



European Union Network for
the Implementation and Enforcement
of Environmental Law

IMPEL Project

LINKING THE WATER FRAMEWORK DIRECTIVE AND IED DIRECTIVE

Report of Phase 3 of the Project

November 2013

Including:

Guidance for water
managers

Guidance for IED
managers



Institute for
European
Environmental
Policy

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 6th 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 websites at:
<http://europa.eu.int/comm/environment/impel>
www.impeltfs.eu

<p>Title report: Linking the Water Framework Directive and the Industrial Emissions Directive, Phase 3.</p>	<p>Number report: 2013/XX</p>
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<p>Project participants: Representatives of 6 IMPEL member countries</p>	
<p>Executive summary:</p> <p>The Industrial Emissions Directive (IED) 2010/75/EU and Water Framework Directive (WFD) 2000/60/EC are two of the most wide-reaching items of EU environmental law. With the introduction of a basin wide and integrated water resource management concept into the EU through the WFD in 2000, cooperation and coordination in the various decisions making process within water and industry has become important. It is needed to shift from mainly monitoring hydrological data to data related to water use and policy processes and implementation. A challenge with seems to be still underdeveloped and which has also become a high priority under the UNDP Water Governance Programme and other initiatives. This has presented many challenges to the Member States and continues to do so. These challenges have included interpretation of the provisions of the Directives and the enormous practicalities of implementation. Installations regulated under IED may impact on the water environment, such as through direct or indirect discharges of pollutants, water abstraction, etc. IED requires installations to operate to conditions in permits compliant with Best Available Techniques (BAT). They are also required to respect environmental quality standards established in EU law, including those derived under EU water law. However, the relationship between the two sets of obligations is often far from simple. Therefore, ensuring integration of the implementation of the Directives is a challenge and this report seeks to analyse the different elements underlying this challenge. A desk based legal/policy analysis of these interactions was presented in an earlier report of Phase 1 of this project and Phase 2 sought views and best practice from IED regulators and water authorities in IMPEL member countries.</p> <p>This report presents the results of phase 3 of the project. The aim of this project was to take the results of phases 1 and 2 and develop guidance for water management authorities and for IED competent authorities on which attention to information should be put on and on the sharing of information in different phases of their water management cycles and regulatory cycles.</p> <p>The checklist for water management authorities is structured around the cycle of river basin planning:</p> <ul style="list-style-type: none"> • Understanding significant water pressures • Establishing and implementing measures • Monitoring 	

The guidance for IED competent authorities is structured around the regulatory cycle of the IED:

- Permitting
- Monitoring
- Inspection planning
- Inspection
- Permit review

The checklists contain a series of actions the relevant authorities may take to aid in their work, including information they could request from another authorities or information they could supply. It is hoped that the checklists are widely used by water and industrial sector managers as a mean to understand better information needs of each sector.

This report presents a summary of the methods undertaken to produce this guidance, together with the guidance itself (in the form of two checklists). It also includes further information from IMPEL members of practical examples of the interaction between water management authorities and for IED competent authorities.

The report recommends that relevant authorities for water management and IED implementation in the Member States examine the checklists, amend them where appropriate to national circumstances and use them in the different parts of decision making within river basin management and IED regulation. The project also recommends that IMPEL members promote the use of the checklists to its members and related public authorities.

Disclaimer:

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

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ACRONYMS

BAT	Best Available Techniques
EQSD	Environmental Quality Standards for Water Directive
ELV	Emission Limit Value
GES	Good ecological status
GWD	Groundwater Directive
IED	Industrial Emissions Directive
IPPC	Integrated Pollution Prevention and Control
POM	Programmes of Measures
RBMP	River Basin Management Plan
WFD	Water Framework Directive

1. INTRODUCTION

The Industrial Emissions Directive (IED) 2010/75/EU and Water Framework Directive (WFD) 2000/60/EC are two of the most wide-reaching items of EU environmental law. With the introduction of a basin wide and integrated water resource management concept into the EU through the WFD in 2000, cooperation and coordination in the various decisions making process within water and industry has become important. It is needed to shift from mainly monitoring hydrological data to data related to water use and policy processes and implementation. It is necessary to have a common understanding and a system in place to determine who gets water, when and how. This has presented many challenges to the Member States and continues to do so. These challenges have included interpretation of the provisions of the Directives and the enormous practicalities of implementation. Each of these Directives is also supported by other EU law, such as E-PRTR, the EQS Directive, GWD and others. Each of these has their own implementation challenges.

The directives strongly interact. IED requires the permitting process to consider environmental objectives (such as those derived from the WFD) and the WFD requires action to be taken on pressures on water bodies (which may include provisions for IED installations). The nature, timing, scope and limitations of these interactions (and more specific interactions with the 'supporting' Directives) are not always clear and they present a major challenge for competent authorities in the Member States to address.

IMPEL established a project in 2010 to examine the nature of the interaction between these directives. This was followed by a second phase of the project in 2011 which brought together IMPEL members to examine the practical problems they face in addressing the interaction between the directives in decision making as well as the good practice solutions that have been developed.

The results of phase 1 of the project can be found at: <http://impel.eu/wp-content/uploads/2012/02/WFD-IPPC-final-report-phase-1-GA-101118-6.pdf>.

The results of phase 2 of the project can be found at: <http://impel.eu/projects/linking-the-implementation-of-the-water-framework-directive-to-the-implementation-of-the-ippc-directive-phase-2/>.

This report presents the results of phase 3 of the project. The aim of this project was to take the results of phases 1 and 2 and develop guidance for water management authorities and for IED competent authorities on the sharing of information in different phases of their water management cycles and regulatory cycles.

This report presents a summary of the methods undertaken to produce this guidance, together with the guidance itself (in the form of two checklists). It also includes further information from IMPEL members of practical examples of the interaction between water management authorities and for IED competent authorities.

2. METHODOLOGY

The methodology of this short project involved three steps:

1. The development of two draft checklists on information exchange for water managers and IED competent authorities based on the issues identified in the analyses and conclusions of the reports from Phases 1 and 2 of the project.
2. A project workshop of IMPEL members to debate the draft checklists, refining their content. The workshop also included presentations of experience in selected Member States of examples of interaction between water managers and IED competent authorities, including a testing of the checklists. Copies of the presentations are provided in Annex III to this report. The workshop was held in the IMPEL offices in Brussels with eight participants. The list of participants is provided in Annex IV to this report.
3. Following the workshop, participants provided further comments on the checklists in writing, so that the checklists were revised for inclusion in this report.

4. RESULTS OF THE PROJECT

The results of Phase 3 of the project are provided in the Annexes to this report. These consist of the guidance to water management authorities, guidance to IED competent authorities and copies of the presentations from the project workshop.

The guidance for water management authorities covers those authorities responsible for implementing EU water directives. The guidance is in the form of a checklist, indicating particular actions that could be taken by water management authorities to improve their interaction with IED competent authorities in order to help them deliver implementation of EU water directives. The checklist is structured around the cycle of river basin planning:

- Understanding significant water pressures
- Establishing and implementing measures
- Monitoring

The guidance for IED competent authorities is a similar checklist, indicating particular actions that could be taken by those to improve their interaction with water management authorities and so help deliver implementation of the IED. The checklist is structured around the regulatory cycle of the IED:

- Permitting
- Monitoring
- Inspection planning
- Inspection
- Permit review

Within each of the respective headings of checklists there is a series of actions the relevant authorities may take to aid in their work, including information they could request from another authorities or information they could supply. Alongside each action is a brief explanation of why that action should be undertaken. The checklist also contains three columns headed 'once', 'periodic' and 'ongoing'. Here the relevant authorities can indicate or comment on whether an action is a one-off activity, whether it is periodic or intermittent or whether it is an ongoing continuous activity.

In both cases the checklists are written for generic water management and IED competent authorities. Where appropriate, these can be amended at national level by adding specific institutional names, dates, etc. Further, for practical use any actions that would not be relevant to an individual authority can be deleted (e.g. if the authority is only responsible for permitting).

The presentations at the workshop in Annex III present examples of the interaction between water management authorities and IED competent authorities in different contexts.

5. CONCLUSIONS AND RECOMMENDATIONS

The project has produced checklists for both water management authorities and IED competent authorities and it has proved possible to focus on the key practical issues for interaction between these authorities in a relatively concise format. It is hoped that the checklists are widely used by water and industrial sector managers as a means to understand better information needs of each sector and that they help to improve achieving water quality objectives in the framework of the WFD. The checklists put strong emphasis on: seeking a comprehensive approach, thinking outside of the 'water box' and outside of the "industry box", going beyond formal institutions throughout the entire assessment, decision-making and inspection processes.

The project makes a recommend to the relevant authorities for water management and IED implementation in the Member States to examine the checklists, to amend them where appropriate to national circumstances and to use them in the different parts of decision making within river basin management and IED regulation.

The project also recommends that IMPEL members promote the use of the checklists to its members and related public authorities.

ANNEX I: GUIDANCE FOR WATER MANAGERS

Interaction between EU water directives and the Industrial Emissions Directive

Guidance for Water Managers

Introduction

The control of pollution from industrial sources is important in meeting the objectives of water bodies and, specifically, the objectives set in EU water directives. Industrial pollution emissions are regulated by the Industrial Emissions Directive. Therefore, there are potential interactions between these directives in their respective implementation. These interactions have been explored by IMPEL in the following two studies:

- Linking the Water Framework Directive and IPPC Directive, Phase 1, 2010. <http://impel.eu/wp-content/uploads/2012/02/WFD-IPPC-final-report-phase-1-GA-101118-6.pdf>
- Linking the Water Framework Directive and IPPC Directive, Phase 2, 2011. <http://impel.eu/projects/linking-the-implementation-of-the-water-framework-directive-to-the-implementation-of-the-ippc-directive-phase-2/>

A figure from the first of these reports is provided on the following page. It summarises some of the key interactions between water and industrial pollution control directives. The purpose of this figure is to illustrate the complexity of interaction and, therefore, the need for collaboration between competent authorities responsible for the implementation of these directives.

A critical conclusion from the IMPEL work that competent authorities for both EU water directives and IED identified was that there needs to be effective and timely exchange of information between these competent authorities. This is essential to ensure they effectively perform their functions as competent authorities. However, as there is a large amount of data and other information generated in implementing these directives, it is important for competent authorities to share necessary information and to share it at the right time for decision making. This guidance aims to help in this process.

This guidance

This guidance is written for those authorities responsible for implementing EU water directives – here called ‘water managers’ (WMs). The guidance is in the form of a checklist, indicating particular actions that could be taken by WMs to improve their interaction with IED competent authorities (IED CAs) and so help deliver implementation of EU water directives.

The checklist is structured around the cycle of river basin planning:

- Understanding significant water pressures
- Establishing and implementing measures
- Monitoring

Within each of these headings, the checklist includes a series of actions WMs may take to aid in their work. This may include information they could request from IED competent authorities or information they could supply. Alongside each action is a brief explanation of why that action should be undertaken. The checklist also contains three columns headed ‘once’, ‘periodic’ and ‘ongoing’. Here WMs can indicate or comment on whether an action is a one-off activity, whether it is periodic or intermittent or whether it is an ongoing continuous activity.

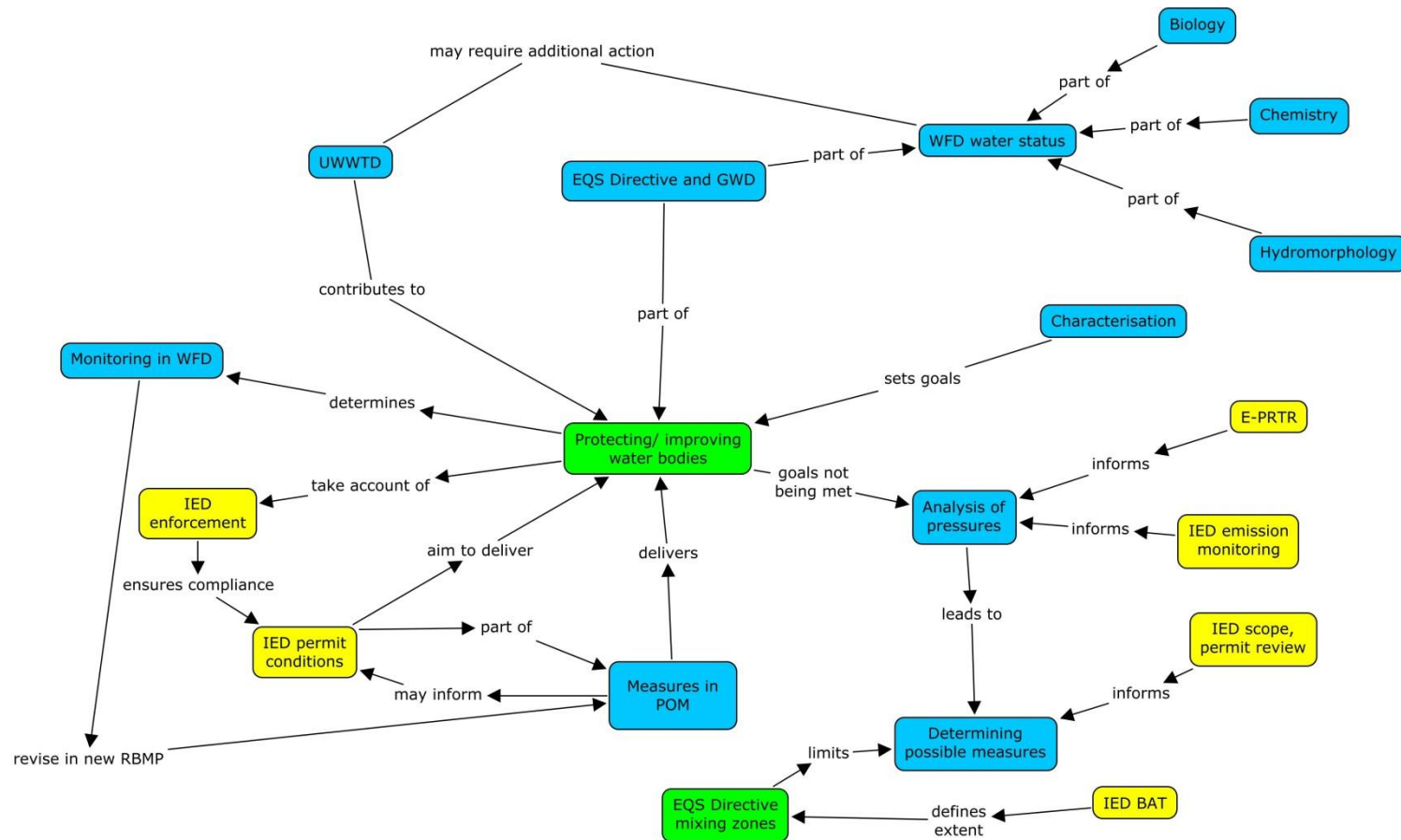
Note: this checklist is written for generic water management and IED competent authorities. Where appropriate, please amend by adding specific institutional names, dates, etc.

Note also that the checklist is written for a generalised interaction between competent authorities

responsible for these directives and, therefore, it is recommended to add or delete elements which are not appropriate for your situation.

Figure: an illustration of the complexity of interaction between EU law relating to industrial pollution control and water management

Note that boxes in blue are largely the responsibility of water management authorities, those in yellow the responsibility of IED competent authorities and those in green are a joint responsibility



Information action	Explanation	Action to be taken		
		Once	Periodic	Ongoing
Understanding significant water pressures				
WM to inform the IED CA of the range of potential activities arising from IED installations that might affect water status/EQS.	IED CA might focus on pollutant substances, but installation could emit heat, use water, etc., as well as diffuse emissions, all of which should be subject to BAT determination and informed by possible impacts on water objectives.			
WM to seek information from IED CA on location of installations, permit conditions, monitoring results, etc.	All such data are important in understanding current and possible future significant water pressures. In particular operators may collect useful data and undertake analysis which is particular useful for WMs. Where IPPC/IED permits have already been issued these provide useful information for WMs to help determine significant water pressures.			
WM to seek information from IED CA on the spatial distribution of IED installations in a catchment.	The spatial element of the impacts of IED installations is addressed in river basin planning and WMs have to bring together this spatial element to consider relative issues and pressures, including comparisons with non-IED pressures.			
WM to identify where multiple IED installations discharge to single water body and communicate with IED on how to address this.	Where there are multiple discharges these may combine to produce impacts on water directive objectives, but how this is to be address needs to be determined with IED CA, such as options for action compared to BAT for the different installations, etc., where it is necessary to go 'beyond BAT'.			
WM to provide information to the IED CA of issues concerning pollutant objectives set at river basin level.	While the EQSD (and mixing zones) are a focus of interaction with IED, MS may set objectives for other pollutants in water bodies and if these exist, these need to be communicated to the IED CA.			

Information action	Explanation	Action to be taken		
WM to inform the IED CA of the nature of GES and EQSs in relation to meeting water objectives (WFD, EQSD and GWD), including issues not related to EQSD.	IED permits need to ensure EU EQSs are not compromised by activities of IED installations, but requirements of water directives can be complex, so this requires interpretation – potentially at water body level.			
WM to determine mixing zones in co-operation with the IED CA.	Determining mixing zones under the EQSD requires expertise of WMs. This must be accurate as their calculation affects permit determination and if this is wrong it could result in future compliance issues.			
WM to inform the IED CA of the timetables in water directives required to meet objectives.	Installations may be given time to upgrade performance to meet BAT and this needs to reflect timetables for meeting water objectives.			
WM to discuss with IED CA on where operators should consider options to prevent or limit inputs of pollution to groundwater.	If IED installations (including through diffuse pollution through the soil at the IED site) contribute to inputs of pollutants addressed by the GWD these need to be addressed.			
Establishing and implementing measures				
WM to obtain information on IED installation performance from IED CA where relevant to considering potential measures.	In establishing PoMs it is important to understand future performance of IED installations to determine if future application of BAT will address pressures identified.			
WM to discuss possible additional measures for IED installations with IED CA.	If the WMs determine that additional action should be taken by an IED installation as part of a PoM, this should be discussed with the IED CA (e.g. whether the measure is appropriate as an IED permit condition, whether it goes ‘beyond BAT’, etc.).			
WM to discuss with IED CA, where appropriate, use of disproportionate cost arguments where affecting IED installations.	WFD requires that use of disproportionate cost under WFD cannot be used to reduce any obligations arising from IED.			
WM to ask IED CA for information on	Inspection under IED requires consideration of the			

Information action	Explanation	Action to be taken		
inspection regime.	environmental impact of the installation. WMs can provide information to support this as well as ensure concerns of installation performance are addressed by the inspection authority. However, it is important for the IED CA to ensure WMs are aware of inspection activities so that this interaction can happen.			
Monitoring				
WM to seek information from IED CA information on monitoring being undertaken (now or in future) by IED installations.	Such information may be useful in contributing to monitoring programmes within RBMPs for WFD, EQSD, GWD.			
WM to supply the IED CA with appropriate monitoring data to inform permitting, inspection and permit review.	Water monitoring data may provide information on the release of pollutants, use of water, etc., by IED installations and of the impacts of those installations which may be important in permitting and inspection. Note that WM may need to work with IED CA to help understand the type of data which would be useful.			
WM to work with IED CA to determine whether monitoring should specifically analyse the relative importance (impacts) of several IED installations discharging to the same water body.	Where the relative importance of discharges from several IED installations to the same water body is not fully understood, monitoring programmes under the WFD may be necessary to determine this.			

ANNEX II: GUIDANCE FOR COMPETENT AUTHORITIES FOR THE INDUSTRIAL EMISSIONS DIRECTIVE

Interaction between EU water directives and the Industrial Emissions Directive

Guidance for Competent Authorities for the Industrial Emissions Directive (IED)

Introduction

The control of pollution from industrial sources is important in meeting the objectives of water bodies and, specifically, the objectives set in EU water directives. Industrial pollution emissions are regulated by the Industrial Emissions Directive. Therefore, there are potential interactions between these directives in their respective implementation. These interactions have been explored by IMPEL in the following two studies:

- Linking the Water Framework Directive and IPPC Directive, Phase 1, 2010. <http://impel.eu/wp-content/uploads/2012/02/WFD-IPPC-final-report-phase-1-GA-101118-6.pdf>
- Linking the Water Framework Directive and IPPC Directive, Phase 2, 2011. <http://impel.eu/projects/linking-the-implementation-of-the-water-framework-directive-to-the-implementation-of-the-ippc-directive-phase-2/>

A figure from the first of these reports is provided on the following page. It summarises some of the key interactions between water and industrial pollution control directives. The purpose of this figure is to illustrate the complexity of interaction and, therefore, the need for collaboration between competent authorities responsible for the implementation of these directives.

A critical conclusion from the IMPEL work that competent authorities for both EU water directives and IED identified was that there needs to be effective and timely exchange of information between these competent authorities. This is essential to ensure they effectively perform their functions as competent authorities. However, as there is a large amount of data and other information generated in implementing these directives, it is important for competent authorities to share necessary information and to share it at the right time for decision making. This guidance aims to help in this process.

This guidance

This guidance is written for those authorities responsible for implementing the IED – here called ‘IED CAs’. Note that in several Member States permitting and inspection functions are undertaken by separate authorities and there are many examples of distribution of competence across different levels of governance. Here we do not distinguish these divisions, but refer simply to IED CAs.

The guidance is in the form of a checklist, indicating particular actions that could be taken by IED CAs to improve their interaction with water managers (WMs) and so help deliver implementation of the IED. The checklist is structured around the regulatory cycle of the IED:

- Permitting
- Monitoring
- Inspection planning
- Inspection
- Permit review

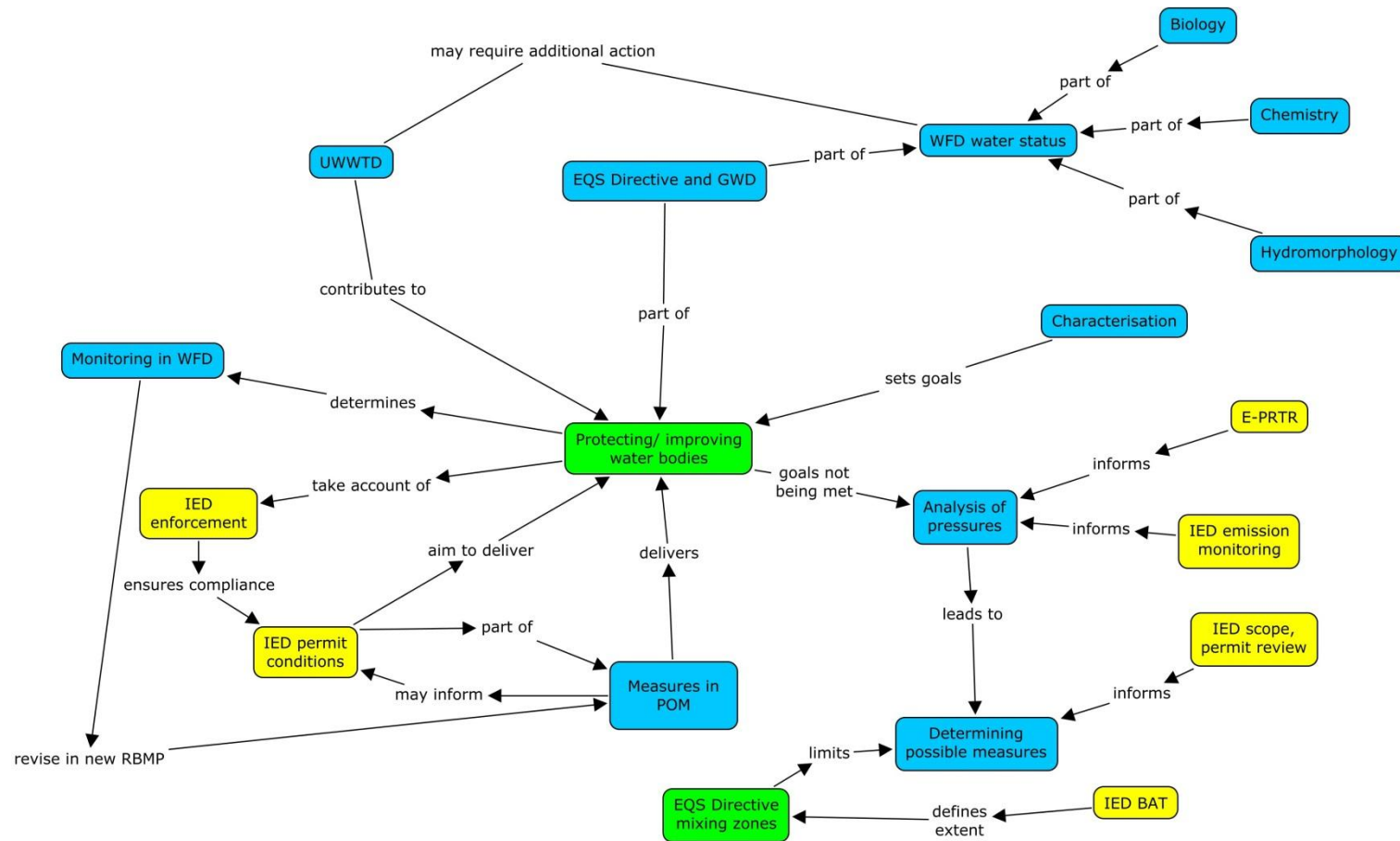
Within each of these headings, the checklist includes a series of actions IED CAs may take to aid in their work. This may include information they could request from WMs or information they could supply. Alongside each action is a brief explanation of why that action should be undertaken. The checklist also contains three columns headed ‘once’, ‘periodic’ and ‘ongoing’. Here IED CAs can indicate or comment on whether an action is a one-off activity, whether it is periodic or intermittent or whether it is an ongoing continuous activity.

Note: this checklist is written for generic water management and IED competent authorities. Where appropriate, please amend by adding specific institutional names, dates, etc.

Note also that the checklist is written for a generalised interaction between competent authorities responsible for these directives and, therefore, it is recommended to add or delete elements which are not appropriate for your situation.

Figure: an illustration of the complexity of interaction between EU law relating to industrial pollution control and water management

Note that boxes in blue are largely the responsibility of water management authorities, those in yellow the responsibility of IED competent authorities and those in green are a joint responsibility



Information action	Explanation	Action to be taken		
		Once	Periodic	Ongoing
Permitting				
IED CA to discuss scope of potential impact of installation to determine what should be included in permit application/determination.	IED allows some flexibility in the ‘boundary’ of an installation, so discussion with WM can ensure relevant directly associated activities impact on water can be included in BAT determination and setting permit obligations.			
IED CA to discuss with WMs possible generic or specific issues relating to operation or monitoring that should be included in guidance to operators applying for permits.	Water management issues should be recognised at an early stage in permit applications, rather than introduced late on as detailed applications become discussed with WMs.			
IED CA to inform WMs of the timetables for permit determination and how their input fits into those timetables.	This allows for WMs to supply relevant information/raise issues, etc. on time and allow for the permit determination process to proceed smoothly, reducing administrative burdens and reducing unnecessary costs to businesses that could arise from delays in the permitting process.			
IED CA to discuss with WMs the obligations of water directives and where these could be impacted by an IED installation and so address these in permit determinations.	Water directive obligations are complex and may need interpretation by WMs.			
IED CA to seek expertise of WMs in understanding pollutant dispersion/behaviour in water where this may affect permit determination.	Where impacts of pollutants (substances and heat) depend on how they spread, etc., in water bodies, WMs are likely to have the expertise to understand, model and interpret this.			
IED CA to discuss with WM situations where several IED installations discharge to a single water body.	Where there are multiple discharges these may combine to produce impacts on water directive objectives, but this needs to be determined with WMs. WMs need to understand potential timetabling issues with the different			

Information action	Explanation	Action to be taken		
	installations, options for action compared to BAT for the different installations, etc., and where it is necessary to go 'beyond BAT'.			
IED CA to inform WMs of the results of permit determinations.	WMs need to understand current and future pressures on water bodies and this includes limits to discharges, etc., from installations.			
Monitoring				
IED CA to seek views of WMs on appropriate monitoring conditions to set in permit conditions.	Where appropriate monitoring by operators may contribute to surveillance or investigative monitoring under the WFD or enhance development of inventories of emissions under EQSD, but this needs to be communicated to IED CA.			
IED CA to seek relevant information from WFD/EQSD monitoring from WMs.	IED CAs tend to rely on operator self-monitoring, but WFD/EQSD monitoring could identify unexpected pollutant concentrations, etc., to trigger investigation by IED CA.			
IED CA to provide WMs with data arising from operator monitoring under IED and inform WMs of its format, frequency and availability.	Monitoring data arising under IED may provide useful information for WMs and they should be fully informed as to its nature and availability.			
Inspection planning				
In developing inspection plans, IED CAs to liaise with WMs on key risks to water bodies that should be taken account of in risk-based planning.	Inspection plans prioritise inspection activity and may take a risk-based approach. A key aspect of risk is the sensitivity of the receiving environment and WMs can interpret the sensitivities of water bodies and receptors in them and risks from different types and quantities of pollutants on those receptors.			
Inspection				
IED CA to seek information from WMs on	Water monitoring will identify if there are potential issues			

Information action	Explanation	Action to be taken		
pollutant, etc., issues for water bodies relevant to installation to help assess permit compliance and environmental impacts of installation.	with an installation, either from non-compliance with a permit not necessarily identified by operator self-monitoring or impacts arising despite compliance with a permit (both required to be considered under IED).			
IED CA to inform WMs of the results of inspections, including any measures to be taken.	Such information may be important in understanding that issues affecting water bodies are being addressed.			
Permit review				
IED CA to seek information from WMs on whether they are issues concerning compliance with water directives potentially arising from the activity of an installation.	As with a permit determination, understanding the impacts on water directive objectives is important. Note that objectives may change as directives are amended, so issues relating to an installation may change. Furthermore, results of WFD monitoring may change the understanding of the objectives and/or the relationship between pressures and objectives.			
IED CA to seek views from WMs on whether monitoring obligations in permits should be changed.	As with determination of monitoring obligations in the initial permit, views of WMs may have changed on the appropriateness of specific monitoring activities by IED operators.			

ANNEX III: PRESENTATIONS AT THE PROJECT WORKSHOP

The presentations include in this Annex are:

- A practical case of the use of the guidance in Portugal for a landfill site with a wastewater permit discharge.
- Presentation on EDM (Electronic Data Management) (Electronic tool used in Austria to enhance partnership and cooperation between authorities, stakeholders and public through data collection, sharing and assessment)
- Presentation on WFD and IED managers cooperation and coordination in the Eastern River Basin District in Ireland
- Presentation on Risk based Inspection Planning in Poland
- Case Study from Lombardy Region

PRACTICAL CASE OF USE OF THE GUIDANCE IN PORTUGAL
Urban Waste Landfill with an Environmental Permit (delivered by IED CA) that includes a Wastewater Permit Discharge (delivered by WM)

Environmental Permit:

- Describes installations and sets conditions for operation to prevent pollution, including the use of BAT
- Sets monitoring programmes for: groundwater and surface water (only physical and chemical parameters)
- Sets report conditions
 - Annual environmental report with a specific format

Wastewater Permit Discharge:

- Describes wastewater treatment plant characteristics (type and treatment level, capacity, type of discharge)
- Sets discharge conditions
 - ELVs (with annual compliance rules)
 - Maximum daily loads (applied to priority substances and specific pollutants)
- Defines a mixing zone
- Sets monitoring programmes for:
 - Wastewaters
 - Groundwater (physical and chemical parameters)
 - Surface waters (physical, chemical and ecological parameters)

Discharge: In a small stream which will link to another one (downstream) designated to support fish life and with good ecological status.

Discharge influence area: 2000 m downstream.

Distance to stream designated to support fish life (and with good ecological status): \pm 6500 m.

Water Managers checklist	Wastewater Permit Discharge (WWPD)
Understanding significant water pressures	
WM to inform the IED CA of the range of potential activities arising from IED installations that might affect water status/EQS.	ELVs are addressed and defined to ensure the receiving water body quality, i.e., the compliance of EQS for critical parameters. For PS/PHS and specific pollutants are defined ELVs with annual compliance rules and maximum daily loads to prevent acute effects.
WM to seek information from IED CA on location of installations, permit conditions, monitoring results, etc.	Yes through the Environmental Permit (EP) application.
WM to seek information from IED CA on the spatial distribution of IED installations in a catchment.	Yes through the RBMPs development.
WM to identify where multiple IED installations discharge to single water body and communicate with IED on how to address this.	Yes. In the current example, diffuse sources were identified and assessed with the IED CA to detect potential inputs of nitrogen (ammonia and nitrates) to the receiving water body.
WM to provide information to the IED CA of issues concerning pollutant objectives set at river basin level.	The WWPD is attached to the EP to ensure IED CA and operators are aware of critical pollutants related with the specific IED installation and the receiving waters. The pollutant objectives set at river basin level are defined in RBMPs.
WM to inform the IED CA of the nature of GES and EQSs in relation to meeting water objectives (WFD, EQSD and GWD), including issues not related to EQSD.	The WWPD includes several monitoring programmes to evaluate the potential impacts arising from the IED installation. Monitoring plans include: <ul style="list-style-type: none"> • Wastewater self-monitoring; • Surface water: <u>Chemical parameters</u>: 1 point upstream, 2 points downstream: 1 after mixing zone limit and a 2nd before the stream's connection with another watercourse (designated to support fish life); <u>Ecological parameters</u>: 1 point before the stream's connection with another stream (designated to support fish life); • Groundwater: 4 points in the surrounding area of IED installation.
WM to determine mixing zones in co-operation with the IED CA.	No. The mixing zone was only determined by WM, and fixed on the WWPD
WM to inform the IED CA of the timetables in water directives required to meet objectives.	This is indirectly achieved. By the definition of appropriate ELVs and by the revision of WWPD conditions whenever

	appropriate measures are needed to not jeopardize water directives objectives.
WM to discuss with IED CA on where operators should consider options to prevent or limit inputs of pollution to groundwater.	WM and IED CA discuss about operation issues to prevent diffuse pollution sources
Water Managers checklist	Wastewater Permit Discharge (WWPD)
Establishing and implementing measures	
WM to obtain information on IED installation performance from IED CA where relevant to considering potential measures.	The operator presents to IED CA and to WM an annual environmental performance report. Then, more coordination should be addressed to improve the communication between both authorities regarding the report assessment.
WM to discuss possible additional measures for IED installations with IED CA.	Yes. The leachates treatment plant needed to be improved to increase the nitrogen removal level. The several options were discussed with IED CA, including measures for the stream's riparian gallery located in the discharge surrounding area.
WM to discuss with IED CA, where appropriate, use of disproportionate cost arguments where affecting IED installations.	The definition of the best option to be applied for the augment of nitrogen removal, the combination of reverse osmosis with low technology systems were considered instead of more sophisticated systems due the respective high cost. To ensure this treatment level is enough, monitoring plans (later defined on the WWPD) were improved.
WM to ask IED CA for information on inspection regime.	Usually no.
Monitoring	
WM to seek information from IED CA information on monitoring being undertaken (now or in future) by IED installations.	Usually no, since all the monitoring results are delivered to WM by the operator.
WM to supply the IED CA with appropriate monitoring data to inform permitting, inspection and permit review.	WM usually supplies information about the monitoring assessment.
WM to work with IED CA to determine whether monitoring should specifically analyse the relative importance (impacts) of several IED installations discharging to the same water body.	Not applied to this IED installation.

IED competent authorities checklist	Environmental Permit (EP)
Permitting	
IED CA to discuss scope of potential impact of installation to determine what should be included in permit application/determination.	When the operator applies for the EP, IED CA ask WM to deliver opinion on potential impacts of installations to water resources
IED CA to discuss with WMs possible generic or specific issues relating to operation or monitoring that should be included in guidance to operators applying for permits.	Both EP and WWPD define monitoring programmes for water resources (but not linked). IED CA discuss some operation issues with WM, namely to prevent diffuse pollution sources (e.g. from runoff)
IED CA to inform WMs of the timetables for permit determination.	The permits define different timetables: <ul style="list-style-type: none"> • Different expiration dates • Different timetables to present reports to WM and IED CA
IED CA to discuss with WMs the obligations of water directives and where these could be impacted by an IED installation and so address these in permit determinations.	The IED CA ask WM to deliver a separate WWPD to ensure obligations of water directives
IED CA to seek expertise of WMs in understanding pollutant dispersion/behaviour in water where this may affect permit determination.	IED CA usually ask WM about critical pollutants and agree with ELV definition
IED CA to discuss with WM situations where several IED installations discharge to a single water body.	Not applied to this IED installation.
IED CA to inform WMs of the results of permit determinations.	IED CA sends a copy to WM from the final document of the EP.
Monitoring	
IED CA to seek views of WMs on appropriate monitoring conditions to set in permit conditions.	Both EP and WWPD define monitoring programmes for water resources (but not linked).
IED CA to seek relevant information from WFD/EQSD monitoring from WMs.	Usually no.
IED CA to provide WMs with data arising from operator monitoring under IED and inform WMs of its format, frequency and availability.	Yes. Previously to the EP emission, IED CA delivers a copy to WM where all the requirements are described.
Inspection planning	
In developing inspection plans, IED CAs to liaise with WMs on key risks to water bodies that should be taken account of in risk-based planning.	Usually no.
Inspection	
IED CA to seek information from WMs on pollutant, etc., issues for water bodies	WM usually supplies information about: <ul style="list-style-type: none"> • Monitoring assessment to help IED CA on

relevant to installation to help assess permit compliance and environmental impacts of installation.	permit compliance evaluation; • Abnormal situations to assess potential environmental impacts. IED CA seeks information from WM when additional facts are needed.
--	---

IED competent authorities checklist	Environmental Permit (EP)
IED CA to inform WMs of the results of inspections, including any measures to be taken.	Usually no.
Permit review	
IED CA to seek information from WMs on whether they are issues concerning compliance with water directives potentially arising from the activity of an installation.	WM usually supplies information about the monitoring assessment and its relevance.
IED CA to seek views from WMs on whether monitoring obligations in permits should be changed.	Usually yes.

What needs improvement?

Communication between IED CA and WM to a better coordination on:

- a. Timetables for permit obligations
- b. Report assessment between:
 - i. IED CA → WM
 - ii. WM → IED CA
- c. Inspection planning and outputs

Austria: EDM (Electronic Data Management)

(Electronic tool used in Austria to enhance partnership and cooperation between authorities, stakeholders and public through data collection, sharing and assessment)

Austrian Example – EDM

IMPEL Project „Linkage WFD and IED“
Workshop
Brussels, 24.– 25. October 2013

Christoph Planitzer
Lower Austria

Electronic Data Management

- ▶ Integrated EGovernment–Application in the Environmental Field
- ▶ 23 applications online
- ▶ 45.000 registered companies
- ▶ 17.000 locations
- ▶ 20.000 installations
- ▶ 800.000 messages per year
- ▶ 20 millions accesses per year
- ▶ Contact: Franz Mochty, Federal Ministry of Agriculture, Forestry, Environment and Water Management Austria

Content

- ▶ EDM Objectives
- ▶ Paper versus electronic Data
- ▶ Legislation covered by EDM (eg IED and WFD)
- ▶ Information Flow in EDM
- ▶ Data exchange between water and IED sector under EDM
 - Permit conditions
 - Inspection Planning
 - Access to Inspection reports
 - Closure Measure
 - GW Monitoring networks
 - Industrial Emission do surface water

What are the objectives of EDM?

- ▶ **Reduction of the administrative** burden on authorities and companies
- ▶ **Integrated comprehensive system for the entire environmental field** and thereby **optimised utilisation of synergies** between different domains
- ▶ **Integration with other eGovernment Register** (eg Austrian company register)
- ▶ Utilisation of international **EDI** (Electronic Data Interchange) **standards** well-established in the economy for messages and **unique international identification system** (of companies, locations and installations)
- ▶ **Single sign-on** for all users and all applications
- ▶ **Prevention of data redundancy**, in particular by a **centralised master data management** across applications (eRAS)
- ▶ **To the extent possible** use of already **available data** (eg from Procurement and accounting)

Present Situation

- > **Companies are confronted with series of report-obligations**
- > **Basic data on enterprises, locations and installations are required for:**
 - **for public administration**
 - ✓ Applications for permits, granting of permits
 - ✓ Record-keeping and reporting obligations
 - **internal business purposes**
 - ✓ In-company organisation, logistics
 - ✓ Procurement and accounting
- > **At present, logics of reporting, structures and level of detail vary for the different fields of application**
- > **↻ Companies and authorities have to maintain and – in part – report the same data in different formats for different sectors**

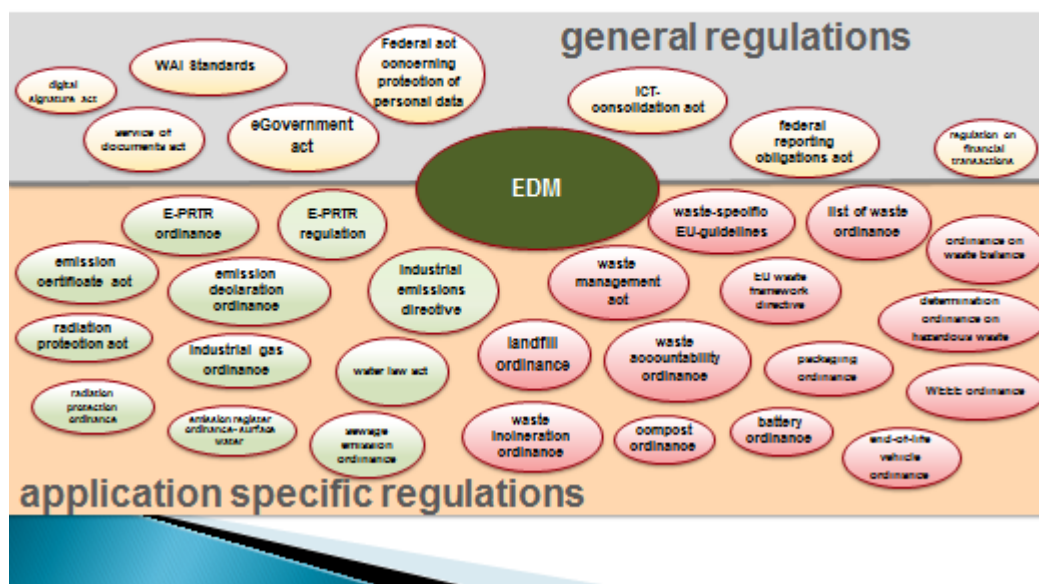
EDM – Solutions

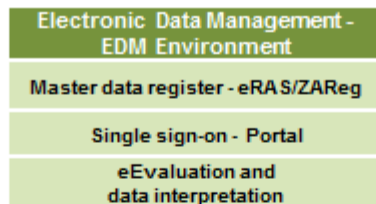
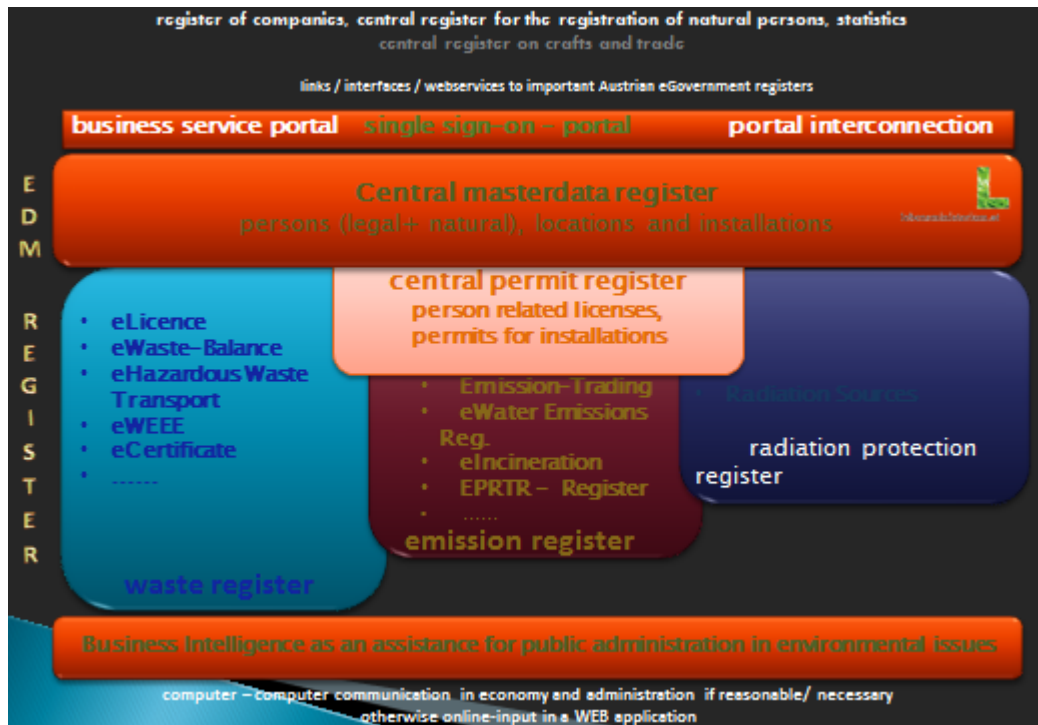
- > **ONE eGovernment application for many obligations**
- > **Fully integrated into the comprehensive Austrian eGovernment system**
- > **A harmonized data model for all procedures involved**
- > **EDM data structures and exchange procedures also served as a basis for the “European Data Interchange for Waste Notification Systems (EUDIN)”:**
 - Data exchange concerning transfrontier waste shipments
 - Project partners: Belgium, Luxembourg, Nordic-TFS, Austria
 - Core components and message structures standardized by UN/CEFACT

What is EDM-Environment?

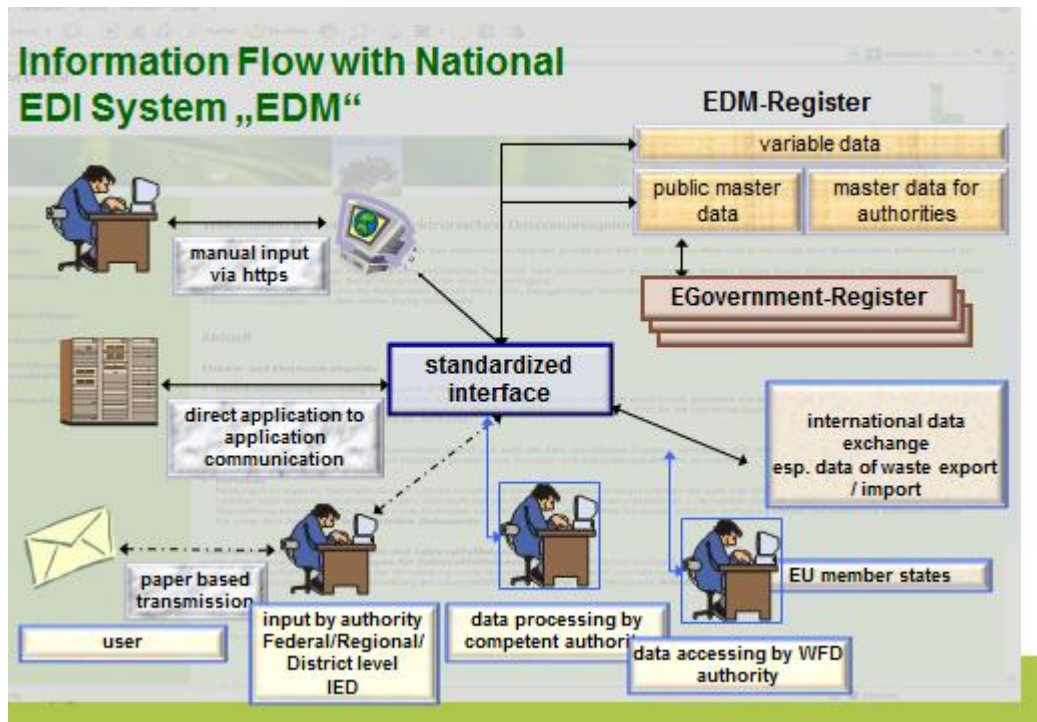
- **An integrated eGovernment application:**
 - Replaces conventional paper-based records and reports (including applications submitted to the authorities) through **efficient electronic data management** in line with **international standards** (e.g. with regard to barrier-free access for disabled people) in the **environmental field**
- **Contribution to i2010 and Digital Agenda for Europe (a Europe 2020 Initiative)**
 - *i2010*: An EU policy framework promoting the positive effects of information and communication technologies (ICTs) to the economy, society and personal quality of life
 - The *Digital Agenda for Europe* (DAE) aims to reboot Europe's economy and help Europe's citizens and businesses to get the most out of digital technologies

EDM – legal background





EDM Waste Management		Environment	Key Cross-cutting Issues	
eWaste Mass Balance Sheets	eEnd-of-Life Vehicles	Emission Certificate Act	eGov. Integration	Usability
eShipment	eWEEE	eIndustrial Emissions	Data Protection	EDM - Shared User Interface
EUDIN	ePackaging	European Pollutant Release and Transfer Register	Data security	Communication/ Notification
eIncineration - Waste	eBatteries	EMREG/ Surface Water Emission	Role-based Access Control	Creation / Commenting of Documents
eCompost	eRefuse derived Fuel	Radiation Protection	Identification/ Authentication	Data Upload/ Export
eConsignment Note	eCertificate	Cooling Agents	Data Requirements/ Harmonisation	Intermediate Data Storage
ePermit	eLandfill	eIncineration	Overall Architecture	Template Project



EDM – Data exchange on permits conditions

- Permits
 - Clear permit conditions
 - Consolidation of permits
 - Authorities have to spend high effort to get an overview about the currently valid content of all permits
- IT support helps to reduce this effort for authorities and operators
- **Inventory** of permits accessible by **water and IED authorities**
- New permits – published and handled within EDM –
 - a summary
 - actual status of the permit conditions and
 - conclusions
- **Obligatory use of EDM** for permits in the waste management sector (**integrated permit**)
- Deliberately use of EDM in other sectors

EDM - Support of Environmental Inspections of Industrial Installations

Art. 23 IED – INSPECTION – Report

- > Available Data in EDM - **permit conditions** and conclusions including **emission limit values** to air and **water** and **waste treatment operations**
- > Information on the installations, location, emission data (EQS directive) and information on produced and treated waste are provided by EDM as a basis for the environmental inspection
- > EDM supports the writing of **environmental inspection reports** and provides methods for a safe and secure exchange of documents between experts, companies and authorities
- > A summary of the **inspection reports** describing the relevant findings on whether an installation is operated in compliance with legal conditions is published via EDM

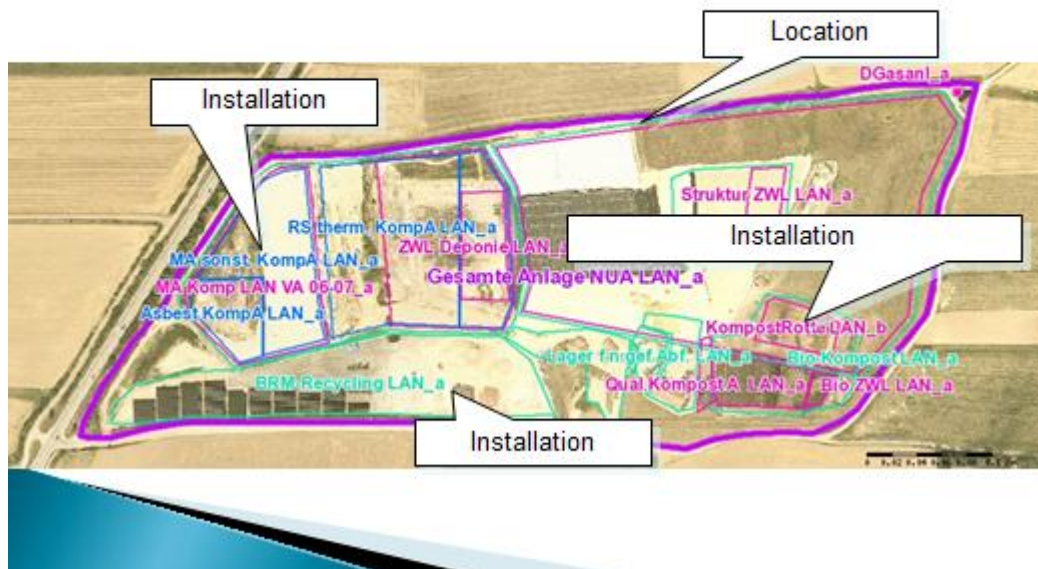


EDM – information for RBMP

- ▶ Inventory of installations (IED, waste plants)
- ▶ Monitoring stations from IED installations and waste plants
- ▶ Inventory of emissions into water
- ▶ PRTR inventory
- ▶ BREF information

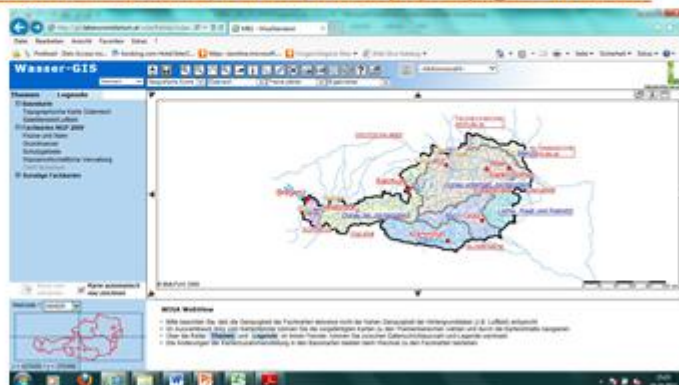


Visualisation of locations and installations



WISA

- ▶ Water Information System Austria
- ▶ http://gis.lebensministerium.at/wisa/frames/index.php?&qui_id=WisaStandard



Presentation on WFD and IED managers cooperation and coordination in the Eastern River Basin District in Ireland



Water Framework Directive and Industrial Emissions Directive

Ray Earle

Eastern River Basin District Coordinator,
Dublin City Council



Industrial Emission Directive

Purpose

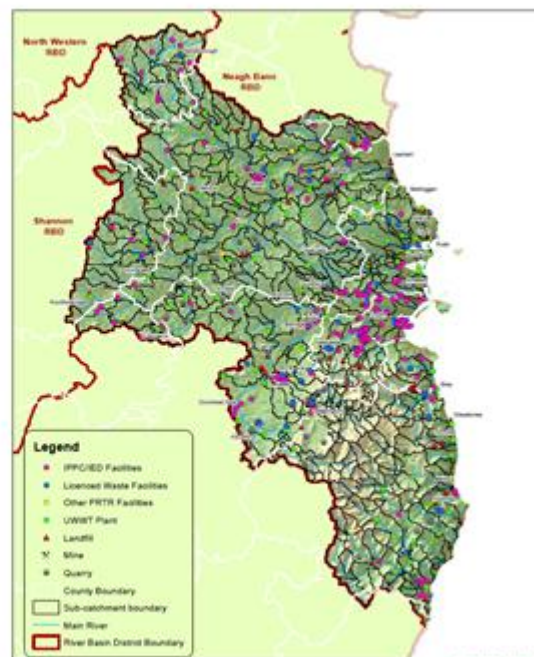
- Collation and strengthening of existing provisions (seven different previous Directives)
- Reducing Industrial Emissions throughout the EU



Industrial Emission Directive

- Majority of the IED Directive taken from the IPPC Directive.
- Recasting of existing directives
 - Integrated Pollution Prevention and Control (IPPC) Directive (96/61/EC)
 - Volatile Organic Compounds (VOC) Solvents Directive (99/13/EC)
 - Waste Incineration Directive (WID) (2000/76/EC)
 - Large Combustion Plants (LCP) Directive (2001/80/EC).
 - 3 Titanium Dioxide Directives (78/176/EEC, 82/883/EEC and 92/112/EEC). *Not Applicable to Ireland*
- Transposed into Irish law by
 - Environmental Protection Agency (Industrial Emissions) (Licensing) Regulations 2013 S.I. No. 137 of 2013
 - European Union (Industrial Emissions) Regulations 2013 S.I. No. 138 of 2013

Point Sources in the ERBD





Point Sources in ERBD

IPPC/IED	166
Licensed Waste Facilities	78
Other PRTR Facilities	2
UWWT Plant	102
Landfill	90
Mine	12
Quarry	119



Pollutant release and transfer register (PRTR)

Waste and wastewater management	38
Animal and vegetable products from the food and beverage sector	12
Intensive livestock production and aquaculture	9
Production and processing of metals	4
Mineral industry	6
Chemical industry	23
Energy sector	6
Paper and wood production and processing	1
Other activities	3



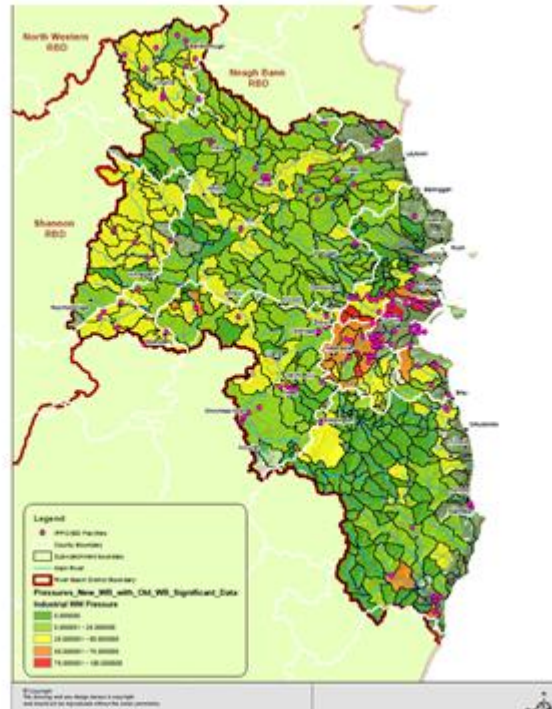


IPPC Emissions to Water



Pollutant release and transfer register (PRTR)





IMPEL Project Phase 3

Linking the Water Framework Directive and the Industrial Emissions Directive

Checklist Guidance for Water Managers and Competent Authorities (EPA)

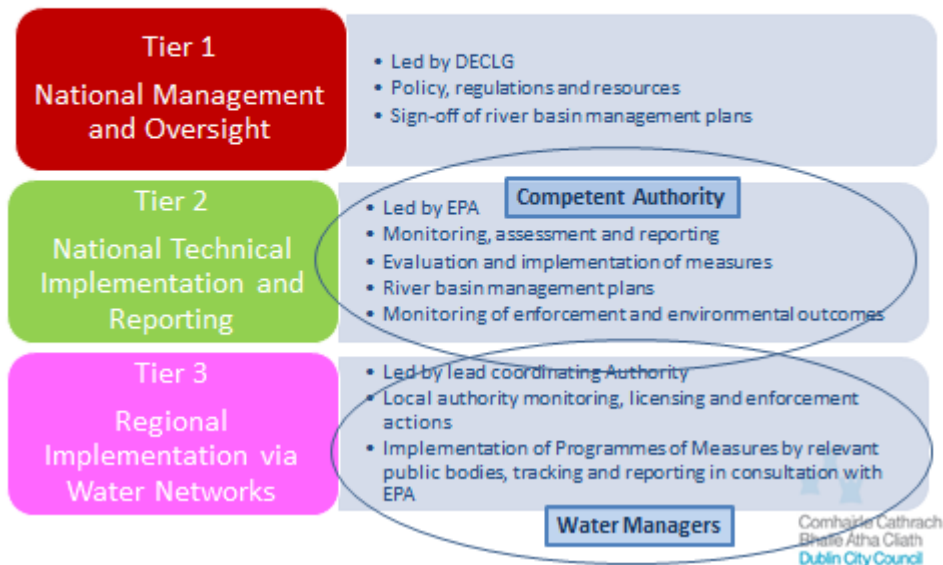
- Water Managers: Information needs for implementation of the Water Directives
- Competent Authority: Information needs for implementation of Industrial Emissions Directive

Data Flow in both directions





WFD Governance in Ireland

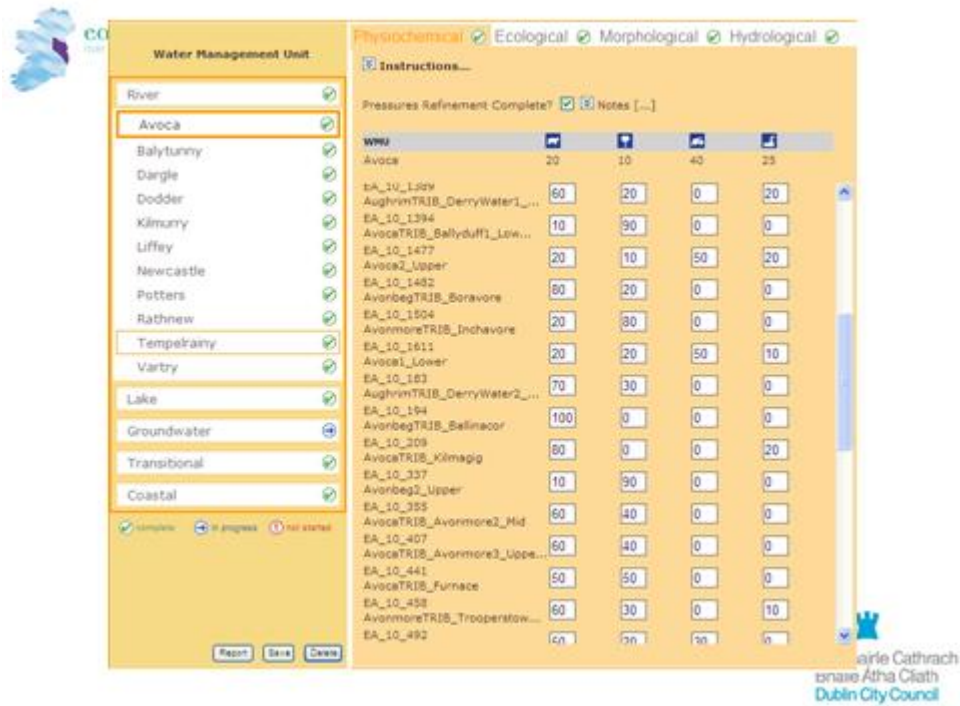
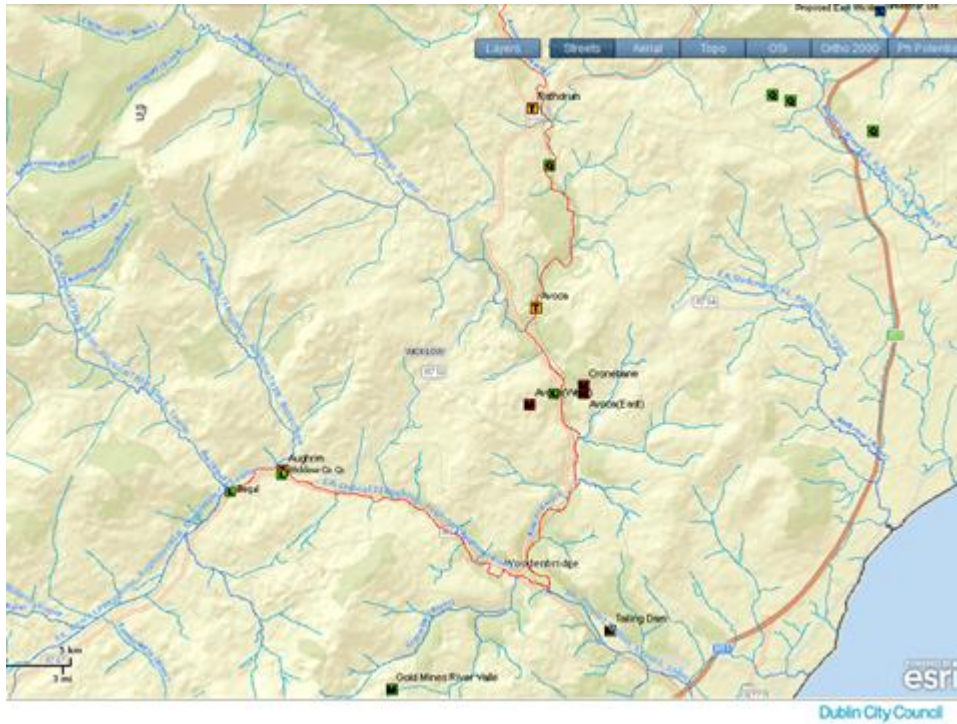


Water Managers (Local Authorities)

Information Needs/Responsibilities

- Understanding Significant Water Pressures (SWMI)
- Establishing and Implementing Measures (Plan and PoMs)
- Monitoring (Surveillance, Operational, Investigative)







Water Managers

Understanding Significant Water Pressures
Establishing and Implementing Measures
Monitoring

- ensure EPA understands the range of potential activities arising from IED installations that might affect Water Status.
- seek information from EPA - installations, permit conditions, monitoring results, etc.
- seek information from EPA on the spatial distribution of IED installations in a catchment
- identify multiple IED discharge to single water body and communicate with EPA on how to address this
- ensure EPA understands the timetables in WFD
- ensure EPA requires operators to consider options to prevent or limit pollution to groundwater



Water Managers

Understanding Significant Water Pressures
Establishing and Implementing Measures
Monitoring

- obtain information on IED installation performance from EPA
- discuss possible additional measures with EPA (beyond 'BAT')????
- discuss with EPA, where appropriate, use of disproportionate cost arguments where affecting IED installations
- ask EPA for information on inspection regime.





Water Managers

Understanding Significant Water Pressures
Establishing and Implementing Measures
Monitoring

- seek information from EPA on monitoring by IED installations
- ensure EPA is supplied with appropriate monitoring data to inform permitting, inspection and permit review
- work with EPA to determine whether surveillance or investigative monitoring should specifically analyse the impacts of several IED installations discharging to the same water body



Competent Authority (EPA) Information Needs/Responsibilities

- Permitting
- Monitoring
- Inspection
- Permit Review





Competent Authority (EPA) **Permitting**

Monitoring
Inspection
Permit Review

- discuss scope of potential impact of installation to determine what should be included in permit application/determination
- discuss with Water Managers possible issues relating to operation or monitoring that should be included in guidance for permits application
- ensure Water Managers understand the timetables for permit determination
- ensure obligations of water directives are fully understood where these could be impacted by an IED installation
- seek expertise of Water Managers in understanding pollutant dispersion/behavior in water where this may affect permit determination
- discuss with Water Manager situations where several IED installations discharge to a single water body
- ensure Water Managers are fully informed of results of permit determinations



Competent Authority (EPA) **Monitoring**

Permitting
Monitoring
Inspection
Permit Review

- seek views of Water Managers on appropriate monitoring conditions to set in permit conditions
- ensure relevant information from Water Framework Directive/ Environmental Quality Standards monitoring are supplied
- ensure Water Managers are fully aware of the data arising from operator monitoring under IED, its format, frequency and availability





Competent Authority (EPA)

Permitting
Monitoring
Inspection
Permit Review

- seek information from Water Managers on pollutant, etc., issues for relevant water bodies to help assess permit compliance and environmental impacts
- ensure Water Managers are fully informed of the results of inspections, including any measures to be taken.
- ensure Water Managers are fully aware of the data arising from operator monitoring under IED, its format, frequency and availability.



Competent Authority (EPA)

Permitting
Monitoring
Inspection
Permit Review

- seek information from Water Managers on whether there are issues concerning compliance with water directives potentially arising.
- seek views from Water Managers on whether monitoring obligations in permits should be changed.





Responsibilities Summary

- *Data flow in both directions*
Installation information, Monitoring data, Permit conditions, timetables etc.
- Mutual consultation on impacts of multiple discharges into the same water body
- ...

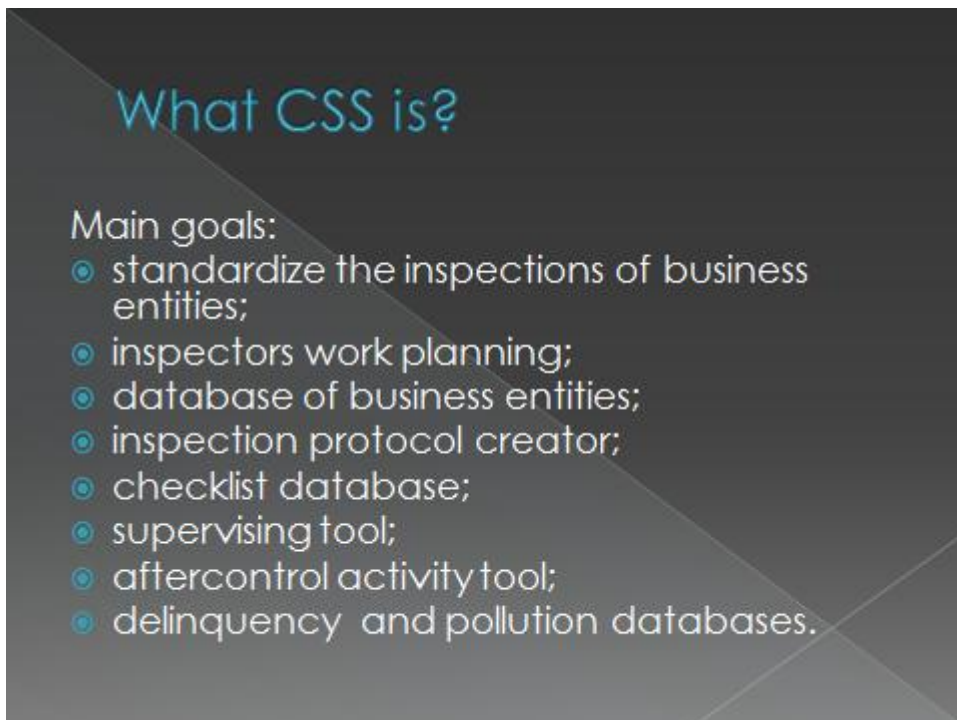



IT Control Support System in Poland



IT Control Support System
(CSS)

Adrian Zajac
senior inspector of environmental
protection



What CSS is?

Main goals:

- standardize the inspections of business entities;
- inspectors work planning;
- database of business entities;
- inspection protocol creator;
- checklist database;
- supervising tool;
- aftercontrol activity tool;
- delinquency and pollution databases.

Database of business entities

- category I – annual inspection;
- category II – biannual inspection;
- category III – an inspection every three years;
- category IV – an inspection every four years.
- category V – turnouts (are not included in the plan of controls).

Database of business entities

Examples of companies in risk category:

- Category I (car disassembling stations, IPPC installations falling under the Accession Treaty, Large industrial fattening pig farms requiring integrated permit, ...);
- Category II (waste water treatment plants above 2000 PE, Facilities operated without any required permit, ...)
- Category III (waste-water treatment plants below 2000 PE, Landfills and incineration facilities other than the ones from category I and II);

Multi-criteria categorization

- probability of risk;
- probability of impact on the environment;
- facility on the neighbouring recipients;
- background in observing the environmental provisions;
- environmental management systems.

Multi-criteria categorization

Wrażliwość otoczenia zakładu (W)	
Lokalizacja zakładu (W)	
Wybierz Opis	Ocena
<input type="radio"/> Strefa ochronna "A" szpitali, tereny szpitali, domów opieki społecznej, tereny zabudowy związanej ze stałym lub czasowym pobytem dzieci i młodzieży/tereny zabudowy mieszkaniowej jedno- i wielorodzinnej oraz zabudowy zagrodowej i zamieszkania zbiorowego	bardzo wrażliwe
Tereny rekreacyjno-wypoczynkowe	
Tereny mieszkaniowo-usługowe	
Tereny w strefie bliźniaczej miast powyżej 100 tys. mieszkańców	
Obszary chronione przyrodniczo (parki narodowe, rezerwaty przyrody, obszary Natura 2000, parki krajobrazowe)	
Wody powierzchniowe stojące	
<input type="radio"/> Obszary najwyższej (OWO) lub wysokiej ochrony (OWO) Globalnych Zbiorników Wód Podziemnych (GZWP)	wrażliwe
Wody powierzchniowe płynące	
Obszary szczególnie narażone na acidy (podlegające dyrektywie acidowej)	
Pozostałe obszary chronione przyrodniczo (obszary chronionego krajobrazu, pomniki przyrody, stanowiska dokumentacyjne, użytki ekologiczne, zespoły przyrodniczo-krajobrazowe)	
Zabytki kultury materialnej	
<input type="radio"/> Tereny zależne, pozostałe użytki rolne	średnio wrażliwe
<input type="radio"/> Neuzyki, użytki kopalne	mало wrażliwe
<input type="radio"/> Tereny przemysłowe, tereny komunikacyjne	bardzo mało wrażliwe

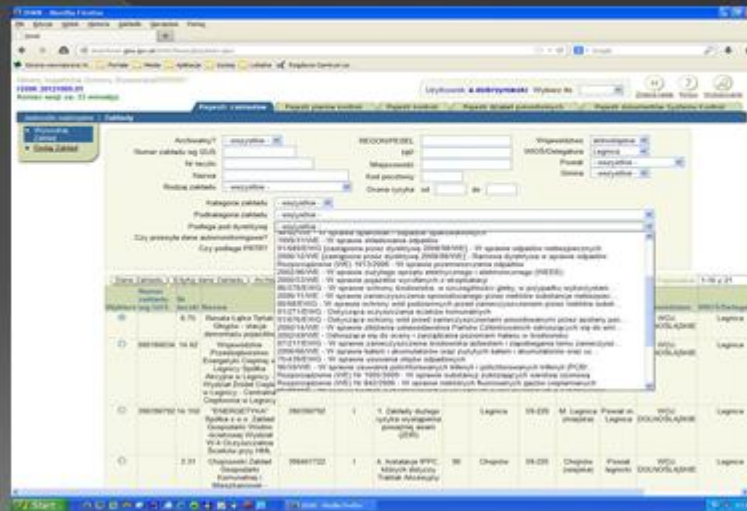
Work scheduling

- **macro-plan of inspections;**
- **long-term work schedule;**
- **annual work schedule;**
- **quarterly work schedule.**
- **Inspections (planned and unplanned)**

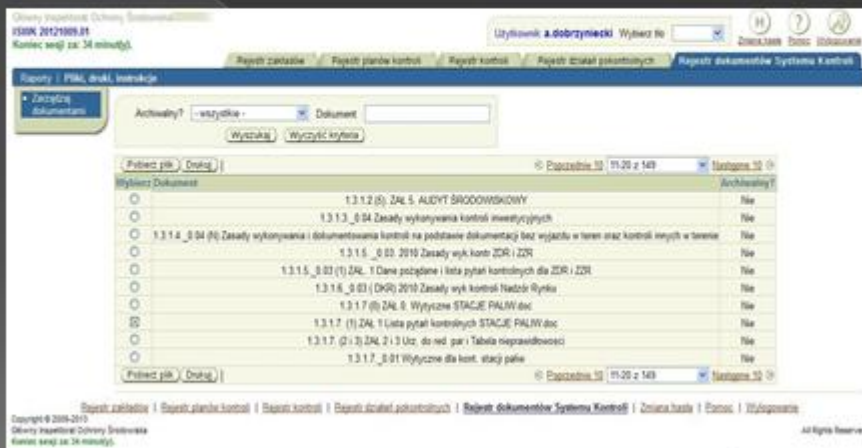
Inspection report

- Standardize reports in all voivodship inspectorates of environmental protection;
- Creating reports in in the electronic and paper form;
- creating database of aftercontrol activities, delinquency and pollution;

Databases - examples



Check-lists - examples



Checklists - examples

Załącznik nr 1 Lista pytań kontrolnych

Nr	Pytanie	Wpisać TAK /NIE/ ew. OPIS	Uwagi
WYMAGANIA ROZPORZĄDZENIA MINISTRA GOSPODARKI Z DNIA 21 LISTOPADA 2005R. W SPRAWIE WARUNKÓW TECHNICZNYCH, JAKIM POWINNY ODPOWIADAĆ BAZY I STACJE PALIW PLYNNYCH, RUROCIĄGI PRZESYŁOWE DALEKOSIĘŻNE SŁUŻĄCE DO TRANSPORTU ROPY NAFTOWEJ I PRODUKTÓW NAFTOWYCH I ICH USYTUOWANIE (DZ. U. Z 2005R. NR 243, POZ. 2063 Z POŹN. ZM.)			
1	Czy stacja paliw wyposażona jest w instalację kanalizacyjną?		
2	Czy stacja paliw wyposażona jest w urządzenia zabezpieczające przed przenikaniem produktów naftowych do gruntu, wód powierzchniowych i gruntowych (określić rodzaj urządzeń)?		
3	Czy stacja paliw wyposażona jest w certyfikowane urządzenia do pomiaru i monitorowania stanu ...		

Protocol creating

The screenshot shows a web browser window displaying a control protocol creation interface. The browser address bar shows a URL from 'www.gov.pl'. The page title is 'Główny Inspektorat Ochrony Środowiska'. The interface includes a navigation menu with options like 'Kontrola planowa', 'Kontrola zaplanowana', and 'Przebieg kontroli'. The main content area is titled 'Edycja danych Kontroli z listy rejestru'. Below this, there is a 'Panel nawigacyjny' (Navigation Panel) with buttons for 'Zapisz', 'Utwórz protokół kontrolny', 'Anuluj/Przejdź', 'Zapisz +', 'Przejdź', 'Przejdź', 'Następny', 'Cofnij', and 'Zakończ kontrolę'. The interface also displays 'Kategoria kontroli: Z wyjątkiem w terenie z osobnym podmiotem', 'Typ kontroli: Planowa', and 'Charakter kontroli: Problemowa'. At the bottom, there is a text area containing legal references: 'art. 3 ustawy z dnia 20 lipca 1991 r. o Inspekcji Ochrony Środowiska (Dz. U. z 2013 r. poz. 686), w związku z art. 71a ustawy z dnia 2 lipca 2004 r. o sposobie działalności gospodarczej (Dz. U. z 2013 r. poz. 672)'.

Protocol creating

Typ kontroli: Planowa Charakter kontroli: Problematyczna Numer kontroli: DL 155/2013 Rok planu: 2013 Sygnatura protokołu: DL.DX 7023.426 Data rozpoczęcia: 16-10-2013 Data zakończenia: <input type="text"/> • Czy kontrola z narazaniem? <input type="text" value="NE"/> Narazenie • Czy kontrola z pomieszczeniem? <input type="text" value="NE"/> • Czy kontrola z instruktazem? <input type="text" value="NE"/> • Czy kontrola dotycząca nabwoa rynku? <input type="text" value="NE"/> • Czy wystąpiła powazna awaria? <input type="text" value="NE"/> Inicjator kontroli Wzrost Osoby udzielajacej informacji: Stanowisko osoby udzielajacej informacji: Jacek Zajac Proszyn Zarzadu Inne osoby uczestniczace w kontroli Osoba poinformowana o kontroli: Jacek Zajac Stanowisko osoby poinformowanej: Proszyn Zarzadu Okres obowiazujacej kontroli: od 01.01.2013 r. do dnia 31.12.2013 r.	Data ostatniej zmiany: <input type="text"/> Numer zakladu wg OUS: <input type="text"/> Nr teczki: 23.1 Nazwa: Gminne Przedsiębiorstwo Komunalne Sp. z o.o. Komunalne Przedsiębiorstwo Oczyszczania i Gospodarki Wodnej REGON/PESEL: 396478432 Kategoria: 8 Podkategoria: 2 Zakłady podlegające rozporządzeniu o Państwowym Gospodarstwie Rolnym i Rybnictwie w sprawie niebezpiecznych odpadów z kategorii I Ulica: Pałczyńska Kod pocztowy: 59-434 Gmina: Pałczyńska Powiat: Powiat zlotoryski Województwo: WOJ. DOLNOŚLĄSKIE Telefon: 76 877 57 88 Faks: <input type="text"/> Czy przesyła dane automatycznie? <input type="text" value="DAK"/> Adres kontrolowanej działalności • Czy adres kontrolowanej działalności inny niż zakładu? <input type="text" value="NIE"/> Adres kontrolowanej działalności: <input type="text"/>
--	--

[Inwestycje](#) [Data ostatniej zmiany](#) [Cecha kontroli](#) [Cecha kontroli](#)

Protocol creating

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21. Nazwa kontrolowanej działalności: Zakład Oczyszczania Ścieków i Wód 22. Adres kontrolowanej działalności: ul. Pałczyńska 14, 59-434 Pałczyńska, powiat zlotoryski, województwo dolnośląskie 23. Nazwa kontrolowanej działalności: Zakład Oczyszczania Ścieków i Wód 24. Adres kontrolowanej działalności: ul. Pałczyńska 14, 59-434 Pałczyńska, powiat zlotoryski, województwo dolnośląskie 25. Nazwa kontrolowanej działalności: Zakład Oczyszczania Ścieków i Wód 26. Adres kontrolowanej działalności: ul. Pałczyńska 14, 59-434 Pałczyńska, powiat zlotoryski, województwo dolnośląskie 27. Nazwa kontrolowanej działalności: Zakład Oczyszczania Ścieków i Wód 28. Adres kontrolowanej działalności: ul. Pałczyńska 14, 59-434 Pałczyńska, powiat zlotoryski, województwo dolnośląskie 29. Nazwa kontrolowanej działalności: Zakład Oczyszczania Ścieków i Wód 30. Adres kontrolowanej działalności: ul. Pałczyńska 14, 59-434 Pałczyńska, powiat zlotoryski, województwo dolnośląskie	

Case Study from Lombardy Region

An important Project was developed from 2009 to 2012 by Regione Lombardia and ARPA Lombardia (Regional Environmental Protection Agency) with the technical and scientific support of Politecnico of Milano and University Bicocca of Milano to analyze through a **water quality simulation models** the restoration possibilities of the Lambro-Seveso-Olona system, investigating both the **source apportionment of the macropollutants**, the **discharge limits that should be set to achieve the good quality status** and their corresponding cost.

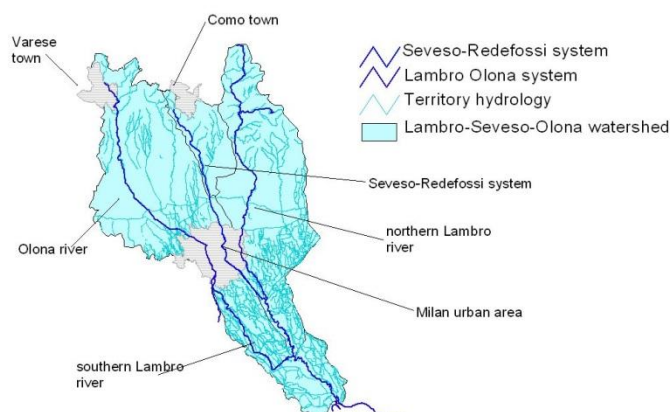
The **Lambro-Seveso-Olona (L-S-O) system** is not a natural watershed since it derives from the human regulation of the natural hydrology of the territory around Milan city area. Olona and Seveso rivers were not originally natural tributaries of the Lambro river but now they are. Olona river in fact merges into the so called southern Lambro river which merges in its turn into the Lambro river about 20 km upstream the Lambro confluence into the Po river. Seveso river, sadly known because of the ICMESA ecological disaster occurred in 1976, is now connected to the Lambro-Olona system since its waters flow through the channel system beneath the Milan urban area and as Redefossi channel flows into the northern Lambro river (Fig. 1). The Lambro-Seveso-Olona watershed is one of the **most densely populated**. The average population density in this area is higher than 1,000 inhabitants/km² (peak values are more than 7,000 inhabitants/km² in the Milan urban area and around 1,500-2,000 inhabitants/km² respectively in the areas of the provinces of Varese and Como which are mostly drained by the Lambro). These population densities are among the highest in Italy and Europe. **Industry** is also highly developed in this basin, chemical, textile, paper, pulp and food industries being the most important ones.

Although at present the Lambro-Seveso-Olona system does not receive any more the untreated wastewaters of the Milan urban area, **depurated wastewaters** constitute about half of the streamflow.

Biotic communities in this river have a long history of poor quality status, having suffered great damage due to domestic and industrial discharges.

The Lambro-Seveso-Olona system constitutes also the most polluted tributary of the Po river, the largest Italian river. Although representing only 6% of Po river drainage area (Lambro-Seveso-Olona watershed has a drainage area of about 2,700 km²) the significant contribution of this river system to the Po river pollutant load has been largely documented.

Fig. 1. Lambro-Seveso-Olona system (L-S-O). Hydrography and major urban areas are shown.



Recently new **chemical quality standards for macropollutants** (i.e. LIMeco index according the legislative decree n.152, 2006) have been set by the Italian legislation as support for the good ecological status according the WFD. This new index considers dissolved oxygen (i.e. deficit for dissolved oxygen saturation, 100-DO_{sat}), ammonia and nitrate concentration, and total phosphorus concentrations and is extremely restrictive, particularly concerning nitrate and phosphorus (see Table 1). The new index makes challenging the achievement of water quality objectives for many Italian rivers and, consequently, it makes extremely hard to reach the good quality for the Lambro-Seveso-Olona system.

Aim of the Project was to **analyze the restoration possibilities of the L-S-O, focusing both on the source apportionment of the macropollutants and on the effluent limits that should be set by law, to achieve the good quality status according to the LIMeco index.** Based on the modeled scenarios, the technical and economic feasibility of the requested discharge limits were evaluated.

Table 1. LIMeco index enforced by the Italian legislation. Scores need to be assigned according to the Thresholds and the final score is the average of the 4 parameter scores.

LIMeco	Thresholds					LIMeco	
	high	good	moderate	poor	bad		
100-DO _{sat}	≤ 10	≤ 20	≤ 40	≤ 80	> 80	high	≥ 0.66
N-NH ₄ (mg/l)	< 0.03	≤ 0.06	≤ 0.12	≤ 0.24	> 0.24	good	≥ 0.5
N-NO ₃ (mg/l)	< 0.6	≤ 1.2	≤ 2.4	≤ 4.8	> 4.8	moderate	≥ 0.33
Total-P (ug/l)	< 50	≤ 100	≤ 200	≤ 400	> 400	poor	≥ 0.17
						bad	< 0.17
Score	1	0.5	0.25	0.125	0		

Table 2. Effluent limits assumed in the wastewater treatment plants as function of the plant size (expressed as People Equivalent, PE) in the considered scenarios.

	Dir 271/91CE		MBR	RO
	PE<100,000	PE>100,000	PE>50,000	PE>50,000
BOD, mg/l	10	10	4	4
COD, mg/l	60	60	15	30
N-org, mg/l	0.75	0.5	0	0
N-NH ₄ , mg/l	2.25	1.5	1	1
N-NO ₃ , mg/l	12	8	9	4
Total Phosphorus, mg/l	2	1	0.5	0.5

QUAL2K models system was used to develop a **quantitative understanding of the inputs and processes affecting the water quality** of the Lambro-Seveso-Olona system. Measurements of different water quality parameters, coming from the Lambro-Seveso-Olona watershed, were used to implement the **water quality simulations**. All the measurements came from the monthly monitoring activity, carried out by ARPA during the period 2009–2010 at 44 sampling stations. Such water quality monitoring refers mainly to low-or mean-flow conditions, less than 25% of the measurements available concerning higher flow conditions. QUAL2K simulations relied also on the direct measurements of the input point sources made available by ARPA. Non point sources contributions, not particularly relevant in this area, were estimated by difference from in-stream measurements and modeling outputs considering only point sources. Table 2 shows the effluent limits assumed for the considered scenarios.

QUAL2K models showed overall a discrete model accuracy (i.e. errors of about \pm 20-30%) for the median annual scenario. The median was assumed as reference for the scenarios and it was preferred to the average to avoid any skewness effect present in the water quality measurements. QUAL2K enabled to assess the **apportionment of the main pollutant sources in the system**.

Wastewater treatment plants (hereinafter WWTPs) constitute more than 90% of the waste flow discharged to the river system, 91% of the discharged organic load and 99.4% of the total nitrogen load. At the watershed closure (i.e. at the Po river confluence) the cumulated flow of discharges accounts for about 40% of the river streamflow. It is also relevant to remark that WWTPs in the L-S-O range from very small (i.e. less than 2,000 PE, about 20% of the total number), to medium size (i.e. 2,000-10,000 PE, 25% of the total number) to bigger sizes. More than 40% of the WWTPs are larger than 10,000 PE and a little less than 10% are larger than 600,000 PE and account for the majority of the discharged pollutant load. However, being the latter almost all around the Milan urban area, where the river has already acquired a low quality status, they do not constitute the most significant pressure for the river water quality. At present, and according to the new LIMeco index, most (i.e. over 200 km out of a total of 253 km) of the L-S-O river length is classified in between a poor and a bad quality status (see Figure 2). Less than 10% of the river length is classified as good or high quality.

The QUAL2K modeling was also used **to evaluate the effluent limits required to achieve the good LIMeco quality status**. Besides ammonium whose concentration is extremely high all through the river and denotes the presence of untreated wastewaters and of scarcely efficient removal treatments, the most challenging

parameters to control in order to achieve the good LIMeco status appear to be nitrate and total phosphorus that should be respectively removed at a level of 1-2 mg l⁻¹ and of 0.2-0.4 mg l⁻¹. These limits are hardly achievable by conventional activated sludge treatments. Only a tertiary Reverse Osmosis (RO) filtering stage would guarantee the respect of these limits and that would increase the treatment cost by 2.5-2.7-fold with respect to the conventional “nitrification/denitrification + phosphorus removal + filtration” treatment scheme. Moreover it should be observed that all through the Lambro-Seveso-Olona system more than 160,000,000 m³ y⁻¹ of wastewaters need to be treated, and this would imply investments of the order of hundreds million euro. On the other hand, even in the hypothesis of the full RO scenario (i.e. all the WWTPs operating a RO treatment), there would be concerns for the river ecosystem due to the fact that RO is not a selective treatment and its full scale application could significantly alter the ion balance of the system, posing at risk the osmolarity of riverine organisms.

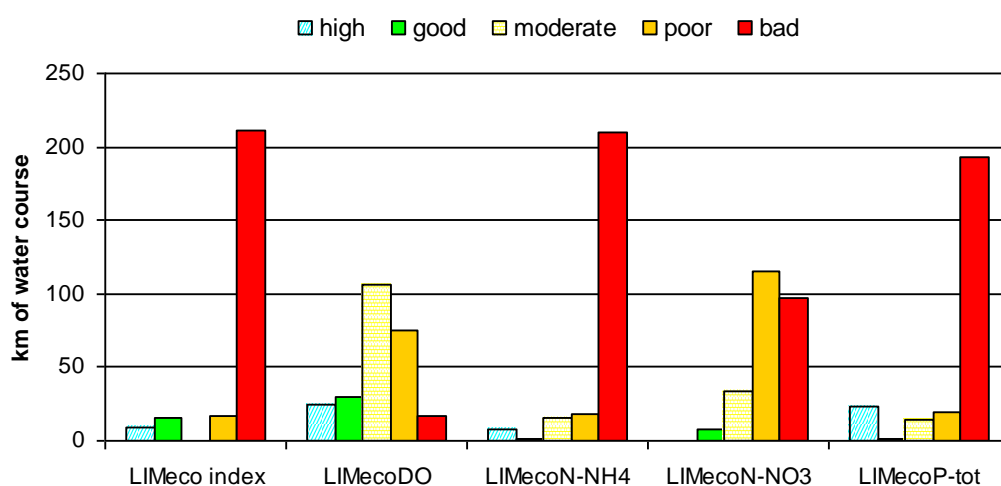


Figure 2. Water quality classification of the Lambro-Seveso-Olona system according the LIMeco index and the its four components (i.e. DO: deficit for dissolved oxygen saturation, N-NH₄: ammonium, N-NO₃: nitrate and P-tot: Total phosphorus).

The results of the Project show the peculiarity of the Lambro-Seveso-Olona-System and demonstrate that a compromise is needed between restrictive quality targets, costs and the real possibility of recovery of such human effluent-dominated system.

Moreover, the results of the Project show that in the perspective of the cost-benefit analysis the expected benefits should be evaluated with appropriate indexes, adequately sensitive to detect improvements in these effluent-dominated streams.

The knowledge acquired though modelling may suggest intermediate scenarios that maximize the efficiency, significantly reducing the costs.

ANNEX IV: PARTICIPANTS AT THE PROJECT WORKSHOP

Country	Participant	Organisation
Austria	Christoph Planitzer	Lower Austria, Environment Department
Ireland	Ray Earl	Dept. Environment, Heritage and Local Government, WFD Eastern River Basin District Project
Italy	Valeria Marchesi	ARPA Lombardia - Environmental Protection Agency of Lombardia
Poland	Adrian Zając	Voivodship Wrocław - Inspectorate for Environmental Protection
Portugal	Anabelo Rebelo	Algarve River Basin District Administration
Portugal	Filipe Vitorino	Inspecção-Geral do Ambiente e do Ordenamento do Território
Sweden	Pia Almbring	Swedish Agency for Marine and Water Management
United Kingdom	Andrew Farmer	Institute for European Environmental Policy

Interaction between EU water directives and the Industrial Emissions Directive

Guidance for Water Managers

Introduction

The control of pollution from industrial sources is important in meeting the objectives of water bodies and, specifically, the objectives set in EU water directives. Industrial pollution emissions are regulated by the Industrial Emissions Directive. Therefore, there are potential interactions between these directives in their respective implementation. These interactions have been explored by IMPEL in the following two studies:

- Linking the Water Framework Directive and IPPC Directive, Phase 1, 2010. <http://impel.eu/wp-content/uploads/2012/02/WFD-IPPC-final-report-phase-1-GA-101118-6.pdf>
- Linking the Water Framework Directive and IPPC Directive, Phase 2, 2011. <http://impel.eu/projects/linking-the-implementation-of-the-water-framework-directive-to-the-implementation-of-the-ippc-directive-phase-2/>

A figure from the first of these reports is provided on the following page. It summarises some of the key interactions between water and industrial pollution control directives. The purpose of this figure is to illustrate the complexity of interaction and, therefore, the need for collaboration between competent authorities responsible for the implementation of these directives.

A critical conclusion from the IMPEL work that competent authorities for both EU water directives and IED identified was that there needs to be effective and timely exchange of information between these competent authorities. This is essential to ensure they effectively perform their functions as competent authorities. However, as there is a large amount of data and other information generated in implementing these directives, it is important for competent authorities to share necessary information and to share it at the right time for decision making. This guidance aims to help in this process.

This guidance

This guidance is written for those authorities responsible for implementing EU water directives – here called ‘water managers’ (WMs). The guidance is in the form of a checklist, indicating particular actions that could be taken by WMs to improve their interaction with IED competent authorities (IED CAs) and so help deliver implementation of EU water directives.

The checklist is structured around the cycle of river basin planning:

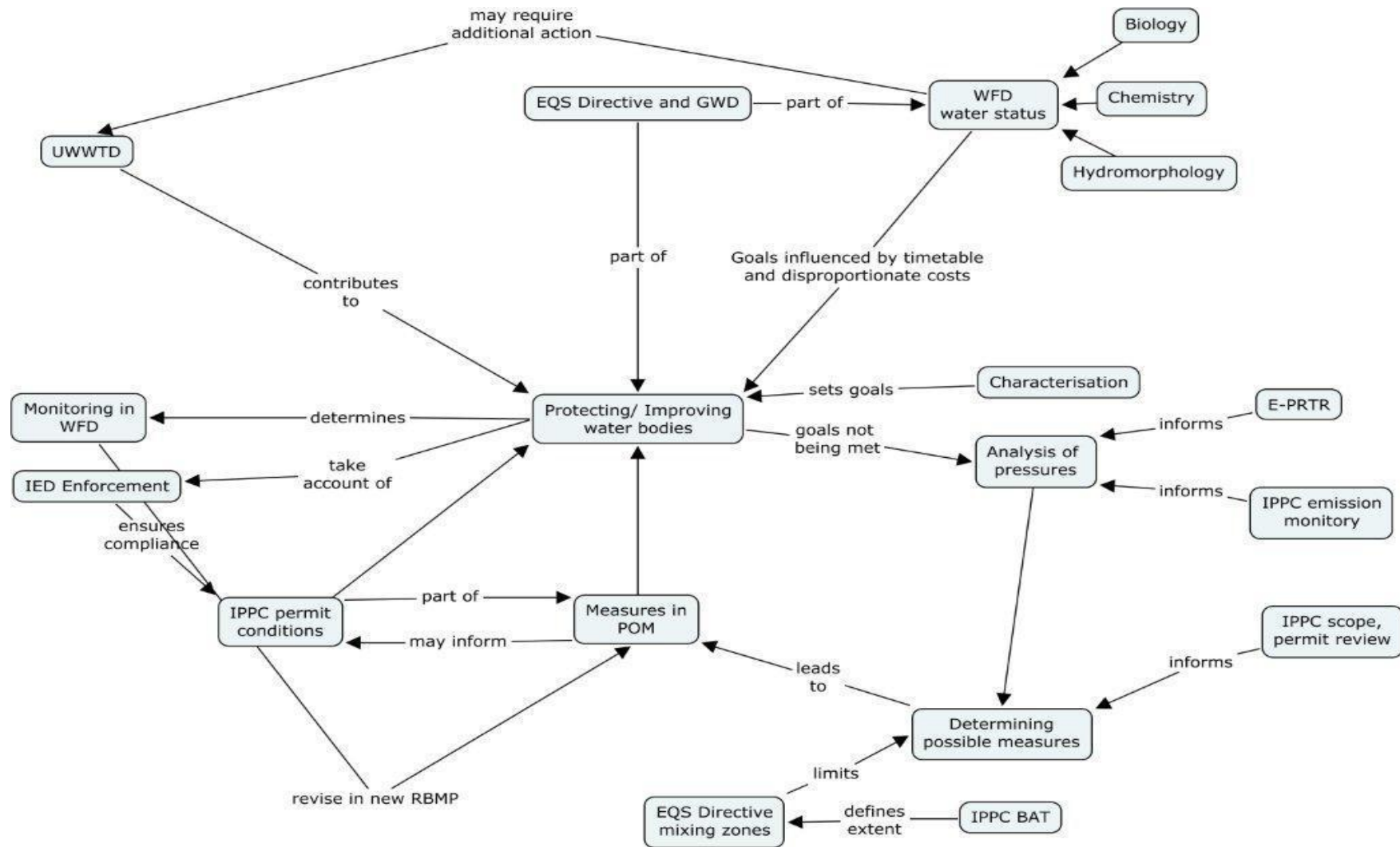
- Understanding significant water pressures
- Establishing and implementing measures
- Monitoring

Within each of these headings, the checklist includes a series of actions WMs may take to aid in their work. This may include information they could request from IED competent authorities or information they could supply. Alongside each action is a brief explanation of why that action should be undertaken. The checklist also contains three columns headed ‘once’, ‘periodic’ and ‘ongoing’. Here WMs can indicate or comment on whether an action is a one-off activity, whether it is periodic or intermittent or whether it is an ongoing continuous activity.

Note: this checklist is written for generic water management and IED competent authorities. Where appropriate, please amend by adding specific institutional names, dates, etc.

Note also that the checklist is written for a generalised interaction between competent authorities responsible for these directives and, therefore, it is recommended to add or delete elements which are not appropriate for your situation.

Figure: an illustration of the complexity of interaction between EU law relating to industrial pollution control and water management



Information action	Explanation	Action to be taken		
		Once	Periodic	Ongoing
Understanding significant water pressures				
WM to inform the IED CA of the range of potential activities arising from IED installations that might affect water status/EQS.	IED CA might focus on pollutant substances, but installation could emit heat, use water, etc., as well as diffuse emissions, all of which should be subject to BAT determination and informed by possible impacts on water objectives.			
WM to seek information from IED CA on location of installations, permit conditions, monitoring results, etc.	All such data are important in understanding current and possible future significant water pressures. In particular operators may collect useful data and undertake analysis which is particular useful for WMs. Where IPPC/IED permits have already been issued these provide useful information for WMs to help determine significant water pressures.			
WM to seek information from IED CA on the spatial distribution of IED installations in a catchment.	The spatial element of the impacts of IED installations is addressed in river basin planning and WMs have to bring together this spatial element to consider relative issues and pressures, including comparisons with non-IED pressures.			
WM to identify where multiple IED installations discharge to single water body and communicate with IED on how to address this.	Where there are multiple discharges these may combine to produce impacts on water directive objectives, but how this is to be address needs to be determined with IED CA, such as options for action compared to BAT for the different installations, etc., where it is necessary to go 'beyond BAT'.			
WM to provide information to the IED CA of issues concerning pollutant objectives set at river basin level.	While the EQSD (and mixing zones) are a focus of interaction with IED, MS may set objectives for other pollutants in water bodies and if these exist, these need to be communicated to the IED CA.			
WM to inform the IED CA of the nature of GES and EQSs in relation to meeting water objectives (WFD, EQSD and GWD), including issues not related to EQSD.	IED permits need to ensure EU EQSs are not compromised by activities of IED installations, but requirements of water directives can be complex, so this requires interpretation – potentially at water body level.			
WM to determine mixing zones in co-operation with the IED CA.	Determining mixing zones under the EQSD requires expertise of WMs. This must be accurate as their calculation affects permit determination and if this is wrong it could result in future compliance issues.			

Information action	Explanation	Action to be taken		
WM to inform the IED CA of the timetables in water directives required to meet objectives.	Installations may be given time to upgrade performance to meet BAT and this needs to reflect timetables for meeting water objectives.			
WM to discuss with IED CA on where operators should consider options to prevent or limit inputs of pollution to groundwater.	If IED installations (including through diffuse pollution through the soil at the IED site) contribute to inputs of pollutants addressed by the GWD these need to be addressed.			
Establishing and implementing measures				
WM to obtain information on IED installation performance from IED CA where relevant to considering potential measures.	In establishing PoMs it is important to understand future performance of IED installations to determine if future application of BAT will address pressures identified.			
WM to discuss possible additional measures for IED installations with IED CA.	If the WMs determine that additional action should be taken by an IED installation as part of a PoM, this should be discussed with the IED CA (e.g. whether the measure is appropriate as an IED permit condition, whether it goes 'beyond BAT', etc.).			
WM to discuss with IED CA, where appropriate, use of disproportionate cost arguments where affecting IED installations.	WFD requires that use of disproportionate cost under WFD cannot be used to reduce any obligations arising from IED.			
WM to ask IED CA for information on inspection regime.	Inspection under IED requires consideration of the environmental impact of the installation. WMs can provide information to support this as well as ensure concerns of installation performance are addressed by the inspection authority. However, it is important for the IED CA to ensure WMs are aware of inspection activities so that this interaction can happen.			
Monitoring				
WM to seek information from IED CA information on monitoring being undertaken (now or in future) by IED installations.	Such information may be useful in contributing to monitoring programmes within RBMPs for WFD, EQSD, GWD.			
WM to supply the IED CA with appropriate monitoring data to inform permitting, inspection	Water monitoring data may provide information on the release of pollutants, use of water, etc., by IED installations			

Information action	Explanation	Action to be taken		
and permit review.	and of the impacts of those installations which may be important in permitting and inspection. Note that WM may need to work with IED CA to help understand the type of data which would be useful.			
WM to work with IED CA to determine whether monitoring should specifically analyse the relative importance (impacts) of several IED installations discharging to the same water body.	Where the relative importance of discharges from several IED installations to the same water body is not fully understood, monitoring programmes under the WFD may be necessary to determine this.			

Interaction between EU water directives and the Industrial Emissions Directive

Guidance for Competent Authorities for the Industrial Emissions Directive (IED)

Introduction

The control of pollution from industrial sources is important in meeting the objectives of water bodies and, specifically, the objectives set in EU water directives. Industrial pollution emissions are regulated by the Industrial Emissions Directive. Therefore, there are potential interactions between these directives in their respective implementation. These interactions have been explored by IMPEL in the following two studies:

- Linking the Water Framework Directive and IPPC Directive, Phase 1, 2010. <http://impel.eu/wp-content/uploads/2012/02/WFD-IPPC-final-report-phase-1-GA-101118-6.pdf>
- Linking the Water Framework Directive and IPPC Directive, Phase 2, 2011. <http://impel.eu/projects/linking-the-implementation-of-the-water-framework-directive-to-the-implementation-of-the-ippc-directive-phase-2/>

A figure from the first of these reports is provided on the following page. It summarises some of the key interactions between water and industrial pollution control directives. The purpose of this figure is to illustrate the complexity of interaction and, therefore, the need for collaboration between competent authorities responsible for the implementation of these directives.

A critical conclusion from the IMPEL work that competent authorities for both EU water directives and IED identified was that there needs to be effective and timely exchange of information between these competent authorities. This is essential to ensure they effectively perform their functions as competent authorities. However, as there is a large amount of data and other information generated in implementing these directives, it is important for competent authorities to share necessary information and to share it at the right time for decision making. This guidance aims to help in this process.

This guidance

This guidance is written for those authorities responsible for implementing the IED – here called ‘IED CAs’. Note that in several Member States permitting and inspection functions are undertaken by separate authorities and there are many examples of distribution of competence across different levels of governance. Here we do not distinguish these divisions, but refer simply to IED CAs.

The guidance is in the form of a checklist, indicating particular actions that could be taken by IED CAs to improve their interaction with water managers (WMs) and so help deliver implementation of the IED. The checklist is structured around the regulatory cycle of the IED:

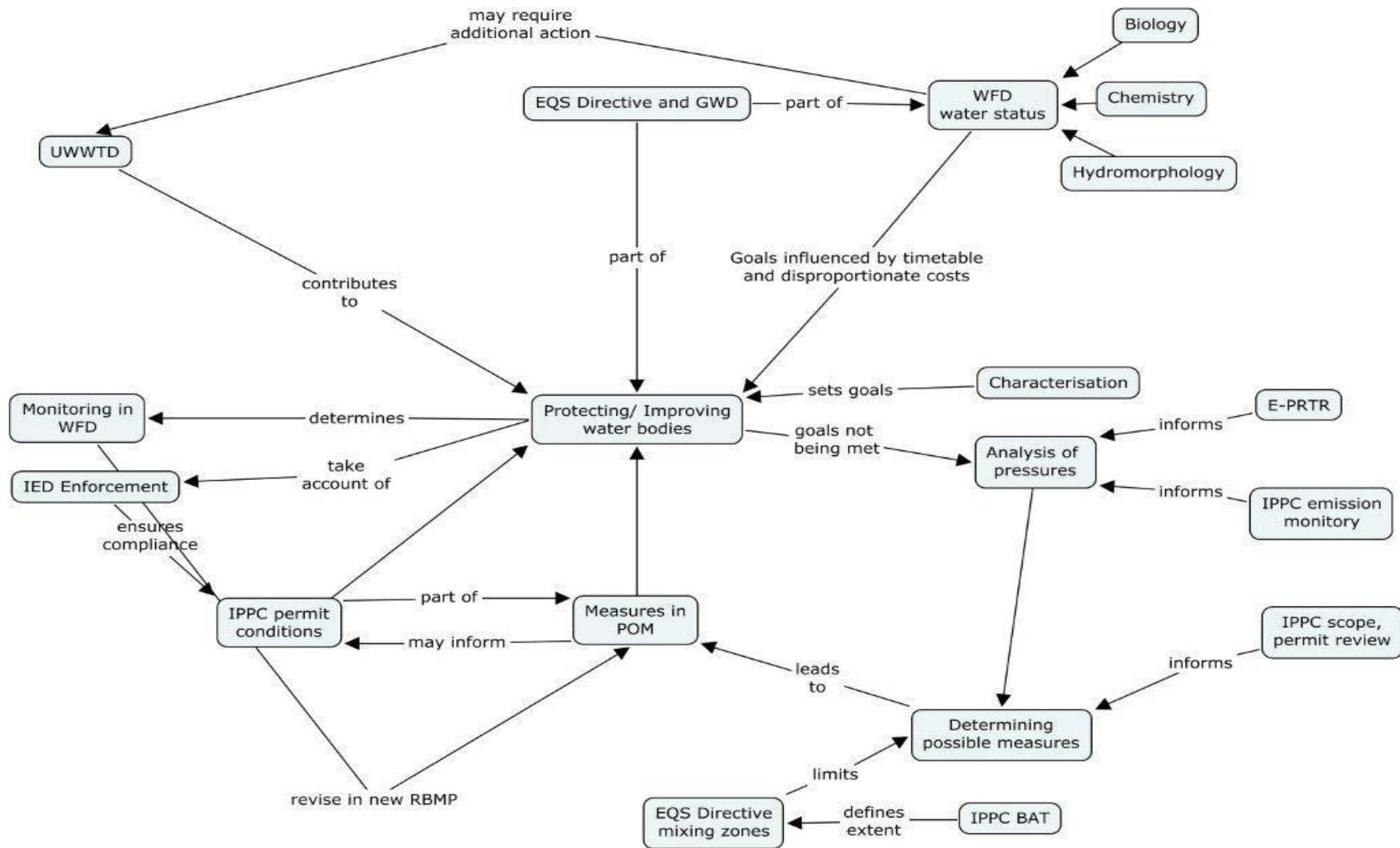
- Permitting
- Monitoring
- Inspection planning
- Inspection
- Permit review

Within each of these headings, the checklist includes a series of actions IED CAs may take to aid in their work. This may include information they could request from WMs or information they could supply. Alongside each action is a brief explanation of why that action should be undertaken. The checklist also contains three columns headed ‘once’, ‘periodic’ and ‘ongoing’. Here IED CAs can indicate or comment on whether an action is a one-off activity, whether it is periodic or intermittent or whether it is an ongoing continuous activity.

Note: this checklist is written for generic water management and IED competent authorities. Where appropriate, please amend by adding specific institutional names, dates, etc.

Note also that the checklist is written for a generalised interaction between competent authorities responsible for these directives and, therefore, it is recommended to add or delete elements which are not appropriate for your situation.

Figure: an illustration of the complexity of interaction between EU law relating to industrial pollution control and water management



Information action	Explanation	Action to be taken		
		Once	Periodic	Ongoing
Permitting				
IED CA to discuss scope of potential impact of installation to determine what should be included in permit application/determination.	IED allows some flexibility in the 'boundary' of an installation, so discussion with WM can ensure relevant directly associated activities impact on water can be included in BAT determination and setting permit obligations.			
IED CA to discuss with WMs possible generic or specific issues relating to operation or monitoring that should be included in guidance to operators applying for permits.	Water management issues should be recognised at an early stage in permit applications, rather than introduced late on as detailed applications become discussed with WMs.			
IED CA to inform WMs of the timetables for permit determination.	This allows for WMs to supply relevant information/raise issues, etc. on time and allow for the permit determination process to proceed smoothly, reducing administrative burdens.			
IED CA to discuss with WMs the obligations of water directives and where these could be impacted by an IED installation and so address these in permit determinations.	Water directive obligations are complex and may need interpretation by WMs.			
IED CA to seek expertise of WMs in understanding pollutant dispersion/behaviour in water where this may affect permit determination.	Where impacts of pollutants (substances and heat) depend on how they spread, etc., in water bodies, WMs are likely to have the expertise to understand, model and interpret this.			
IED CA to discuss with WM situations where several IED installations discharge to a single water body.	Where there are multiple discharges these may combine to produce impacts on water directive objectives, but this needs to be determined with WMs. WMs need to understand potential timetabling issues with the different installations, options for action compared to BAT for the different installations, etc., and where it is necessary to go 'beyond BAT'.			
IED CA to inform WMs of the results of permit determinations.	WMs need to understand current and future pressures on water bodies and this includes limits to discharges, etc., from installations.			
Monitoring				
IED CA to seek views of WMs on appropriate monitoring conditions to set in permit conditions.	Where appropriate monitoring by operators may contribute to surveillance or investigative monitoring under the WFD or enhance development of inventories of emissions under EQSD,			

Information action	Explanation	Action to be taken		
	but this needs to be communicated to IED CA.			
IED CA to seek relevant information from WFD/EQSD monitoring from WMs.	IED CAs tend to rely on operator self-monitoring, but WFD/EQSD monitoring could identify unexpected pollutant concentrations, etc., to trigger investigation by IED CA.			
IED CA to provide WMs with data arising from operator monitoring under IED and inform WMs of its format, frequency and availability.	Monitoring data arising under IED may provide useful information for WMs and they should be fully informed as to its nature and availability.			
Inspection planning				
In developing inspection plans, IED CAs to liaise with WMs on key risks to water bodies that should be taken account of in risk-based planning.	Inspection plans prioritise inspection activity and may take a risk-based approach. A key aspect of risk is the sensitivity of the receiving environment and WMs can interpret the sensitivities of water bodies and receptors in them and risks from different types and quantities of pollutants on those receptors.			
Inspection				
IED CA to seek information from WMs on pollutant, etc., issues for water bodies relevant to installation to help assess permit compliance and environmental impacts of installation.	Water monitoring will identify if there are potential issues with an installation, either from non-compliance with a permit not necessarily identified by operator self-monitoring or impacts arising despite compliance with a permit (both required to be considered under IED).			
IED CA to inform WMs of the results of inspections, including any measures to be taken.	Such information may be important in understanding that issues affecting water bodies are being addressed.			
Permit review				
IED CA to seek information from WMs on whether they are issues concerning compliance with water directives potentially arising from the activity of an installation.	As with a permit determination, understanding the impacts on water directive objectives is important. Note that objectives may change as directives are amended, so issues relating to an installation may change. Furthermore, results of WFD monitoring may change the understanding of the objectives and/or the relationship between pressures and objectives.			
IED CA to seek views from WMs on whether monitoring obligations in permits should be changed.	As with determination of monitoring obligations in the initial permit, views of WMs may have changed on the appropriateness of specific monitoring activities by IED			

Information action	Explanation	Action to be taken		
	operators.			