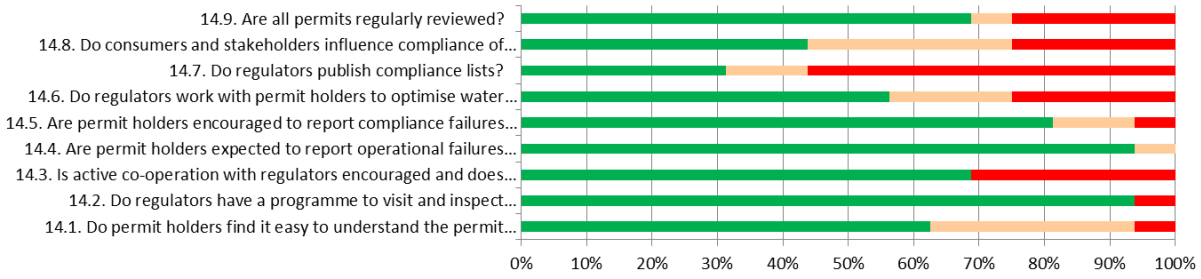
Environmental Management Systems? ~55% yes, ~30% don't know

Real time effluent monitoring? ~60% Yes, ~20% Don't Know~20% No

5.14 Question 14 – Compliance Promotion

The aim of this question is to understand the feedback and communications element of the regulatory cycle.

5.14.1 Compliance Promotion - Graphic and Data Table



	14.1. Do permit holders find it easy to understand the permit conditions?	14.2. Do regulators have a programme to visit and inspect installations holders?	14.3. Is active co-operation with regulators encouraged and does this work in practice	14.4. Are permit holders expected to report operational failures that risk pollution incidents to the regulator, early?	14.5. Are permit holders encouraged to report compliance failures early?	14.6. Do regulators work with permit holders to optimise water quality?	14.7. Do regulators publish compliance lists?	14.8. Do consumers and stakeholders influence compliance of operators?	14.9. Are all permits regularly reviewed?
Yes	10	15	11	15	13	9	5	7	11
Don't Know	5	0	0	1	2	3	2	5	1
No	1	1	5	0	1	4	9	4	4

5.14.2 Compliance Promotion – Any Other Comments? - Narrative Responses

- **Country No 15 Response**
  - Most permit holders find it easy to understand the permit conditions, although some find this more difficult. We have recently moved to a new regulatory framework and are educating our main dischargers on what the new conditions mean. Cooperation with the regulator is encouraged and it can be successful but not all operators wish to cooperate. There are regular inspections of Installations. With most sectors there is good cooperation although some are more challenging than others. Dischargers are required to report issues that may cause pollution and compliance failures early.
- **Country No 13 Response**
  - The regulatory procedure provides the prevent pollution plan for every permit holders and the obligation to inform the water authority about any events related to lack of plant performance. If is necessary the permit holder negotiates with the water authority a water infrastructure investment program. During the development works, water authority allows some derogation from water legislation.
- **Country No 2 Response**
  - Active cooperation with installations holders is not officially given by law. But permitting and inspecting process involves communication about technical solutions. Publishing results is voluntarily made by operators, NGOs or accessible on demand from state authorities. Permits are reviewed during facility changes.
- **Country No 6 Response**
  - 6.7: they now publish an inspection report after inspections acc. to IE directive, apart from that there are no compliance lists

5.14.3 Overall findings and comment on Question 14 Compliance Promotion

Box 5.14.3 Summary of respondent's opinion

16 Answers

Mostly 'Yes' but plenty of "No's" & "Don't Knows".

- Fewer "Yes" responses regarding:
  - operator's ease of understanding permit,
  - active cooperation with regulator,
  - regulators working with operators to optimise WQ,
  - publishing compliance lists,

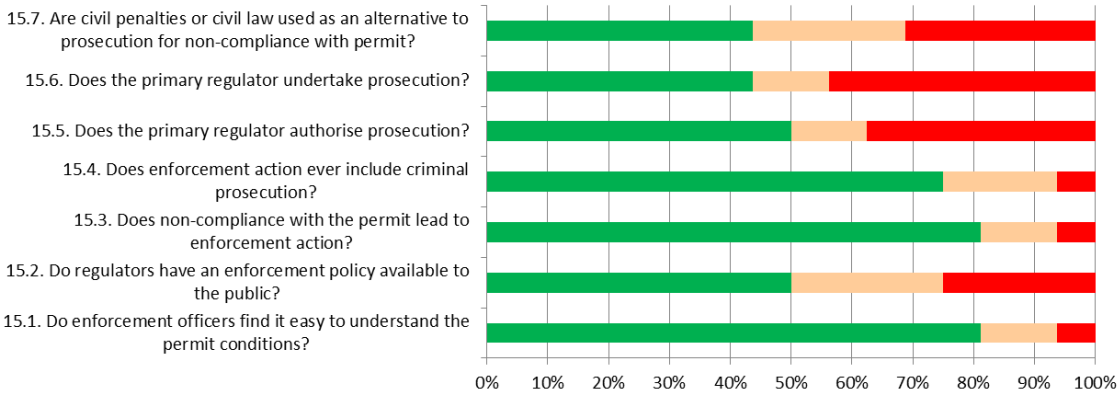
- consumers & stakeholders influence on operator,
- Regular review.

Permit holders understand? ~60% Yes, £0% Don't Know
Regulators inspect? 95% Yes
Active co-operation encouraged and working? ~70% Yes, 30% no
Report operational failures risking pollution early? 95% Yes
Report compliance failures early? ~80% Yes
Work together to optimise water quality?~ 55% Yes, ~20% Don't Know, ~ 25% No
Regulators publish compliance lists? ~30 %Yes, 55% No
Consumers/stakeholders influence? ~45 %Yes, ~30% Don't Know, ~25%No
Permits regularly reviewed? ~70% Yes, 25% No

5.15 Question 15 – Enforcement

The aim of this question is to understand how permits are enforced and what enforcement options are used to ensure compliance.

5.15.1 Enforcement - Graphic and Data Table



	15.1. Do enforcement officers find it easy to understand the permit conditions?	15.2. Do regulators have an enforcement policy available to the public?	15.3. Does non-compliance with the permit lead to enforcement action?	15.4. Does enforcement action ever include criminal prosecution?	15.5. Does the primary regulator authorise prosecution?	15.6. Does the primary regulator undertake prosecution?	15.7. Are civil penalties or civil law used as an alternative to prosecution for non-compliance with permit?
Yes	13	8	13	12	8	7	7
Don't Know	2	4	2	3	2	2	4
No	1	4	1	1	6	7	5

5.15.2 Enforcement - Roughly how many prosecutions are undertaken in your country for permit- related incidents? Narrative Responses

BOX 5.15.2

- **Country No 15 Response**
  - Enforcement officers do find it easy to understand the conditions after training. Our enforcement policy is available to the public. We do take enforcement action and this can include prosecution. We now have some limited civil penalties for minor transgressions. We have approximately 20 to 30 prosecutions per year of water companies and a small number of other operators (<10) per year.
- **Country No 13 Response**
  - Rarely, sometimes one prosecution per year per XX water basin. The Country No 13 water authority may apply the penalties for non-compliances against the maximum discharge limits, stipulated in water permits. The Romanian water law allow that.
- **Country No 14 Response**
  - Information to follow.
- **Country No 2 Response**
  - Permit conditions are sometimes not easily controllable (case to case, if found then comes impulse for a change). To criminal execution it comes if infringement is found to be a crime. Civil penalties is not alternative. Either it's a crime or not. Environmental prosecutions – maybe units or tens
- **Country No 6 Response**
  - Don't know how many prosecutions. I didn't understand question 7.2 in detail – law states basic rules on how law enforcement works. If that is the question, then the answer is yes. 7.6: the primary regulator undertakes prosecution in some cases. In most cases, however, prosecution is undertaken on a regional level (district or federal state level).

5.15.3 Overall findings and comment on Question 15 – Enforcement

Box 5.15.3 Summary of respondent's opinion

16 answers

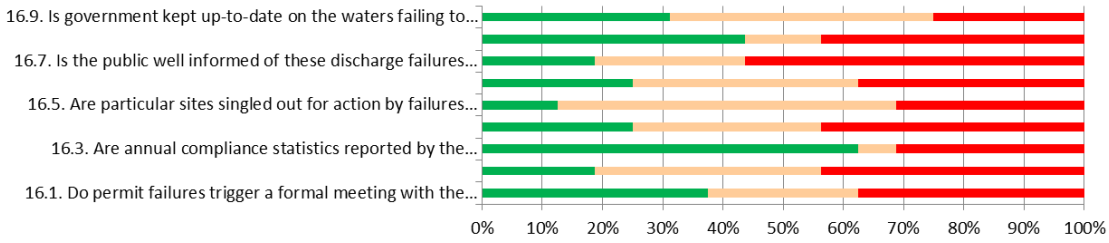
- Mostly "Yes" responses but plenty of "No's" and "Don't Knows"
- It seems likely that this is due to institutional differences.
- Fewer "Yes" responses on:
  - Enforcement policy,
  - Regulator authorising/undertaking prosecution,
  - Civil penalties.
  - Impact of Level of Fines – positive and negative

Enforcement officers find permit easy to understand? ~80% Yes.
Enforcement Policy? 50% Yes, 25% Don't Know, 25% No
Non-compliance leads to enforcement? ~80% Yes,
Enforcement includes criminal prosecution? 75% Yes, Don't Know 20%.
Primary regulator authorises prosecution? 50% Yes ~40% No
Primary regulator undertakes prosecution? ~45% Yes, 45% No
Civil penalties alternative? ~45% Yes, ~25% don't Know, ~30% No

5.16 Question 16 - Assessment & Feedback

This question aims to understand the communication and feedback about the issues raised across the regulatory cycle.

5.16.1 Assessment & Feedback - Graphic and Data Table



	16.1. Do permit failures trigger a formal meeting with the permit holder?	16.2. Are permit failures and prosecutions actively reported to the press?	16.3. Are annual compliance statistics reported by the regulator?	16.4. Does this report provide unbiased estimates of trends such as the number of discharges that fail a permit for a particular pollutant?	16.5. Are particular sites singled out for action by failures calculated to have 95% confidence?	16.6. Are discharge failures linked publicly to water quality objectives?	16.7. Is the public well informed of these discharge failures and their consequences?	16.8. Are permits reviewed periodically on the basis of the risk to water bodies or the impact on them?	16.9. Is government kept up-to-date on the waters failing to meet planned quality? Does this avoid biased trends by reporting separately for each...
Yes	6	3	10	4	2	4	3	7	5
Don't Know	4	6	1	5	9	6	4	2	7
No	6	7	5	7	5	6	9	7	4

5.16.2 Assessment & Feedback – Any Other Comments? - Narrative Responses

BOX 5.16.2

- **Country No 15 Response**
  - Prosecutions are actively reported to the press but not permit failures. We produce annual reports that show numbers of pollution incidents per sector and compliance with permit conditions. Failure doesn't always trigger a formal meeting.
- **Country No 7 Response**
  - We produce annual reports that show numbers of environmental controls per sector and compliance with permit conditions.
- **Country No 13 Response**
  - All our annual reports highlight the pollution events and the consequences on status of water bodies**.**
- **Country No 6 Response**
  - The responsibility for the enforcement of the Country No 6 water legislation lies with the regional authorities (federal states, XX). For most of the above mentioned points there is no legal obligation but regional authorities do have processes and regional reports for some of them. Regarding point 8.9: Information is collected and updated within the 6 year cycle for the preparation of the National River Management Plans (NRMP) according to the WFD. For the purpose of reporting from the regional authorities to the ministry (in charge of NRMP preparation) several data bases were installed, the most important of them collects and organizes all relevant data on a water body basis including point source information.
  - 8.2 – permit failures and prosecutions are not generally reported to the press, but in some cases they are – especially in cases that the public is already aware of. 8.3 – such statistics are reported on a federal government level in some cases, but not by the regulator
- **Country No 2 Response**
  - Feedback from inspection goes to the Ministry of Environment and next steps are questions for them.
- **Country No 5 Response**
  - 16.1 sometimes yes 16.3 to Ministry and Parliament

5.16.3 Overall findings and comment on Question 16 Assessment & Feedback

Box 5.16.3 Summary of respondent's opinion

16 answers

- Mostly "No" or "Don't Know" responses.
- This is seen as evidence that the "Check" and "Review" part of the Regulatory Cycle is poorly understood or not being implemented.
- This shows clear need for improvement / development.

Permit failures trigger formal meeting? ~40% Yes, 20% don't Know, ~40 % No.
Permit failures & prosecutions reported to press? ~20% Yes, ~40% Don't Know, ~40% No
Annual Compliance statistics reported? ~60% Yes, ~30% No
Report provides unbiased estimates of trends? 25% Yes, 30% Don't Know, 45% No
Sites singled out for action at 95% confidence of failure? ~10% Yes, 60% Don't Know, 30% No
Discharge failures linked publicly to WQOs? ~25% Yes, ~40% Don't Know, ~35% No
Public well informed of failures & consequences? ~20% Yes, ~25% Don't Know, ~55% No
Permits reviewed periodically on basis of risk or impact? ~45% Yes, ~45% No
Is Government kept up to date on failures? 30% Yes, 45% Don't Know, 35% No

5.17 Question 17 – IMPEL Best Practice

Narrative question only - Please could you highlight any areas of the IMPEL regulatory cycle that you consider to be particularly good or best practice in relation to achieving Water Framework Directive objectives?

5.17.1 Individual Responses

Box 5.17.1 Individual Responses

- **Country No 15 Response**
  - Our developing catchment permitting and flexible permitting approaches are areas that we consider best practice. In Country No 15 our overall approach of using numeric limits in permits that are set to achieve the water quality objectives, and assessing compliance including confidence of failure works well.
- **Country No 7 Response**

- Compliance/Enforcement outcomes being used to inform the legislative process.

- **Country No 2 Response**
  - Compliance control; Assessment &Feedback; Enforcement
- **Country No 13 Response**
  - XX is IMPEL member, but is not very active, so is unable to express a point of view.
- **Country No 14 Response**
  - Looks to bring stakeholders together as part of a catchment approach. Gives regulators the ability to reach stakeholders who would not generally be included in regulation.
- **Country No 6 Response**
  - Assessment and feedback
- **Country No 8 Response**
  - In the framework of the implementation of the Water Framework Directive, the Ministry of Environment in cooperation with the Natiolnal Water Management Authority and the General Directorate of Environmental Protection conducted multiple conferences and workshops on the implementation of the Water Framework Directive. Additionally, during the public consultations (6 months) many meetings on the review of the RMBPs were organised. Their main objectives were to obtain information/opinion on consulted documents from all stakeholders. The consultation were aimed at find appropriate solutions based on knowledge, opinions, insights, experiences and ideas of various stakeholder groups participating in the process of consultation.
- **Country No 5 Response**
  - All areas of the IMPEL regulatory cycle are considered good or best practice.

5.17.2 Overall findings and comment on Question 17

Box 5.17.3 Summary of respondent's opinion

Areas of the IMPEL regulatory cycle that you consider to be particularly good or best practice in relation to achieving Water Framework Directive objectives?

- There were no universally common themes in the responses, but two components stood out:
    - Statistically robust environmental and discharge monitoring provides confidence in permit limits set to achieve planned environmental outcomes in a fair and economic way.
    - Engaging with stakeholders through formal consultations and informal catchment approaches develops understanding and wider ownership – both of the problems in achieving good status, and their solutions.

5.18 Question 18 – Workshop Planning

Narrative Question Only - We are planning a workshop as part of this project to find out more about different regulatory approaches to discharge permitting across member states and to help share best practice and identify areas of concern. Please can you highlight any specific aspects that you would like to include or explore at this workshop?

5.18.1 Individual Responses

Box 5.18 Individual Responses

- **Country No 15 Response**
    - Chemicals permitting, multi-discharge permits, permit limits on small discharges. Different approaches to permitting.
- **Country No 7 Response**
    - How other member states regulate point sources- what forms of permitting/registration are used, how compliance is assessed, how enforcement tools are used? Any experience of civil sanctions/"on the spot" fines for minor breaches.
- **Country No 2 Response**
    - intermittent discharges; Statistical methods of data processing;

methodologies for the definition of emission limit values in accordance with the quality objectives of the water bodies

- **Country No 13 Response**
  - How can be managed the exceptions on environment objectives for water bodies who failed good status until 2015 (WFD)
- **Country No 14 Response**
  - Regulatory approach to permits in relation to UWWTD. Explore how other member states approach discharges from the network and sewage works.
- **Country No 6 Response**
  - In my personal perception there is need of action regarding the information and involvement of the public in Country No 6with respect to emissions to the (aquatic) environment. It would be fine to see successful examples of information policy from other member states.
- **Country No 2 Response**
  - Feedback from inspection to the permit reviews. Recommended types of monitoring and limits and recommended reviewing of permits.
- **Country No 5 Response**
  - Setting of discharge limits for different activities

5.18.2 Overall findings and comment on Question 18 - any specific aspects that you would like to include or explore at a future workshop

Box 5.18.3 Summary of respondent's opinion

It looks like all aspects of the IMPEL Regulatory Cycle need to be addressed in the context of WFD delivery. Particularly:

- Identifying the various regulatory systems in use
- Identifying the "background" information needed for a fair permit.
- Identifying what is "sufficient "information, and providing it to the public and stakeholders
- Technical specifications for monitoring, compliance, enforcement, evidence etc.

5.19 Question 19 – Structural Diagram of Regulation

Aim is to understand the institutional variety and options for delivery of WFD

Question - If a schematic diagram is available showing the regulatory structure for environmental water quality in your country, please share this with the project manager, Barrie Howe of the Environment Agency, England, barrie.howe@environment-agency.gov.uk. Alternatively, please provide a link to this in the space provided below. (We are particularly interested in learning whether water quality is regulated by a single regulatory body, or if it is split nationally/in combination with local authorities in your country).

Two member states provided schematic diagrams of their planning and regulatory structures with their response – these are provided in Annex 3

5.19.1 Individual Responses

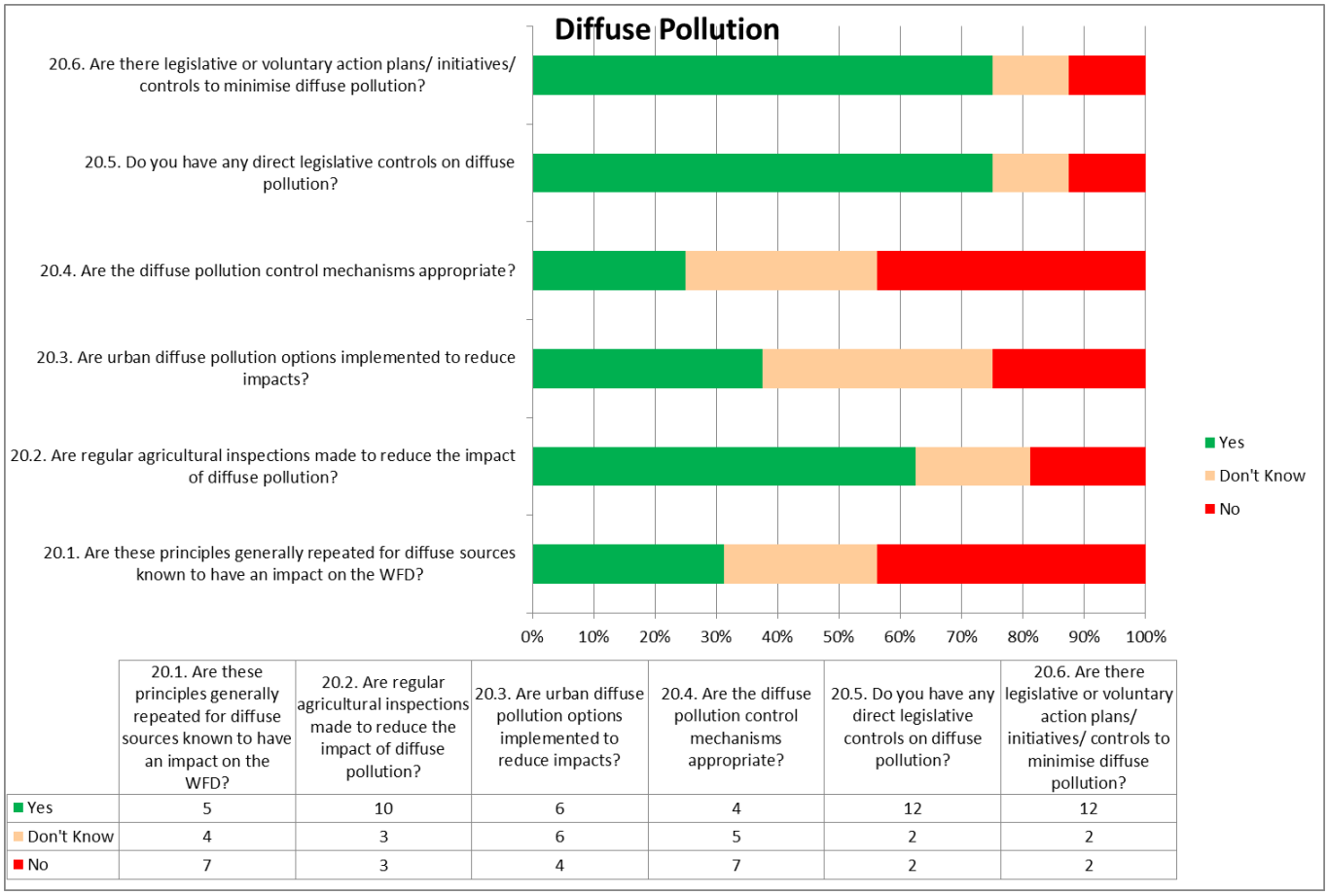
BOX 5.19.2

- **Country No 15 Response**
  - Environment Agency nationally determines permits and carries out all aspects of compliance assessment and enforcement**.**
- **Country No 7 Response**
  - All point source regulation undertaken by the XXXX. Two regulatory regimes currently exist: Consenting discharges under the Water (Country No 7 Response) Order 1999- Undertaken by the Water Management Unit of XXXX; Pollution Prevention and Control (Industrial Emissions) Regulations (XX) 2013- regulates emissions from all activities prescribed for control under these regulations, including point source discharges from same- undertaken by the Industrial Pollution and Radiochemical Inspectorate of XXXX
- **Country No 6 Response**
  - Responsibility for water legislation lies with the Federal Ministry of Agriculture, Forestry, Environment and Water management Responsibility for the Enforcement of water legislation lies with the governments of the federal states (xx) and their local authorities
  - There is one single regulator (national level). Permitting and compliance control, however, is split nationally between the ministry for agriculture, forestry, environment and water; the governors of the water states and the district administration**.**
- **Country No 2 Response**
  - Permitting – Regional Authority and Municipalities Inspecting – XXX, Municipalities (partly MoE, partly MoA, Regional Authority)
- **Country No 8 Response**
  - Schematic was provided
- **Country No 5 Response**
  - **For** the WFD there are two regulators, the Water Development Department is in charge for the quality and quantity and the Department of Environment is in charge for permit and inspection. Therefore, the split of authorities in this legislation may appear in the future some problems.

5.20 Question 20 – Diffuse Pollution

The aim of this question is to get an initial view on the importance of diffuse pollution and the need to include this in future Phases of the project.

5.20.1 Diffuse Pollution- Graphic and Data Table



	20.1. Are these principles generally repeated for diffuse sources known to have an impact on the WFD?	20.2. Are regular agricultural inspections made to reduce the impact of diffuse pollution?	20.3. Are urban diffuse pollution options implemented to reduce impacts?	20.4. Are the diffuse pollution control mechanisms appropriate?	20.5. Do you have any direct legislative controls on diffuse pollution?	20.6. Are there legislative or voluntary action plans/ initiatives/ controls to minimise diffuse pollution?
Yes	5	10	6	4	12	12
Don't Know	4	3	6	5	2	2
No	7	3	4	7	2	2

5.20.2 Diffuse Pollution – Any Other Comments? -Narrative Responses

Box 5.20.2 – Diffuse Pollution

- **Country No 15 Response**
  - Diffuse pollution remains an issue and in some cases the control mechanisms are not appropriate to limit the impact although these are difficult problems to solve**.**
- **Country No 13 Response**
  - The diffuse pollution issue is included in the Basin Management Plan from sources, types, the impact magnitude, the program of measures for effect diminishment and the expected results. There is no specifically legislation, is only the water law.
- **Country No 14 Response**
  - We have a diffuse action plan in Country No 14. Restrictions on funding and resources are inhibitive at present. Diffuse pollution is a key aspect of the Water Strategy in Country No 14.
- **Country No 2 Response**
  - Diffuse pollution particularly from agriculture are subject of the Ministry of Agriculture, relation to permits is restricted.
- **Country No 5 Response**
  - 20.3 some 20.6 Code of Good Agriculture Practice: • Compulsory for NVZ zones • Guiding for the rest areas

5.20.3 Overall findings and comment on Question 20 – Diffuse Pollution

Box 5.20.3 Summary of respondent's opinion

16 Answers

- Mostly "Yes" responses but lots of "Don't Knows" & "No's"

High proportion of "Yes" on

- agricultural inspection,
- legislative controls
- legislative / voluntary plans.

Lower proportion of "Yes "on

- principles in use for addressing diffuse pollution
- urban diffuse pollution,
- diffuse pollution control mechanisms

Principles repeated for diffuse? ~30% Yes, 25% Don't Know, 45% No
Regular agricultural inspections? ~60% Yes, ~20% Don't Know, ~20% No
Urban Diffuse Options implemented? ~35% Yes, ~35% Don't Know,~ 30% No
Diffuse pollution control mechanisms appropriate? 25% Yes,30% Don't Know, 45% No
Direct Legislative controls on diffuse pollution? 70% Yes, ~15 % Don't Know, ~15 % No
Legislative or voluntary plans / initiatives? 70% Yes, ~15 % Don't Know, ~15 % No

6 Discussion

Regulation is never perfect and there will always be opportunities to improve and to learn from experience. IMPEL has significant experience in implementing IPPC and IED which could be applied to optimise the land and water challenges targeted by the WFD.

Implementation of the WFD could be improved if water quality regulation is optimised to suit the specific and new challenges that the Directive offers. The Directive enables three planning and implementation cycles. These three cycles should be used to progressively improve water quality regulation.

The initial phases of implementation of the WFD, and the Common Implementation Strategy, mostly focussed on the planning and assessment requirements of the Directive. There is no CIS Guidance focussed on the regulatory options available required for implementing the Programme of Measures. One option would be for the EU to initiate a CIS guidance document or regulatory platform to ensure improved implementation. IMPEL could facilitate this and this project could be developed to inform and enable this.

The Questionnaire provides valuable preliminary insight into current regulatory and permitting activities focussed at implementing the WFD. This report is not a definitive analysis of MS action and capability, but it provides a useful and subjective overview of the issues from the practitioners who responded.

At a high level the following issues are noted in relation to the IMPEL Regulatory Cycle. For ease of reference, in the following sections 6.1 to 6.4 Ctrl+Click on the coloured Heading takes you to the Regulatory Cycle Diagram at 6.7; and Ctrl+ Click on the coloured boxes on the diagram takes you to the relevant section of Discussion.

6.1 Planning Objectives and Legislation

1. The planning and strategic elements of the WFD are generally in place and to a high standard. Most believe that planning and documentation is reasonably robust, but have some doubts about targeting and overall delivery of the WFD outcomes.

2. The full implementation of the WFD requires knowledge of all elements of the IMPEL cycle and the capability to join this up and to optimise the workings of the cycle. WFD planners may not have sufficient expertise in the regulation and permitting phases leading to a lack of certainty in achieving outcomes. Likewise the implementers may not understand the planning phase or the resulting plans that they are given to implement. We should aim for a general level of competence and understanding for all the players involved and the IMPEL regulatory cycle is a good model on which to focus. This would lead to greater understanding and communication, helping to optimise water quality regulation, serving both regulators and the regulated, and leading to better and more sustainable outcomes.

3. For point source discharges most respondents believe that the legislation is in place and is adequate to deliver the WFD. They indicate that the use of these statutory laws and regulations is not optimal and a full understanding of the potential regulatory mechanisms is missing. The legislation is generally understood, but is not always used to full effect.

4. Strengthening enforcement capability could add significant additional focus and certainty to the implementation of the WFD in some MS.

6.2 Permitting

Permitting

1. Permits for point sources are generally in place, however the quality and quantity limits are not always set to protect a specific watercourse, or to ensure WFD outcomes are met. There is less certainty for discharges to Groundwater, and these are often seen as a separate issue. In fact the principles of water quality regulation and permit setting remain the same, differing only in evidence requirements.

2. Permits for intermittent discharges are not always in place with around 30% of respondents believing them to be not permitted. This contrasts against 90% of responses indicating that continuous discharges are properly permitted. It would also appear that 10% of respondents thought that not all municipal STW were permitted.

3. There are significant variations on the setting of numeric limits in permits which could be reason for the WFD objective not being met. The answers demonstrate a lot of variation in understanding of the potential benefits of the need to use robust statistical and

modelling approaches. Such techniques could significantly improve optimisation of permits and infrastructure design and operation, and increase the probability that WFD objectives are met.

4. Other issues relating to permit limits include:

    a. Many municipal STW may be set to UWWTD standards but may not be sufficiently protective of the receiving water.
    b. Need more attention to metals and accumulative substances, linked to bio-availability
    c. Some note the options for seasonal permit standards, which are rarely taken up.
    d. There is potential for optimisation of pollution loads within catchments and between treatment works. This approach is facilitated by the WFD, but is rarely taken up. It is an area of good practice that could be developed.
    e. Permit review was an issue raised by respondents. There should be a permit review period – or at least a review period based on environmental risk and input.

6.3 Compliance and Feedback

Compliance & Feedback

1. Lack of monitoring of effluents and the receiving environment, may be a primary issue here. A number of respondents commented on this. There may be a lack of data from the receiving environment and the discharges. This would prevent accurate and evidence based modelling and setting or revision of permit conditions. This is an area for development of best practice, and discussion on the optimisation of monitoring and modelling for effective decision making.

2. Impacts of intermittent discharges may be responsible for high ammonia levels and microbiological contamination of bathing waters – this is a topic raised in the questionnaire and worthy of further consideration.

3. Permit compliance control is mostly positive but there was significant doubt over its effectiveness from some respondents. Most utilised operator self-monitoring.

4. The following points were raised:

    a. Some were concerned about the validity of results reported

b. Quality assurance methodologies were not fully utilised to validate and increase the confidence in self-monitoring and reporting.
c. Environmental Management Systems were rarely thought to be utilised effectively.
d. There was uncertainty about the level of confidence in compliance assessment. This could disadvantage dischargers.
e. Less than 50% thought that automated compliance assessment methods were used properly.
f. Few used real time monitoring methods.
g. Optimisation of water quality could be improved. The WFD seeks to find the best combination of measures to achieve outcomes. There is significant scope to explore this through modelling and source apportionment methods.

This is a key area for development and good practice exchange. It would be helpful to examine a selection of compliance reports from MS to establish good practice.

There is significant scope for engagement with industry and the public in terms of making compliance information readily available in understandable format. This is a key area of stakeholder engagement that could be further developed. Some do this well and others not at all.

Other issues include:

a. Feedback and communication issues with industry and public.
b. Understanding customers and promoting the regulatory experience.
c. Most MS do not publish compliance lists or engage fully with the public on this. Public engagement is a key opportunity to change attitudes of polluters and other stakeholders. Use of stakeholder pressure is a useful option to effect positive change for the environment.

The public tend to be involved in the WFD planning, but not in the delivery of point source regulation. There is some engagement in diffuse pollution control and the use of 'supplementary measures' and other voluntary measures. NGOs can also be important in influencing regulation and environmental outcomes.

This is potentially an area for developing best practice and emphasising the regulatory delivery elements of the WFD. There is significant scope to examine this area of the regulatory cycle.

6.4 Enforcement and Review

Enforcement & Review

1. In terms of enforcement most responses were positive. Clearly institutional differences are important here and there is often a split between planning, permitting and enforcement authorities which emphasises this gap. Discussions could include developing an optimum regulatory structure or pathway with linkages and feedback loops to accommodate a number of institutional arrangements. Issues of regulatory independence and potential conflicts of interest may also be aligned with this.

2. The optimal use of all the 'tools in a regulatory toolbox' is important. There are a range of options to be used individually or in combination to gain optimal outcomes. This will help to optimise the enforcement role, including the use of criminal and civil penalties to drive improvement.

3. The assessment and feedback loop is an essential part of the 'check & review' elements of the regulatory cycle. Most respondents thought that this needed attention. Without this ongoing failures may not be detected. Systemic failure of WFD delivery could occur unless this is improves. Also regulatory improvement will not occur.

4. There were some concerns that fines were generally set too low, so that the polluter did not pay for the polluting impact of a discharge. Very little was mentioned about the commercial value of a permit for the successful running of a business, or of environmental (ecosystem) valuation. These are areas of considerable importance for enforcement and review, and should be addressed in developing good regulatory practice.

6.5 Diffuse Pollution

1. Diffuse pollution was explored in one question. There was general agreement that this was an area for future development and the effective application of regulatory options, in its widest sense. One comment was that there were a number of diverse action plans, but few 'hard tools'. This is clearly an area for future work, possible in Phase 2 or in a separate, but aligned IMPEL project.

6.6 Key Current Concerns

1. From the text responses the following issues are highlighted:

a. Lack of resources, reductions of staff and capability, and diminishing resources due to changing priorities and recession pressures.
b. Lack of data for efficient decision making – noted above.
c. Lack of information on receiving water capacity
d. Conflicts of interest in permit stetting and enforcement.
e. Succession planning has also been identified as a key issue.

All could be addressed by competency building, efficient regulatory mechanisms and best practice exchange. The possibility of developing some regulatory training courses focussed on the delivery of WFD could be developed through the IMPEL network.

6.7 Future Issues

1. Arising from the question on future permitting issues the following have been identified,

    a. Chemicals, micro-pollutants and novel substances – need new capabilities and methods.
    b. Water reuse impacts on WFD outcomes.
    c. Climate change issues.
    d. Polluter pays issues and full cost of water service. An overview of current views on environmental economics, including economic input into regulation and the ecosystem services elements of benefit assessment would be helpful.
    e. Better Regulation opportunities and sharing knowledge of best practice and current thinking on this.

There are a number of important pointers to the need for improved regulatory practice to improve the implementation of the WFD and to better secure the outcomes in the most effective way. The Figure 2 has been developed to provide a visual view of the findings, related directly to the IMPEL regulatory cycle. The colours broadly indicate the findings, in terms of green, most elements generally in place. Red / Purple indicates any areas of concern and priorities for development and future collaboration to improve. The hyperlinks will take you to the relevant recommendations.

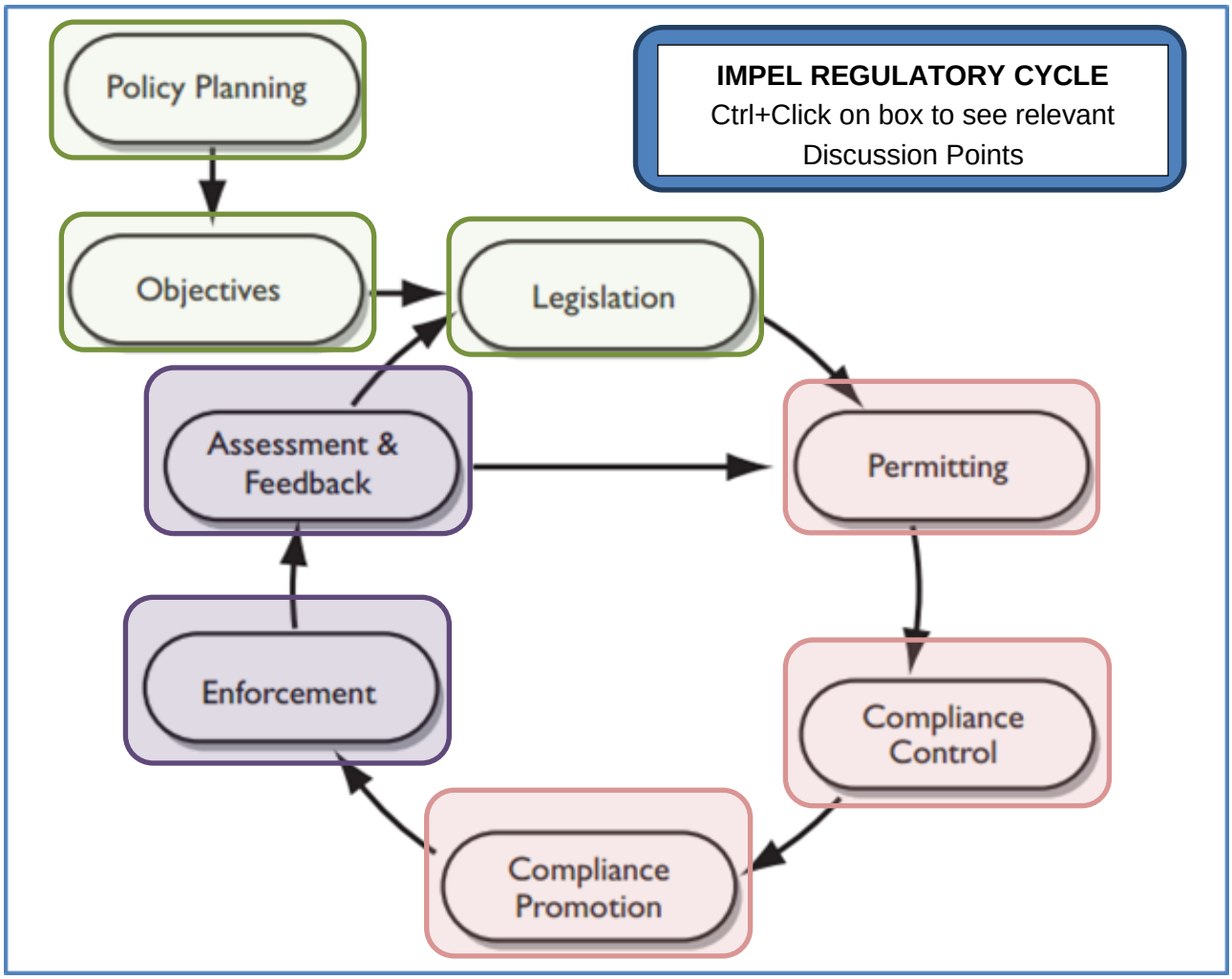


Figure 2 - IMPEL Regulatory cycle with findings linked to relevant discussion Points

The points raised above will form a useful basis for discussion and prioritisation at the proposed Phase 2 workshop. It is important to engage a wide range of respondents, if possible including DG Environment, WFD CIRCABC ("**C**ommunication and **I**nformation **R**esource **C**entre for **A**dministrations, **B**usinesses and **C**itizens"), the Joint Research Centre and European Environment Agency in the workshop.

We propose a small sub-group of the Land and Water Group be convened to work with the project team to take this forward. The findings of this report and the outline proposals for the workshop can be further developed to fully utilise the findings of this questionnaire. With the correct agenda this would be a useful opportunity for a progressive discussion and a clear set of short- and medium- term actions, not least of which would be forward looking networking to develop some of these key issues to better implement the WFD in the next two cycles.

7 Recommendations and Future Actions

The questionnaire and other discussions during this project point to the following options that may improve the implementation of the WFD and help to better realise the outcomes specified in the River Basin Plans. The issues identified are based on an interpretation of the questionnaire responses and have been developed to assist with the future development of a workshop and the proposed second phase of the SWETE Project.

7.1 Recommendations

1. IMPEL has developed significant regulatory capability through its work with IPPC and IED. This could be used to optimise use of 'the combined approach' for regulatory and permitting activity in Land and Water and to meet the new challenges seen in the implementation of the WFD.

2. The WFD enables three planning and delivery cycles. We are about to commence the second delivery cycle, much of the planning for cycle 2 already having been drafted ready for governments' sign-off. We should ensure that regulation improves through each cycle. This IMPEL project could feed into this progressive and continual improvement.

3. Consideration should be made to initiate a CIS guidance document or regulatory platform to ensure improved implementation of the WFD. IMPEL could facilitate this and this project could be developed to inform and progress this. This project and questionnaire responses will provide evidence of need to improve regulatory implementation of the WFD and the possibility to do this under IMPEL leadership.

4. The findings of this report should be discussed and developed at a workshop in early 2016. The aim of the workshop would be to clarify the veracity of the questionnaire analysis findings, and to scope further work under a proposed SWETE Phase 2 project to address competencies and potential training need. The overall aim would be to improve the implementation of the WFD and other related Directives. The workshop would also examine good practice examples of specific regulatory components of the cycle from MS.

5. The workshop agenda and delegate invitation list could be developed by a small subset of IMPEL Land and Water Group members, with assistance from this project team. An overview of the IMPEL regulatory cycle could be used to structure the workshop and to ensure all understand the language and potential regulatory issues. The points raised in Section 6 Discussion, will form key elements to be addressed in the workshop. This report should be circulated before the workshop.

6. The Water and Land Expert Group is relatively new to IMPEL. This work area is a good opportunity to develop networks and knowledge exchange opportunities between MS. The networks should be extended to key officials in DG Environment, WFD CIRCABC, the Joint Research Centre and European Environment Agency to ensure two way communication to facilitate improved implementation of Directives and better legislation from EU, and a better environment for us all.

7. Significant progress is being made on Better Regulation initiatives and new technologies are becoming available. It would be useful to ensure good practice includes these elements and knowledge is exchanged so that any improved regulatory practice encompasses these progressive ideas.

8. The WFD planners may not have sufficient expertise and/or authority in regulation and permitting leading to a lack of certainty in achieving outcomes. Likewise the implementers may not understand the planning phase or the resulting plans that they are given to implement. We should aim for a general level of competence and understanding for all the players involved and the IMPEL regulatory cycle is a good model on which to focus. This would require implementing a Plan, Do, Check, Review cycle targeted at the implementation of the WFD. Importantly the Plan should include identification of the key information and resource requirements necessary to deliver the Do, Check and Review components.

9. It is important that throughout the regulatory cycle the use of legislation and regulatory infrastructure is optimised. This is especially important for the 'Check (inspection & enforcement) and 'Review' (feeding the next cycle) components.

10. The way in which numeric limits are set in permits could be a reason for the WFD objective not being met. There is a significant gap in understanding of the benefits of statistical and modelling approaches, based on receiving water quality– existing (monitored) and planned (WFD class), and discharge characteristics. This could significantly improve optimisation of permits and infrastructure design and operation, and increase the probability that WFD objectives are met.

11. Improving confidence in self-monitoring, including monitoring certification schemes and quality assurance methodologies would be a useful area to exchange good practice.

12. Making compliance information readily available in understandable format is a key area of stakeholder engagement with industry and the public. This could be further developed to promote awareness of the linkage (or not) between permitted discharges and WFD compliance. Some MS do this well and others not at all.

13. The questionnaire responses highlighted the variety of institutional structures. It is clear that a wider understanding of this variety is needed in order to develop good practice in institutional issues, and optimising structures and responsibilities. There is a need to examine and potentially optimise the enforcement role within institutional structures and to look at the use of criminal and civil penalties to encourage good behaviour and punish bad.

14. The assessment and feedback loop is an essential part of the 'Check' & 'Review' elements of the regulatory cycle. Most respondents thought that this needed attention. Without this ongoing failures may not be detected. Systemic failure of WFD delivery could occur unless this is improves. Also regulatory improvement will not occur.

15. Diffuse Pollution was explored in one question. There was general agreement that this was an area for future development and the effective application of regulatory options, in its widest sense.

16. There is an emerging issue of reduced resources, a need for succession planning and potentially reduced competence. The proposed IMPEL work under SWETE 2 could assist with this, and competence building and training programmes would be a useful development from this project.

17. A number of future permitting issues have been identified which should be considered in future work. These include:

    a. Chemicals, micro-pollutants and novel substances – need new capabilities and methods.
    b. Water reuse impacts on WFD outcomes
    c. Climate change issues
    d. Polluter pays issues and full cost of water service. An overview of current views on environmental economics, including economic input into regulation and the ecosystem services elements of benefit assessment would be helpful.

Finally, the responses to the questionnaire have identified a wide range of issues and opportunities for more effective water quality regulation, leading to improved implementation of the WFD. The information from the Questionnaire will assist with the structuring of a workshop to determine priorities and to plan the most effective way of

taking this work forward, developing and exchanging good practice via the IMPEL network.

7.2 Proposals for the Workshop

7.2.1 Aim of the Workshop

The workshop would aim to bring delegates together to reach a common understanding of the current issues relating to the regulatory aspects of implementing the WFD. It will utilise the findings of this report and questionnaire to focus discussion and to assess best practice and identify gaps in knowledge. It will review options to improve implementation of the WFD, within the IMPEL network and elsewhere. Through this networks can be developed to share knowledge and increase regulatory competence.

7.2.2 Proposed Invitees

Ultimately to be determined by the IMPEL Water and Land Expert Group. However, from this project perspective we would recommend that delegates would include IMPEL representatives, DG Environment, and at least a sub-set of the respondents to the questionnaire. Other groups should be considered, including WFD CIRCABC, the Joint Research Centre, and European Environment Agency.

7.2.3 Duration

The workshop should be two full working days.

7.2.4 Timing

Spring 2016.

7.2.5 Location

To be determined but should be neutral and central. The venue could be in a university or one of the EU special centres.

7.2.6 Facilitation

For some elements progressive and sensitive facilitation will be very helpful. The SWETE project team can offer some of this but IMPEL should nominate an experienced facilitator and chairperson.

7.2.7 Outline Agenda

Day One

- Introduction –"Is Point Source Regulation contributing sufficiently to help deliver Water Framework Directive compliance?"
- IMPEL Water and Land Expert Group perspective
- Review of findings of questionnaire
- Facilitated discussion and working group focussed on 'elements of the regulatory cycle'
- Input from MS, views and experience, initial regulatory need and feedback
- Introduction to the Regulation for Water Quality book.
- Dinner and networking. Maybe DG Environment speaker – a view from Brussels??

Day 2

- Identification of good practice – Some short presentations from MS.
- Review of regulatory gaps – working groups to develop and feed back
- Development of training needs and options for delivery and increasing competence
- Review of DG Environment view of the options and their engagement going forward
- Outline of future phases of SWETE and IMPEL or other delivery mechanisms
- Report back on key issues and agreed way forward.

7.2.8 Workshop output

A short report on key issues arising and agreed way forward. This will include a brief outline of proposals to IMPEL Water & Land Expert Group for short-term deliverables (Quick Wins) and longer-term development activities (e.g. Projects, Workshops, Networks, Good/Best Practice Manual).

Annex 1 – Completed SWETE Questionnaire - Example

Safeguarding the Water Environment throughout Europe – SWETE Project

The questions we are trying to answer in this project are:

- **How does the permitting of discharges to the water environment contribute to achieving Water Framework Directive compliance in IMPEL Member States?**
- **Can we identify examples of good practice?**
- **Are there regulatory gaps that need to be filled?**

Background

IMPEL has been asked by the European Commission to expand its area of regulatory influence into promoting best practice in delivery of the Water Framework Directive, as well as the Industrial Emissions Directive. The Commission is concerned at the rate of delivery of intended Water Framework Directive outcomes, and sees regulatory inconsistency between Member States as a key issue. The IMPEL Water and Land Group

has been set up to assist in the improvement of WFD implementation and to promote good regulatory practice. This is one component of this early work.
We are in the early stages of implementing the SWETE project and developing an associated knowledge exchange programme to assess and improve environmental water quality planning and regulatory capability across the EU. It will be focussed on the delivery of the EU Water Framework Directive (WFD) and in the first instance be limited to permitted point source discharges and impacts. It will aim to increase Member State regulatory competence through knowledge exchange and developing and sharing best practice.
This survey will aim to assess need and for us to prioritise the content of the programme and potential best practice workshops. As a longer term goal the programme may also expand to include diffuse pollution, water resources regulation and flood risk management best practice.

Aim of Questionnaire

The aim of the questionnaire is to understand the current status of regulatory measures used across Member States to implement the Water Framework Directive (WFD) and protect and improve the water environment. This information will be used to enhance regulatory competence and identify development needs, through spreading best practice and making good regulatory principles available to all via the IMPEL Water & Land Network.

The questionnaire will follow the logic of the well-established IMPEL regulatory cycle[3] (Figure 1) and questions will broadly follow the components of the regulatory elements. We assume you are familiar with this cycle. If not please download the IMPEL Environmental Inspector's Handbook using the link provided.

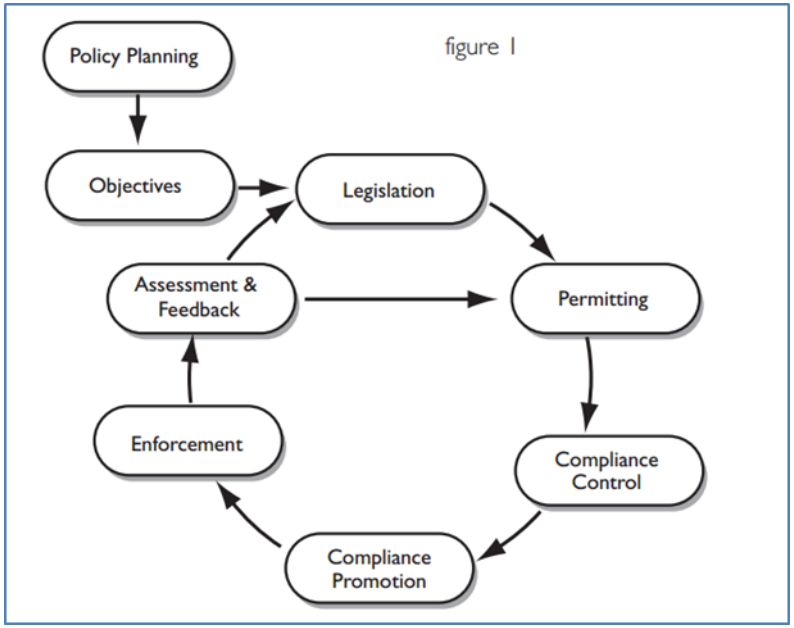


Figure 1 IMPEL Regulatory Cycle

[3] Reference. IMPEL Environmental Inspector's Handbook 1999 : impel.eu/wp-content/uploads/2009/12/refbook.pdf

Please note, responses to the questionnaire will be held confidentially within the IMPEL project and will not be attributed to individuals.
Please answer the questions as a nominated Member State (MS) expert, using your personal knowledge.

Safeguarding the Water Environment throughout Europe Project – (SWETE)	
Please answer the questions quickly and to the best of your knowledge – We aim to get a high level view	
Questions are deliberately simplistic to allow yes/no responses - with some duplication to increase confidence	
Answer Yes/No/ Don't Know where possible	
Comment boxes have been included. Please use these to add other relevant information	
When completed please return electronically to **SWETE Project Manager** **Barrie Howe at barrie.howe@environment-agency.gov.uk**	
Please Complete the Questionnaire and return by Monday 9 November 2015	
Name	**XXX**
Country/Region	**Country No 6**
Role e.g. National/local/policy/field officer	**National officer**

No.	Question	Yes	No	Don't Know
1	**Policy Planning**	**Yes**	**No**	**Don't Know**
1.1	Is your Member State water environment strategy/strategic water plan published and available to all?	x		
1.2	Is it clear and well understood by all that it impacts upon?	x		
1.3	Is it being implemented on time?		x	
1.4	Will it deliver WFD compliance?			x
1.5	If No what are the 3 most important constraints on delivering compliance? Use comment box below			
1.6	**Comment**			
2	**Objectives**	**Yes**	**No**	**Don't Know**
2.1	Are the Water Environment Objectives clearly defined for each waterbody?			x
2.2	Are chemical targets for the water environment in place?	x		
2.3	Are appropriate biological indicators in place to assess good status?	x		
2.4	Are water environment monitoring programmes able to assess compliance and failure?	x		
2.5	Does the monitoring information allow assessment of the statistical confidence of failure of the receiving water body?			x
2.6	Is there enough sampling to pick out environment objective failures with adequate confidence?			x
2.7	Does your member state publish a report on the 'state of the water environment' or similar?	x		
2.8	Do you have enough information to understand the 'reasons for failure' and target remedial measures appropriately?	x		
2.9	**Comment** I didn't understand question 2.5 and 2.6 in detail			

3	**Legislation**	**Yes**	**No**	**Don't Know**
3.1	Are water managers and assessment teams trained in water legislation?	x		
3.2	Are training programmes in place to increase capability in the understanding of the law?	x		
3.3	Are the laws used to effectively ensure optimal water environmental outcomes and the delivery of the WFD?	x		
3.4	Are the laws effective in regulating point source discharges?	x		
3.5	Are the laws effective in punishing polluters?			x
3.6	**Comment** add 3.5: laws exist, but fines are low. And – as part of our culture – often, punishment is not applied but consensual solutions are sought for			
4	**Permitting**	**Yes**	**No**	**Don't Know**
	Process			
4.1	Is the permitting process the same for all discharges to surface and ground waters?	x		
4.2	Does the form and complexity of the permit vary according to the size or risk of the discharge?	x		
4.3	Are there some discharges that do not require permits e.g. Small low risk discharges such as heat pumps?	x		
4.4	Do applicants pay for the determination of the permit?		x	
4.5	Do permit holders pay for the subsistence costs of maintaining the permit and associated regulatory activities?		x	
	Discharge Types			
4.6	Are all sewage treatment works and direct industrial discharges authorised by a permit?	x		
4.7	Are all intermittent discharges (e.g. combined sewer overflows) authorised by a permit?	x		
4.8	Are industrial discharges to sewer authorised by a permit?		x	
	Numeric Limits			
4.9	Do some (or all) permits contain numeric limits?	x		
4.10	Are the numerical limits in the permits defined as summary statistics allowing calculation of the statistical confidence of compliance or failure?		x	
4.11	If permit limits are defined as "maxima" are they treated as summary statistics that allow a statistically confident assessment of compliance?		x	

4.12	Are some (or all) permit limits calculated according to the pollutant assimilation capacity of the receiving water?	x		
4.13	Are some (or all) permit limits set at BAT or other type of fixed emission limit?	x		
4.14	Are/will any permit be based on 'bio-availability' in the receiving water?		x	
4.15	Do any permit limits vary according to the season of the year?	x		
4.16	Do any limits on individual permits vary according to the flow of the receiving watercourse?		x	
4.17	Are some permit limits set to prevent deterioration within WFD class boundaries or towards an EQS?	x		
4.18	Do some (or all) permits include specific conditions to protect bathing or shellfish waters?			x
	Management & Other Conditions			
4.19	Do some (or all) permits include conditions that control management of the discharge infrastructure?	x		
4.20	Do some (or all) permits require an environmental management system?	x		
4.21	Do some (or all) permits specify discharge quality monitoring requirements?	x		
4.22	Do some (or all) permits specify flow monitoring requirements?	x		
4.23	Do some (or all) permits specify what should be reported to the regulatory authority?	x		
4.24	Do some (or all) intermittent discharge permits include a maximum spill frequency?			x
4.25	Do some (or all) intermittent discharge permits include spill frequency monitoring?			
4.26	Do some (or all) permits apply to more than one discharge or facility such as all the discharges in a sewerage network?			x
4.27	**Please could you briefly explain your permitting process below? Please include in general terms which organisations issue permits and which are the permit holders.** Permit holder applies to administration. Depending on the size of the plant and the specific law that applies, the administration to apply to is on a local (district admin.), regional (governor of federal state) or national (ministry) level. Permit holders are those who discharge water to the environment or to public sewer systems, e.g. private persons, municipalities, industry, etc. –			
4.28	**Please could you highlight any current problems that you have with discharge permitting?** Complex legal situation Open or hidden political pressure on executives of permitting authorities Anticipatory obedience of executives of permitting authorities or their superiors			

4.29	**Please highlight any future permitting problems that you foresee?** Same as today + the current generation of executives involved in permitting has “grown up” with the increase in complicity of law. For the next generation it will be quite difficult to work themselves in. Also the pressure on the public sector to reduce costs – therefore less and less human resource’s available for permitting.			
4.30	**Comment**			
5	**Compliance Control**	**Yes**	**No**	**Don’t Know**
5.1	Does the regulator monitor compliance with the permit conditions?	x		
5.2	Are discharge monitoring points and programmes clear to permit holders and regulators?	x		
5.3	When considering if a discharge is non-compliant with numeric limits is there a statistical test that is used to confirm the confidence of failure?			x
5.4	Do you predominantly utilise self-monitoring by permit holders?	x		
5.5	Are discharge monitoring results regularly delivered to the regulators?		x	
5.6	Are quality assurance systems in place to increase confidence in discharge performance information?	x		
5.7	Are validated discharge monitoring results placed in the public domain?		x	
5.8	Is numeric compliance automated using computer assessment programmes?	x		
5.9	Is there an action plan for dealing with non-compliance, or with unexpected results?		x	
5.10	Are Environmental Management systems in place?	x		
5.11	Are real time effluent monitoring systems in use for some discharges?	x		
5.12	**Comment** I didn’t understand question 5.3 in detail			
6	**Compliance Promotion**	**Yes**	**No**	**Don’t Know**

6.1	Do permit holders find it easy to understand the permit conditions?			x
6.2	Do regulators have a programme to visit and inspect installations holders?	x		
6.3	Is active co-operation with regulators encouraged and does this work in practice	x		
6.4	Are permit holders expected to report operational failures that risk pollution incidents to the regulator, early?	x		
6.5	Are permit holders encouraged to report compliance failures early?	x		
6.6	Do regulators work with permit holders to optimise water quality?	x		
6.7	Do regulators publish compliance lists?		x	
6.8	Do consumers and stakeholders influence compliance of operators?	x		
6.9	Are all permits regularly reviewed?			x
6.10	**Comment** 6.7: they now publish an inspection report after inspections acc. to IE directive, apart from that there are no compliance lists			
7	**Enforcement**	**Yes**	**No**	**Don't Know**
7.1	Do enforcement officers find it easy to understand the permit conditions?	x		
7.2	Do regulators have an enforcement policy available to the public?			x
7.3	Does non-compliance with the permit lead to enforcement action?	x		
7.4	Does enforcement action ever include criminal prosecution?	x		
7.5	Does the primary regulator authorise prosecution?		x	
7.6	Does the primary regulator undertake prosecution?	x		
7.7	Are civil penalties or civil law used as an alternative to prosecution for non-compliance with permit?	x		
7.8	Roughly how many prosecutions are undertaken in your country for permit- related incidents – please use the comment box			x
7.9	**Comment** I didn't understand question 7.2 in detail – law states basic rules on how law enforcement works. If that is the question, then the answer is yes. 7.6: the primary regulator undertakes prosecution in some cases. In most cases, however, prosecution is undertaken on a regional level (district or federal state level).			
8	**Assessment and Feedback**	**Yes**	**No**	**Don't Know**
8.1	Do permit failures trigger a formal meeting with the permit holder?	x		

8.2	Are permit failures and prosecutions actively reported to the press?		x	
8.3	Are annual compliance statistics reported by the regulator?		x	
8.4	Does this report provide unbiased estimates of trends such as the number of discharges that fail a permit for a particular pollutant?			x
8.5	Are particular sites singled out for action by failures calculated to have 95% confidence		x	
8.6	Are discharge failures linked publicly to water quality objectives?			x
8.7	Is the public well informed of these discharge failures and their consequences?		x	
8.8	Are permits reviewed periodically on the basis of the risk to water bodies or the impact on them?	x		
8.9	Is government kept up-to-date on the waters failing to meet planned quality? Does this avoid biased trends by reporting separately for each pollutant?	x		
8.10	**Comment** 8.2 – permit failures and prosecutions are not generally reported to the press, but in some cases they are – especially in cases that the public is already aware of. 8.3 – such statistics are reported on a federal government level in some cases, but not by the regulator			
9	**Good or Best Practice**			
9.1	**Please could you highlight any areas of the IMPEL regulatory cycle that you consider to be particularly good or best practice in relation to achieving Water Framework Directive objectives?**			
10	**Workshop Planning**			
10.1	**We are planning a workshop as part of this project to find out more about different regulatory approaches to discharge permitting**			

	across member states and to help share best practice and identify areas of concern. Please can you highlight any specific aspects that you would like to include or explore at this workshop?

Please add a schematic diagram here to show the regulatory structure for environmental water quality in your country, or give a reference to where we may find this.

E.g. is there a single regulator, or is this split nationally or in combination with local authorities?

There is one single regulator (national level). Permitting and compliance control, however, is split nationally between the ministry for agriculture, forestry, environment and water; the governors of the water states and the district administration.

The focus of this questionnaire is on point source regulation, but the next stage may be on diffuse pollution issues. Please assist by answering the following.

10	Diffuse Pollution	Yes	No	Don't Know
10.1	Are these principles generally repeated for diffuse sources known to have an impact on the WFD?	x		
10.2	Are regular agricultural inspections made to reduce the impact of diffuse pollution?			x
10.3	Are urban diffuse pollution options implemented to reduce impacts?			x
10.4	Are the diffuse pollution control mechanisms appropriate?			x
10.5	Do you have any direct legislative controls on diffuse pollution?	x		
10.6	Are there legislative or voluntary action plans/ initiatives/ controls to minimise diffuse pollution?	x		
10.7	**Comment**			

When completed please return electronically to **SWETE Project Manager** **Barrie Howe at barrie.howe@environment-agency.gov.uk**				

Annex 2 – SWETE - Terms of Reference

TOR Reference No.: 2015/23	Author(s): Paul Hickey (EA, UK) C Chubb & M Griffiths (Foundation for Water Research (FWR), UK),
Version: 3.1	Date: 1/10/2015
TERMS OF REFERENCE FOR WORK UNDER THE AUSPICES OF IMPEL	

1. Work type and title

1.1 Identify which Expert Team this needs to go to for initial consideration	
Industry	☑
Waste and TFS	☐
Water and land	☑
Nature protection	☐
Cross-cutting – tools and approaches -	☑
1.2 Type of work you need funding for	
Exchange visits	☐
Peer reviews (e.g. IRI)	☐
Conference WORKSHOP	☑
Development of tools/guidance	☑
Comparison studies	☑
Assessing legislation (checklist)	☑
Other (please describe): Broadening the understanding and establishing a network within IMPEL Membership of EU & national water environmental policy and regulatory delivery cycles, to identify, develop and disseminate best practice. Implementing Water Framework Directive through regulatory best practice.	☑

1.3 Full name of work (enough to fully describe what the work area is)
Developing Best Practice in use of regulation to achieve Water Framework Directive objectives. (Initial dialogue, questionnaire and exchanges to identify likely best practice in point source discharge regulation in planning and delivering EU water quality outcomes. Subsequently establishing a communication and collaboration network under IMPEL providing a rolling programme across all IMPEL Members to harmonise and consolidate current point source discharge permiting and regulatory effort, identify new skills needed, and the skills required to deliver them. A later phase, to be authorised separately, building on the point source experience, broadening the programme to include best practice in diffuse pollution control, water resources regulation and flood risk management. Use of 'Regulation for Water Quality' book http://www.fwr.org/WQreg/index.htm as a stimulus for discussion and to help identify further develop and disseminate best practice regulation in the water sector from across the EU.)
1.4 Abbreviated name of work or project
Safeguarding the Water Environment Throughout Europe(SWETE)

2. Outline business case (why this piece of work?)

2.1 Name the legislative driver(s) where they exist (name the Directive, Regulation, etc.)	
Water Framework Directive Industrial Emissions Directive Urban Waste Water Treatment Directive Habitats and Birds Directives Marine Strategy Framework Directive Floods Directive	
2.2 Link to IMPEL MASP priority work areas	
1. Assist members to implement new legislation	☑
2. Build capacity in member organisations through the IMPEL Review Initiatives	☑
3. Work on 'problem areas' of implementation identified by IMPEL and the European Commission	☑
2.3 Why is this work needed? (background, motivations, aims, etc.)	
IMPEL has been asked by the European Commission to expand and apply its regulatory capability into the Water Environment Area and specifically implementation of WFD, having previously focussed on industrial emissions and associated processes under IPPC and IED Directives. Effective water resource management, (both quality and quantity) relies on good forward planning and delivery based on data, information and professional judgement. It is essential that economic growth in each Member State supports planned sustainable water resource protection and utilisation.	

Implementation of the WFD is dependent upon good regulatory practice to produce good River Basin Management Plans and to implement the associated Programmes of Measures in a timely and effective way. Major benefits could be achieved by identifying and sharing good regulatory practice available across the EU, using both conventional permits ('hard' regulation) and 'softer' non-regulatory measures separately or in combination.

The Water Framework Directive requires Member States to manage their water resources at catchment and water body level. This may require new thinking and ways of working in order to achieve the Directive's requirements.

YEAR 1

In Year 1 an initial questionnaire will be circulated within the IMPEL Water and Land Group, aimed at identifying point source regulatory capabilities, current practice, and common issues. The report from this questionnaire will be used in preparing for a first IMPEL Workshop to be held early in Year 2. There will be a second IMPEL Workshop later in Year 2 if authorised.

The initial IMPEL questionnaire is intended to stimulate debate within the Water and Land group of IMPEL Members:

- about the current state of play regarding point source discharge planning and regulation,
- identify where there are examples of good or best practice, (particularly approaches to monitoring and discharge permitting, statistically derived quality objectives and permit limits, use of statistics in assessing compliance, risk analysis, and measuring 'success')
- where there are clear gaps, and
- how to proceed to increase competence and implement training needs.

The output of the YEAR 1 Project Report will be to identify the different approaches to point source discharge control adopted for implementation of the WFD, and to provide the basis for a larger and broader programme of work within IMPEL to be developed in Year 2, and in subsequent years, – via Workshops and collaboration to promulgate a strong IMPEL network delivering the necessary good practice, skills and techniques needed to ensure an effective water regulatory cycle.

2.4 Desired outcome of the work (what do you want to achieve? What will be better / done differently as a result of this project?)

- YEAR 1
- IMPEL will have identified existing WQ point source discharge regulatory practice, elements that are good practice and weaknesses and gaps to fill.
- YEAR 2 subject to IMPEL funding & Authorisation
- IMPEL will establish a network and programme to develop and promulgate best practice, initially in water quality and ultimately water resource regulation providing common ownership of regulatory options and approaches to deliver WFD & IED
- IMPEL Members will share WQ regulation knowledge, efficiencies and linkages across the EU.
- Water Framework Directive Objectives will be more readily achieved by Member States.
- Member States' Environmental Water Quality Regulators will be closely involved in strategic and local Development Planning decisions, as well as monitoring and reporting environmental water quality and discharges.

2.5 Does this project link to any previous or current IMPEL projects? (state which projects and how they are related)

Linking the Water Framework and IPPC/IE Directives Phase 3 (2013)

3. Structure of the proposed activity

3.1 Describe the activities of the proposal (what are you going to do and how?)
YEAR 1 1. Questionnaire drafting, circulation and analysis of returns; drafting report; (IMPEL W&L Lead; Project Lead, Environment Agency UK) 2. Preparation for Workshop in Year 2
3.2 Describe the products of the proposal (what are you going to produce in terms of output / outcome?)
• Report on current point-source regulatory practice, including good practice and issues within IMPEL Water and Land group • Plan for first SWETE Workshop aimed at forming a strong network to address: ○ Preparing a WQ Regulatory good practice manual aligned to WFD implementation. ○ Identifying and prioritising water quality management institutional, regulatory and skills issues in each IMPEL MS. ○ A prioritised list for future development by IMPEL of water quality management skills & techniques for use by IMPEL Members. ○ Suggestions arising from the consideration of the issues raised during the project for any regulatory or institutional changes that IMPEL might promote.
3.3 Describe the milestones of this proposal (how will you know if you are on track to complete the work on time?)
Drafting questionnaire – End September 2015 Circulation of Questionnaire – Early October 2015 Completion by Water & Land Group Members - by End October 2015 Analysis & Draft Report – end November 2015 Final report & Workshop Plan for Year 2 – end December 2015
3.4 Risks (what are the potential risks for this project and what actions will be put in place to mitigate these?)
Inability or unavailability of relevant MS expertise to complete questionnaire – IMPEL W&L Lead &/or IMPEL Board to use contacts. Inadequate information/returns from MS. – If necessary Project Lead to escalate to IMPEL W&L Lead &/or IMPEL Board to use contacts to extract necessary information. Duplication of work being done under WFD CIS – facilitate contact with WFD CIS technical working group and the EC to ensure the work is complementary

4. Organisation of the work

4.1 Lead (who will lead the work: name, organisation and country) – this must be confirmed prior to submission of the TOR to the General Assembly)
Paul Hickey (Environment Agency, UK)
4.2 Project team (who will take part: name, organisation and country)

Paul Hickey – Project Executive (Environment Agency UK)
Barrie Howe – Project Manager (Environment Agency, UK)

4.3 Other IMPEL participants (name, organisation and country)

Slovenia - Bojan Počkar
Inšpektor svetnik
Italy

4.4. Other non-IMPEL participants (name, organisation and country)

Martin Griffiths (Foundation for Water Research, UK)
Chris Chubb (Foundation for Water Research, UK).

The Foundation for Water Research (FWR) is an independent, membership based charity dedicated to education and information exchange. It is based in Marlow, Buckinghamshire, UK.

It was founded in 1989 and its mission is to advance the education of the public in science, engineering and management of water through specialist forums, reviews of current knowledge, publishing and information support. http://www.euwfd.com/index.html

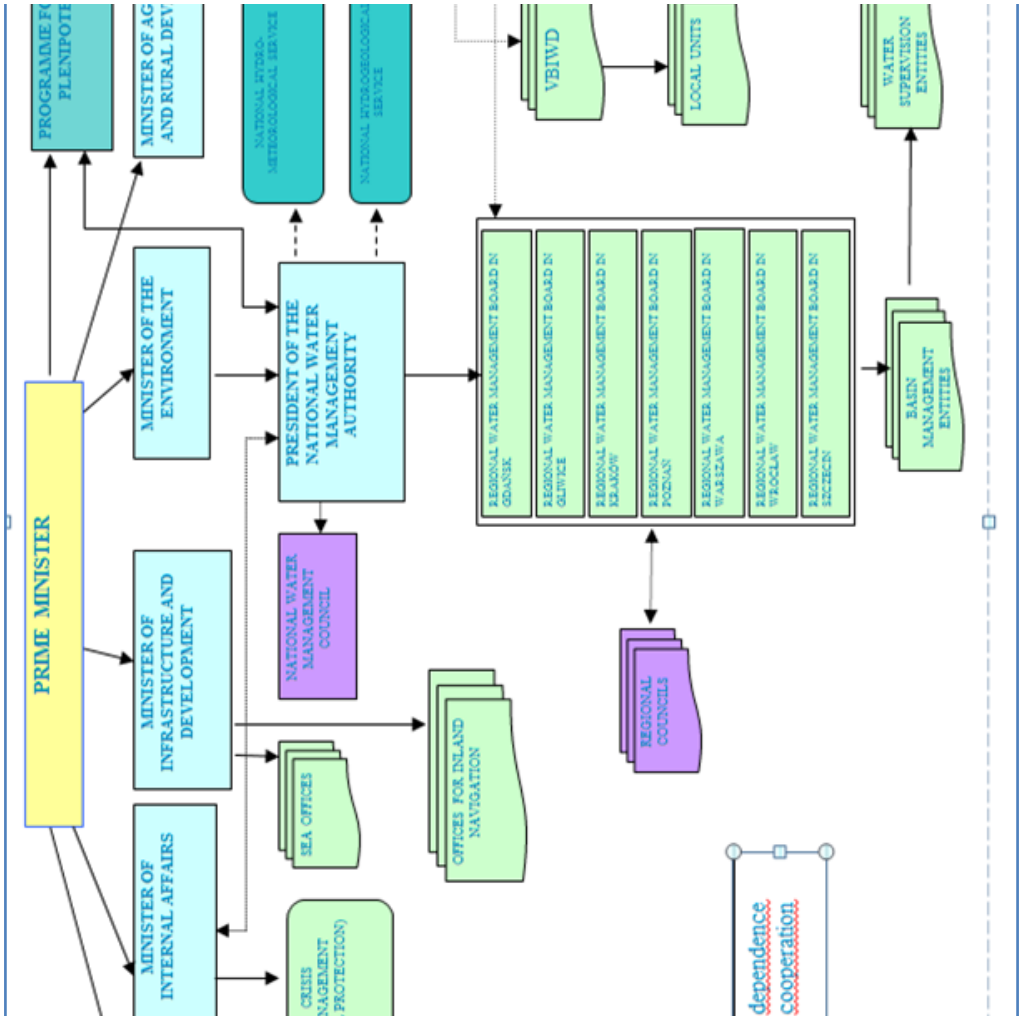
It hosts the The Water Framework Directive Information Centre (WFDIC)

WFDIC is an independent source of information about the Water Framework Directive (WFD).

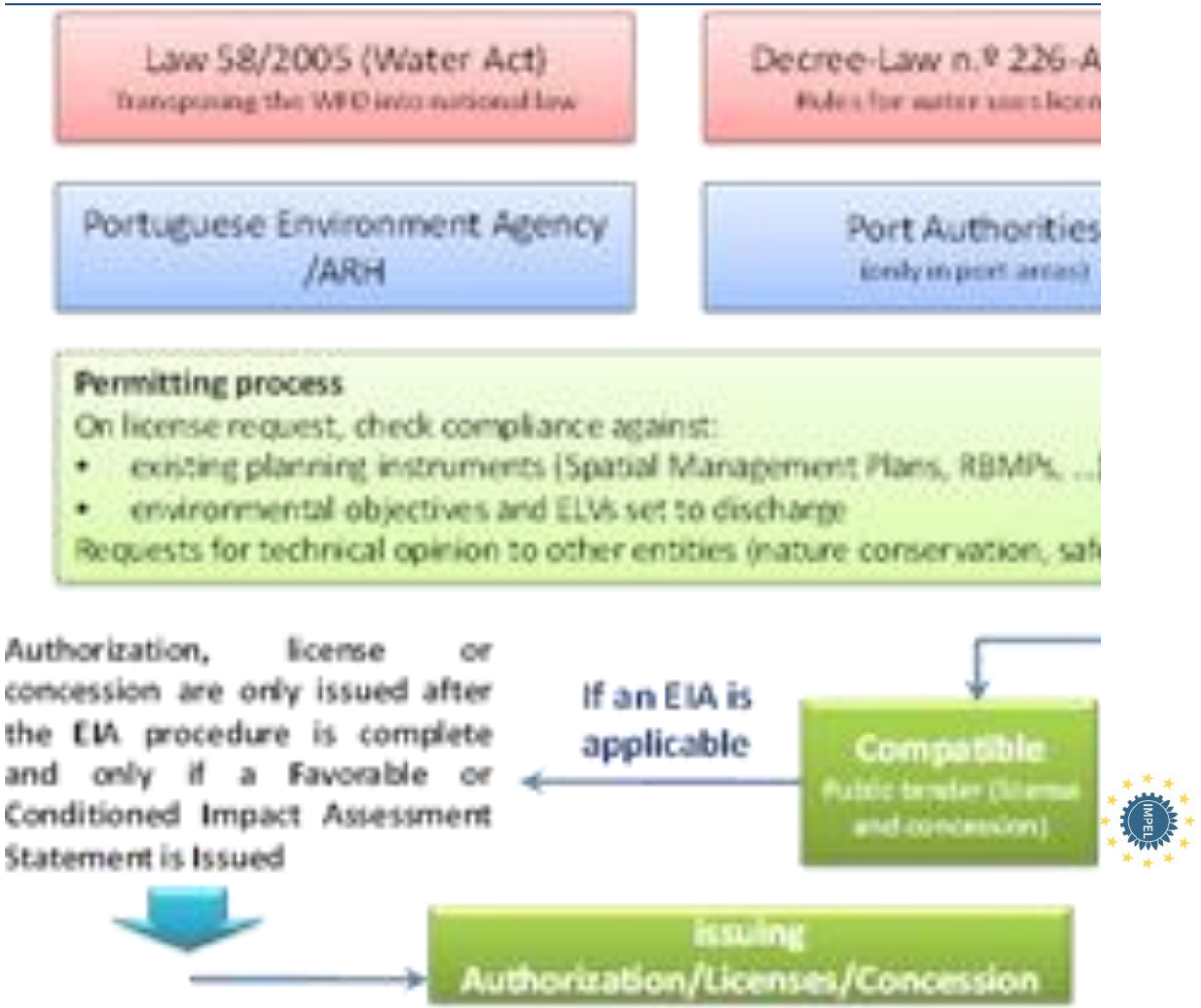
It helps people understand what the Directive means, how it is being implemented, who the key players are and how it is relevant to achieving and maintaining a clean and well-managed water environment, including lakes, reservoirs, rivers, wetlands, groundwater and estuaries and coastal waters - all typical components of a river basin.

Annex 3 – Regulatory organograms provided with the questionnaire

Poland – Regulatory Organogram



Portugal Regulatory Organogram


Law 58/2005 (Water Act)
Decree-Law n.º 226-A
Portuguese Environment Agency /ARH
Port Authorities
Permitting process
On license request, check compliance against:
existing planning instruments (Spatial Management Plans, RBMPs, ...)
environmental objectives and ELVs set to discharge
Requests for technical opinion to other entities (nature conservation, saf
Authorization, license or concession are only issued after the EIA procedure is complete and only if a Favorable or Conditioned Impact Assessment Statement is Issued
If an EIA is applicable
Compatible
Public tender (license and concession)
issuing Authorization/Licenses/Concession
it/licenses/concession must comply with the WFD objectives and r