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**EPIRB Project Activity 2
Pilot Testing in EPIRB Project River Basins**

Draft Guidance Document
on the Development of Programme of Measures and the Achievement of
Environmental Objectives According to the EU WFD



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1 INTRODUCTION

The development of River Basin Management Plans (RBMPs) according to the EU Water Framework Directive (EU WFD; 2000/60/EC) requires many implementation steps that build upon each other (**Figure 1**). All consecutive implementation steps shall be coordinated between responsible institutions by the identified competent authority. The river basin characterisation, which includes – inter alia - typology and water body delineation, is followed by a Pressure/Impact Analysis and Risk Assessment. The outcomes of the Risk Assessment builds the basis to design appropriate monitoring networks and programme to assess water status. After setting **environmental objectives** (EU WFD Article 4), measures that maintain and/or improve water status are required to be outlined in a related **Programme of Measures** (EU WFD Article 11) that need to be implemented in a cost-effective way in order to achieve the set environmental objectives. The planning, implementation and evaluation of the Programme of Measures is a repeating procedure and integral part of River Basin Management Plans that EU Member States have to report in the years 2009, 2015, 2021 and 2027.

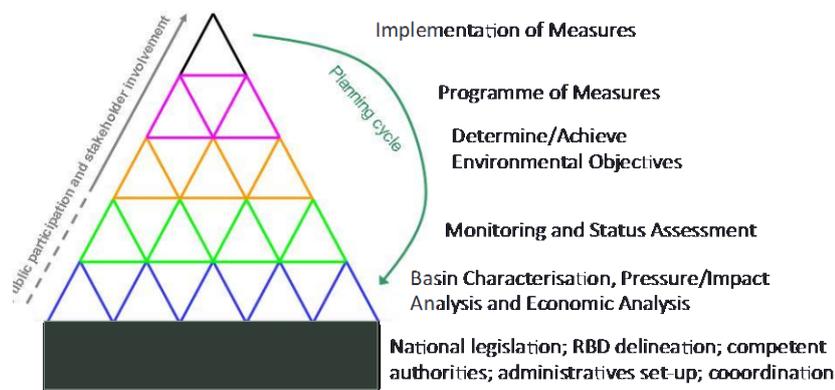


Figure 1: The planning cycle of the EU WFD and its consecutive implementation steps.

The EPIRB Project and its beneficiary countries follow the EU WFD steps as illustrated in **Figure 1** in order to practice and implement the achievement of the required EU WFD objectives for all its pilot basins. As of drafting this guidance document, River Basin Management Plans are under development. So far, **river basin characterisations** are in place including the identification of relevant water categories, typologies, reference sites and the basic delineation of water bodies for both surface waters and groundwater. This basic characterisation enabled the implementation of **Pressure and Impact Analyses** as well as corresponding Risk Assessments. The results of the already undertaken work now build the pre-requisites for the next steps to **set environmental objectives** and to **develop Programmes of Measures**.

This document provides basic guidance to initiate the next EPIRB Project implementation activities to (i) set environmental objectives and (ii) develop a Programme of Measures (PoM).

It should be noted here that the basic data sets and assessment outcomes in each EPIRB Project pilot basis differ among each other. Hence and in order to ensure the necessary flexibility, this document does not provide an exact step-by-step procedure to set environmental objectives and design Programme of Measures. The document rather offers an overview on basic principles, ideas and proposals that should support the beneficiary countries and contractors in their work towards environmental objectives and PoMs.

2 SCOPE, FOCUS AND OBJECTIVES OF THIS GUIDANCE DOCUMENT

2.1 Scope

The scope of this guidance document is to support experts within the EPIRB Project to gain a common understanding and to discuss the (i) setting of environmental objectives and (ii) the development of WFD compliant Programmes of Measures.

Proposals are given, to design the PoMs in such a way that they correspond to the results of the Pressure/Impact Analysis and risk assessments as well as it shall include measures to fill identified gaps that currently hinder complete WFD compliant implementation.

2.2 Focus

The content of the document to set environmental objectives and to develop PoMs focuses on

- the requirements of the EU WFD of Article 4 and 11;
- addresses all water categories in a general way,
- hence, pressures and impacts in the five EPIRB Project are not addressed individually but a general understanding is established to initiate setting of environmental objectives and PoM development, and
- is based on previous EPIRB Project findings.

2.3 Detailed Objectives

The detailed objectives of this study are to:

- **Guide the experts involved in the EPIRB Project** and the development of the RBMPs for the five pilot river basis regarding the setting of environmental objectives;
- **Guide the experts involved in the EPIRB Project** and the development of the RBMPs for the five pilot river basis regarding the development of a Programme of Measures that correspond to existing significant pressures and impacts;
- **Outline the basic principles of the above implementation steps** according to the EU WFD;
- **Provide a stepwise proposals and recommendations** how to tackle the setting of environmental objectives and the development of PoMs within the EPIRB Project; and
- Ensure that the guidance aligns with **previous EPIRB Project** work.

3 SETTING ENVIRONMENTAL OBJECTIVES

3.1 Setting environmental objectives aligned to six year WFD planning cycles

Setting environmental objectives for surface waters and groundwater takes an important role within river basin management planning. Environmental objectives aim at:

- Achieving good status for all water bodies;
- Prevent deterioration of water status;
- Ensure sustainable water management;
- Meet specific requirements for protected areas.

For water bodies in high status environmental objectives aim for measures that maintain water status. Water bodies that are in moderate or worse status shall be addressed with measures that allow an achievement of set environmental objectives within the WFD planning cycles.

Key purpose and aims to set environmental objectives

Setting environmental objectives aim to determine the specific water status - for both surface waters and groundwater – that has to be achieved within one of the WFD planning cycles.

Environmental measures need to be set in such a way that they ensure a balance between maintenance and improvement of water resources also ensuring their sustainable use.

Therefore, the six-year planning cycles of the EU WFD are crucial when it comes to setting EU WFD environmental objectives basically determining the implementation time line of measures towards good status for all water bodies.

For EU Member States the first planning cycle relates to 2009 and, hence, the first RBMPs. The second cycle ends 2015, the third one in 2021 and the last one in 2027 when all environmental objectives have to be achieved.

For Non EU Member States the six-year planning cycles are also of high implementation relevance. However, the reference years are different to the ones of the EU Member States. For the EPIRB Project the first cycle is proposed to relate to end 2015 and the RBMPs are due to be compiled.

The EU WFD allows for stepwise approaches over the planning cycles to achieve environmental objectives. Such approaches need to make use of exemptions according to EU WFD Article 4 and need to be presented in the RBMPs in a fully transparent way.

Setting environmental objectives and planning their achievement are the basis to design appropriate measures as part of the Programme of Measures.

3.2 Exemptions (WFD Article 4) regarding environmental objectives

According to its Article 4 the EU WFD allows to set exemptions that explain why the good ecological/chemical/quantitative status or the good potential of water bodies cannot be achieved within the first planning cycle but only later or not at all. When setting environmental objectives the requirements related to exemptions need to be taken into account.

In summary, WFD Article 4(4) on exemptions outlines conditions that have to be met if respective measures that are needed to achieve the set environmental objectives will not be implemented in the first WFD planning cycle but in later ones. For EU Member States this means that measures to achieve objectives will not be implemented by 2015, but either by 2021 or 2027 at the latest.

In case, *less stringent environmental objectives* are aimed for in water bodies implementers need to fulfil the requirements of WFD Article 4(5).

When Future Infrastructure Projects (FIP) are developed that cause impacts and provoke deterioration of water status, an exemption according to WFD Article 4(7) needs to be applied.

The application of exemptions require comprehensive tests that justify for each water body in a transparent way why measures can only be implemented (i) after the first planning cycle and with an extended deadline or (ii) through applying a less stringent environmental objective. The tests show if the needed measure to achieve the environmental objectives and good status/potential:

- is not feasible to be implemented within the first planning cycle because of natural conditions;
- is technically not feasible; or
- is technical feasible but disproportionately expensive.

In case exemptions are applied, water status must not be degraded in the meantime. Looking at the RBMPs of the EU Member States it can be said that exemptions according to Article 4(4) have been frequently applied considering national budget availability for measure implementation. Exemptions according to Article 4(5) have not been applied very often.

3.3 Setting environmental objectives within the EPIRB Project

The basic requirements and principles outlined above to set environmental objectives shall be implemented for the pilot basins of the EPIRB Project.

In this context, it is recommended here to set environmental objectives for ***all*** water bodies in the pilot basins. To do so the outcomes of the

- pressure/impact analysis,
- the risk assessment and
- monitoring results (if available)

need to be considered for ***each*** delineated water body in order to align environmental objectives and in follow-up measures over six-year-planning cycles.

There are several options to set environmental objectives within the EPIRB Project. However, based on the above, **Table 1** includes a proposal to follow a pragmatic and stepwise approach to achieve good status over all six year WFD planning cycles.

Starting point for the planning cycles will be end 2015 when the EPIRB Project RBMPs are aimed to be approved by the beneficiary countries.

Table 1: Setting environmental objectives in the EPIRB Project RBMPs considering the six-year planning cycles that start end 2015.

Water Status 2015	Environmental Objectives to be set
Water bodies in high or good status in 2015	need the setting of environmental objectives and measures that maintain water status over all planning cycles up to 2032 and beyond.
Water bodies that are (i) at risk to fail the environmental objectives in 2015 or (ii) in moderate status in 2015	need the setting of environmental objectives within the first planning cycle (= by 2021): (i) to have WFD compliant status assessment in place or (ii) to achieve good status by 2021
Water bodies that are (i) at risk to fail the environmental objectives in 2015 or (ii) in poor status in 2015	need the setting of environmental objectives: (i) to have WFD compliant status assessment in place within the first planning cycle (= by 2021) or (ii) to achieve moderate status by 2021 and good status by 2027
Water bodies that are (i) at risk to fail the environmental objectives in 2015 or (ii) in bad status in 2015	need the setting of environmental objectives: (i) to have WFD compliant status assessment in place within the first planning cycle (= by 2021) or (ii) to achieve moderate status by 2021; moderate or good status by 2027 and for sure good status by 2033.

*Note: **Table 1** is supplemented in **Chapter 4** with information when basic and supplementary measures aligned to the timelines*

It should be noted here that exemptions need to be taken into account within the EPIRB Project. However, the full application of the Article 4 exemptions seems difficult due to time restrictions and information gaps that may hamper the Article 4 tests.

Hence, it is proposed here to discuss the topic of (i) applying WFD Article 4 as well as (ii) the above proposal to set environmental objectives at the 3rd RBMP workshop in Minsk (Belarus) on 7 October 2014. The discussion will aim at finding a balanced and feasible solutions as the application of exemptions cannot be completely excluded from the process of setting environmental objectives.

4 DEVELOPMENT AND IMPLEMENTATION OF PROGRAMMES OF MEASURES

This chapter describes the development and the implementation of Programme of Measures (PoM) as part of RBMPs. The chapter is split in two parts keeping in mind the different preconditions for EU Member States and Non EU Member States regarding the implementation of the EU WFD and other EU Directives that play an important role when developing PoMs.

Whereas **Chapter 4.1** focuses on outlining the requirements regarding PoM according to the EU WFD Article 11, **Chapter 4.2** provides ideas and proposals how PoMs could be set-up in the pilot basins of the EPIRB Project. These proposals aim to initiate the discussion between and within the beneficiary countries and to support the contractors in identifying appropriate measures that correspond to the Significant Water Management Issues and impacts that have been assessed in previous project steps.

4.1 EU WFD requirements to develop Programmes of Measures

As illustrated in **Figure 1** the RBM planning includes the development of a Programme of Measures (PoM), which is a heart piece of RBMPs and follow the pressures/impact analysis, risk assessment and water status assessment through monitoring.

PoMs serve the key purpose to reach the EU WFD objectives in particular *good water status* and, hence, provide regulatory actions to reach, maintain and/or improve water status.

The EU Member States are assessed against the implementation of the Programmes of Measures that have been agreed.

Requirements regarding Programme of Measures are part of the EU WFD Article 11 stating that *'each Member State shall ensure the establishment for each river basin district, or for the part of an international river basin district within its territory, of a programme of measures, taking account of the results of the analyses required under Article 5, in order to achieve the objectives established under Article 4.'*

Article 11 sets out the types of measures to be part of PoMs to ensure the achievement of the WFD environmental objectives. These types – that are:

1. Basic measures and, if needed,
2. Supplementary measures.

The basic measures aim to meet requirements of other EU Directives that support WFD implementation. If necessary, these have to be complemented by the supplementary measures in order to meet the environmental objectives. **Figure 3** (after Chubbs et al., 2014) illustrates the basic structure and principles of PoMs according to the EU WFD. Further, **Chapters 4.1.1 and 4.1.2** outline basic and supplementary measures more detailed.

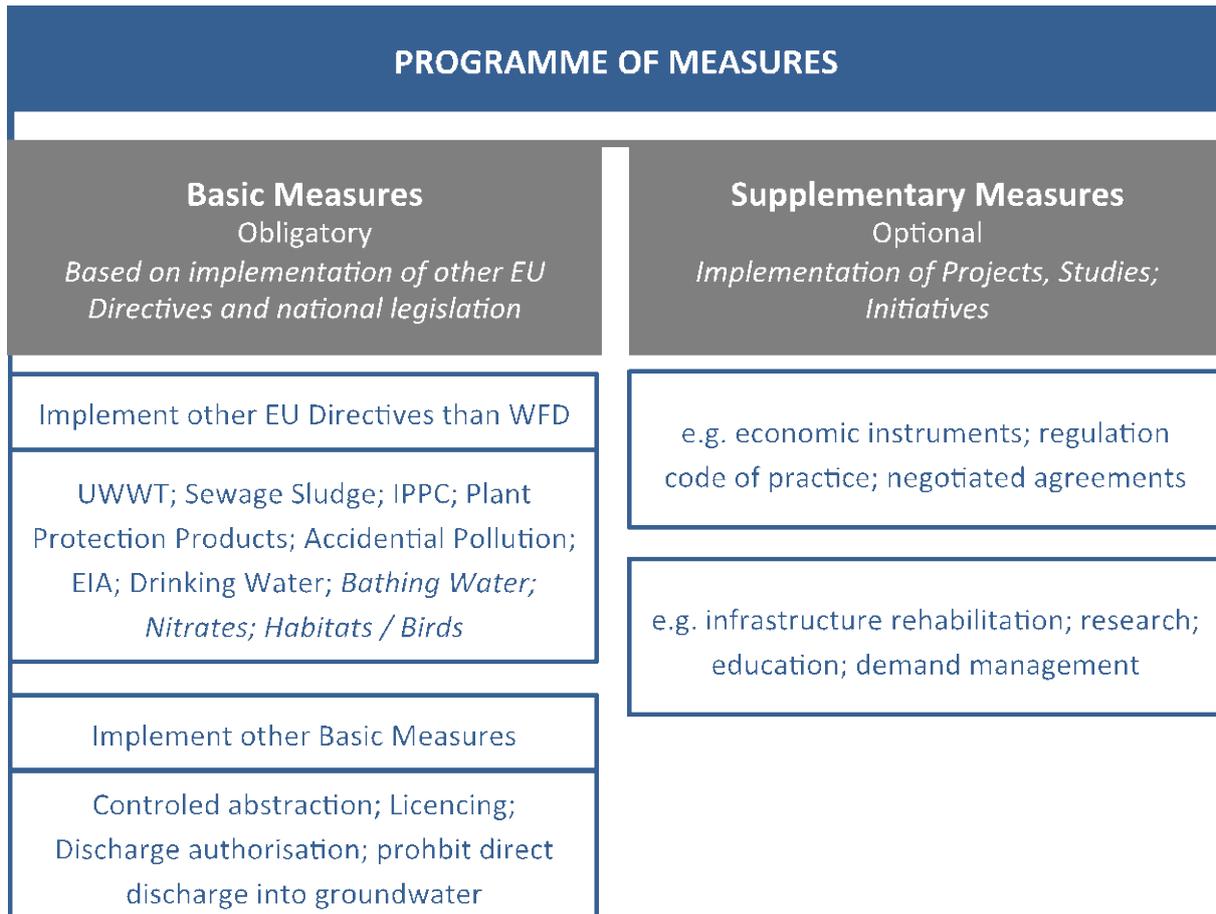


Figure 3: Structure and basic principles of Programmes of Measures according to the EU WFD (after Chubbs et al., 2014).

4.1.1 Basic Measures

For EU Member States, basic measures are obligatory to be in place as part of PoMs and, therefore, include the legally binding implementation of other EU Directives than the EU WFD to achieve *good water status*. These other EU Directives and their implementation foresee measures relating e.g. to water protection to reduce the discharge of nitrates and hazardous substances or any discharge limitation from point sources of pollution as well as water protection for water supply purposes. The other EU Directives that foster the implementation of basic measures have been transposed into national legislation of the in EU Member States and are summarised in **Table 2**.

For Non EU Member States the situation is slightly different as the implementation of EU Directives is not legally binding. However, the list below can serve as a guiding principle within the EPIRB Project to develop POM (also see **Chapter 4.2**).

Due to the current SWMIs and related significant pressures in the pilot basins, it is proposed here to prioritise the implementation of measures regarding the Directives marked in red (**Table 2**) **during the first two planning cycles**. Measures regarding the other EU Directives should be implemented in the following planning cycles.

Table 2: EU Directives relevant to be addressed through basic measures in PoMs. *Measures related to the Directives marked in red should be given priority in the EPIRB Project in the first planning cycles.*

Urban Wastewater Treatment Directive (91/271/EEC)	Major Accidents Directive (96/82/EC)
Nitrates Directive (91/676/EEC)	Environmental Impact Assessment Directive (85/337/EEC)
Drinking Water Directive (98/83/EC)	Birds Directive (79/409/EEC)
Habitats Directive (92/43/EEC)	Integrated Pollution Prevention Control Directive (96/61/EC)
Bathing Water Directive (2006/7/EC)	Plant Production Products Directive (91/414/EEC)
Sewage Sludge Directive (86/278/EEC)	

In addition, to the measures as listed above, the EU WFD Article 11(3) requires other basic measures than the ones relating to the implementation of other EU Directives. These other basic measures shall prevent any negative impacts on water status and are listed and described in **Table 3**.

When developing the PoM for the pilot basins within the EPIRB Project it is proposed to address the basic measures in **Table 3** as far as possible and add substantive content for all planning cycles.

Table 3: Other basic measures relevant to be addressed in PoMs.

Measures to apply the principle of recovery of costs for water use (WFD Article 9)
Measures to promote efficient and sustainable water use
Measures to protect drinking water sources
Measures to control abstraction and impoundment of surface and ground waters
Measures to control point and diffuse pollution sources
Measures to authorise direct discharge into groundwater
Measures to manage priority substances
Measures to control physical modifications of surface waters
Measures that control any other actions that can impact on water status
Measures to prevent accidental pollution

4.1.2 Supplementary Measures

For EU Member States, supplementary measures are optional and have to be set and implemented in case basic measures cannot ensure the achievement of the environmental objectives and 'good water status'. While basic measures rather relate to the national and basin-wide level through the implementation of national laws, supplementary measures rather relate to the water body and local level. The WFD provides a list of supplementary measures in an Annex listing the implementation of e.g. economic instruments, agreements and regulation codes of practice.

As mentioned above, supplementary measures complement basic measures. They should be proportionate in costs, transparent and pragmatic. They are determined in the first WFD planning cycle and need to be checked if they are (i) technically feasible, (ii) if they ensure the achievement of good status in time (by 2015) and in combination with the basic measures, and (iii) if they are disproportionately expensive to achieve the environmental objectives.

In case these checks results in the outcome that the supplementary measures are technically infeasible or disproportionately expensive, exemptions according to WFD Article 4 can be applied (see **Chapter 3**). Exemptions either allow (i) the achievement of the set environmental objectives in a later WFD cycle than the first one (in EU MS 2015, 2021 or 2027; Article 4(4)) or (ii) less stringent environmental objectives (Article 4(5)).

When developing the PoMs for the pilot basins within the EPIRB Project supplementary measures will play an important role during the first planning cycle as these measures aim at filling gaps that currently exist e.g. regarding WFD compliant monitoring programmes and technical as well as personnel capacities. Soft supplementary measures aim at filling these gaps (see **Chapter 4.2**).

4.1.3 Iterative development of PoMs within the WFD planning cycles

The development of PoMs according to the WFD follows a dynamic and iterative process that is based on the six-year planning cycles for regular updating. Following this concept, changes to the pressures and impacts on a water body can be assessed and new measures developed to overcome them. Refinements to monitoring programme and the availability of further data, enables fine-tuning to existing measures to increase effectiveness.

Taking into account the on-going WFD implementation in EU Member States, first PoMs had to be reported as part of RBMPs in 2009. Full operation of PoMs had to be ensured by 2012 also providing an interim report on the implementation of measures. Updates of PoMs are required as part of the next RBMPs that are due by end 2015, 2021 and 2027. **Figure 4** illustrates the six-year planning cycle to develop and implement PoMs for EU Member States. When implementing the EU WFD in Non EU MS – as it is the case within the EPIRB Project – the above timelines are not relevant. However, the six year planning circles are relevant and need to be followed.

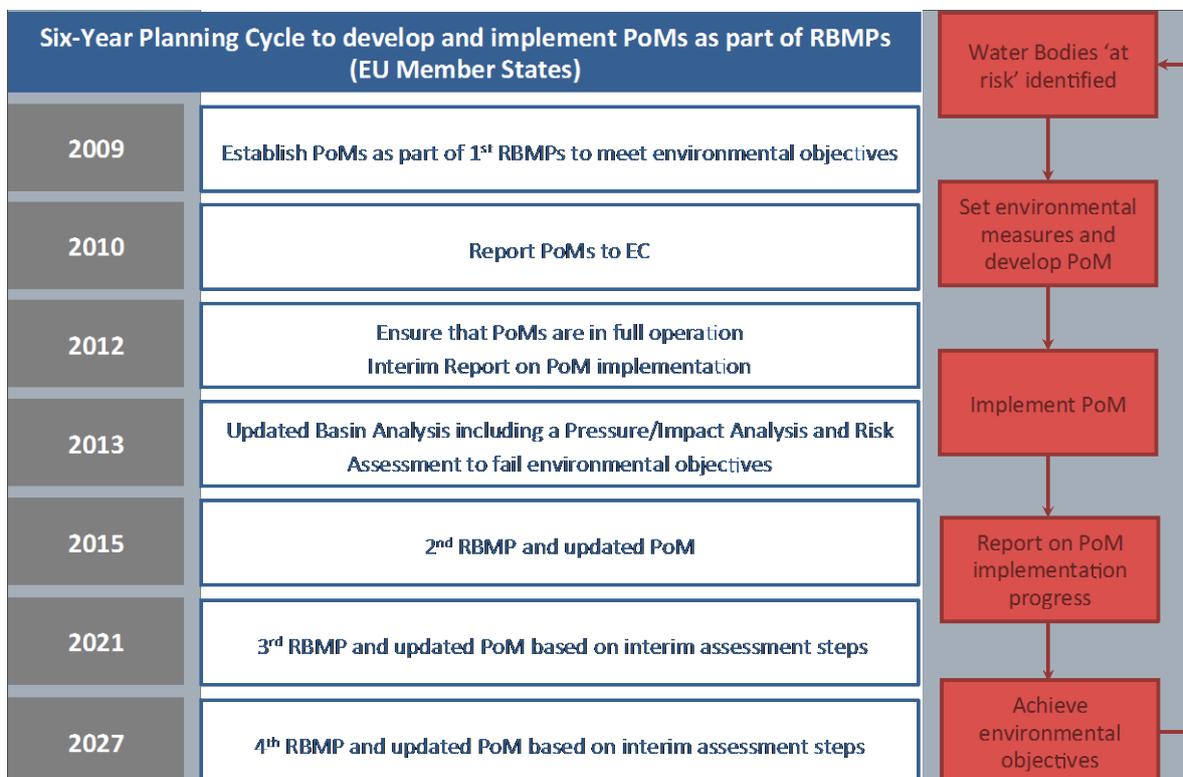


Figure 4: EU WFD six-year planning cycle to develop and implement PoMs in EU Member States including key implementation steps (based on Chubbs et al., 2014).

Checking and evaluating PoMs over the six-year cycles as part of interim progress reports generally provides a good basis to assess (i) implementation success to achieve good status, (ii) the effectiveness of measures as well as (iii) to adapt water monitoring, status assessment and water body delineation.

4.1.4 Anchoring of PoMs in national law

The implementation of PoMs is usually connected with partially large financial investments. Hence, knowing and ensuring these investments is crucial for planning to effectively implement the measures to achieve the environmental objectives. Highest effectiveness can likely be achieved, if Programmes of Measures and their financing are anchored on the national level in a binding way.

In the above context, the *Comparative Study on Pressures and Measures in the Major RBMPs of 2009 initiated by the EC's DG Environment (2012)* concluded that only eight EU Member States provide good information on the costs and/or financial resources for PoMs. Partial information was provided by further nine EU Member States.

As an inspiration for the EPIRB project's beneficiaries to address financing of future POMs, **Figure 5** shows potential financial sources including local, national and regional governments in 20 EU Member States .

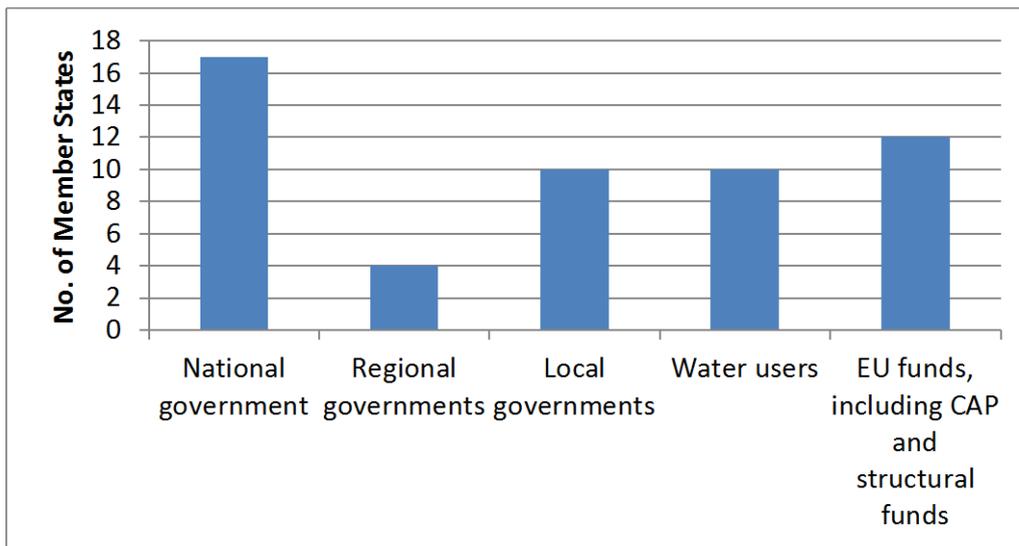


Figure 5: Sources to finance PoMs in 20 EU Member States based on the RBMPs 2009 (EU, Pressures and measures Report: Task 1 Governance; 2012).

4.2 Development of Programme of Measures within the EPIRB Project pilot basins

This section outlines a few principles to guide the EPIRB Project beneficiaries and contractors in the development of the Programme of Measures for the pilot basins. However, it should be highlighted here that the conditions and situation in each pilot basin and country is different and, hence, there are no one size fits all solutions. Measures need to be tailor made and be aligned to the findings of the RBM planning cycle and to the respective environmental objectives. Chapter 4.3 summarises the proposal for PoM development within the EPIRB Project.

Ideas and proposal for EPIRB Project PoMs

The following provides a consecutive list of ideas and proposals how PoMs can be compiled as part of the RBMPs that are currently being developed. These proposals shall be discussed in the frame of the 3rd EPIRB Project RBMP Workshop (7 October 2014, Minsk, Belarus) and can be amended in this document accordingly.

The following sub-chapter are more or less set-up as a step-by-step approach that can be used to plan and discuss the development of a Programme of Measures.

In general, there are some basic steps that are recommended in the following sub-chapters that shall be taken into account when developing PoMs for implementation addressing (i) the set environmental objectives, (ii) the identified Significant Water Management Issues, (iii) the results of the pressure/impact analysis and risk assessment, and (iv) monitoring results and reference to water status worse than good.

4.2.1 PoMs, EU WFD requirements and the EPIRB Project

When approaching the development and implementation of PoMs for the EPIRB Project pilot basins, it needs to be highlighted here once more that none of the EPIRB Project beneficiary countries are EU Member States. However, there is a commitment within the project to develop the RBMPs as compliant as possible to the EU WFD requirements. Further, many of the beneficiary countries (e.g. Georgia, Moldova, Ukraine) have recently signed Association Agreements with the EU, which foresee the approximation of national law to EU legislation.

The alignment to EU legislation does play a significant role when it comes to the development of PoMs, specifically the set-up of basic measures.

It is recommended here, to gain a very good overview on the other EU Directives that support EU WFD implementation and the achievement of environmental objectives (**Table 2**). In follow-up, national legislation that directly correspond to the other EU Directives (**Table 2**) shall be aligned in order to be used within the PoM and its basic measures.

Legislative gaps need to be outlined and respective solutions how to tackle these gaps regarding PoM development will be discussed.

4.2.2 Base PoM on set environmental objectives

Before PoMs are developed, environmental objectives for the short, medium and long term planning need to be set (see **Chapter 3**). Once the environmental objectives will be defined, the PoM will be the 'tool' to describe how the environmental objectives and, hence, good water status will be achieved.

Basic and supplementary measures will be identified accordingly including actions, regulating mechanisms, legal and financial instruments that will ensure the implementation of measures.

Table 5 in **Chapter 4.3** presents a proposal to implement basic and supplementary measures aligned to the environmental objectives and the six year planning cycles.

4.2.3 Base PoM on Significant Water Management Issues

Significant Water Management Issues (SWMIs) have been identified during the river basin characterisation and have been confirmed and further modified based on the outcomes of the pressure/impact analysis and risk assessment.

The SWMIs are usually the basis to define certain river basin management visions to achieve RBM aims and are the basis to set the environmental objectives that have to be achieved during the RBM cycles. Considering the outcomes of the RBMPs in EU Member States but also the EPIRB project findings, SWMIs usually include:

Point source pollution

Diffuse source pollution

Hazardous substances pollution

Hydromorphological alterations

It is proposed here that the identified SWMIs should be used and listed to start the development of the PoM. In consequence specific measures will be allocated for each SWMI in order to achieve the environmental objectives.

4.2.4 Base PoM on significant pressures, impacts, risks assessment and monitoring results

Each EPIRB Project RBMP includes a pressure/impact analysis and a corresponding risk assessment. The results of these assessments sharpened the SWMIs and – most importantly – indicate which water bodies (surface water and groundwater) are *at risk to fail the EU WFD environmental objectives*.

In addition to the risk assessment, monitoring results are available that show - to a certain degree as gaps exist – which water bodies are not in good status as of today.

These findings have important implications to develop the PoM in follow-up: Aligned to the steps in **Figure 6**, (i) water bodies at risk and (ii) water bodies that are not in good status are firstly, addressed with environmental objectives and secondly, with measures that are integral part of the PoM.

Measures that aim to reach the environmental objectives of water bodies at risk and with water status below good may currently take a **higher implementation priority** than measures to maintain good water status. However, this implementation priority may refer to the first WFD planning cycles, are a matter of setting environmental objectives and can certainly change over time.

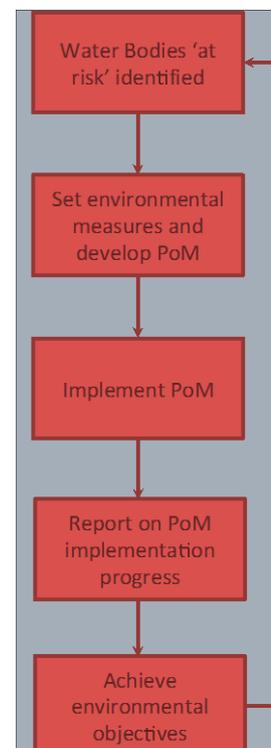


Figure 6: Steps to set environmental objectives and to develop PoMs for water bodies at risk.

4.2.5 Measure types, basic and supplementary measures

Chapter 4.1 describes the requirements and meaning of basic and supplementary measures according to the EU WFD. In summary, basic measures aim to meet requirements of other EU Directives that support the achievement of EU WFD aims. If basic measures alone are insufficient to achieve the environmental objectives, they have to be complemented by the supplementary measures in order to meet the environmental objectives.

As a first step, the allocation of certain measure types to the categories of (i) basic measures and (ii) supplementary measures and that directly relate to the pilot basin findings can help to follow a logical approach to develop PoMs and to reach the environmental objectives within the EPIB Project.

For the EPIRB Project and to achieve the environmental objectives, it is proposed here to tackle (i) **'basic measures'** that are linked to the implementation of national legal acts, decrees, procedures and instruments to achieve and maintain environmental objectives. In addition, (ii) **'soft measures'** (as part of supplementary measures) shall be included in the PoM that relate to identified implementation gaps and foresee the adaptation of laws and capacities to become fully WFD compliant in the future. Hence, the following types of measures are recommended **Table 4**.

Table 4: Allocation of measure types to basic and supplementary measures.

Basic Measures
Measures that will prevent the degradation of water status in a water bodies
Measures that will ensure a stepwise improvement of water status in water bodies
Measures to enhance national water management in relation to water uses (permits; licences)
Soft Measures Types as part of supplementary measures
Supplementary measures as part of the WFD Annex (see Table 2)
Measures that will be needed to improve e.g. monitoring, national legislations and technical/personnel capacities to ensure WFD compliant implementation in future

Basic measures may e.g. include the construction of wastewater treatment plants to reduce point source pollution, regulated water abstraction and controlled development of infrastructure through the effective implementation of national legislation that takes into account the set environmental objectives.

Soft measures are based on gaps that have been identified during the development of the EPIRB Project RBMPs and aim to support the competent authorities of the beneficiary countries to better plan towards full WFD compliance. Soft measures may e.g. include the improvement of monitoring networks and programmes to comply with the requirements of the EU WFD (addressing all biological quality elements); improve water status assessment, undertake WFD intercalibration; validate the abiotic typology with biological monitoring; align national legislation to WFD requirements including the permit and licencing process, adapt technical and personnel capacities to enable full WFD implementation.

Once the measures types will be allocated the detailing of the basic and supplementary measures can be undertaken. Full use will be made on the elaborated overview on national legislations that

supports the achievement of WFD environmental objectives and that has been screened and compiled before (see **Chapter 4.2.1**).

4.2.6 Consider feasibility and effectiveness for measure implementation

When developing the PoM, certain aspect regarding implementation feasibility and effectiveness should be taken in into account including (i) technically feasibility of measures and (ii) highest possible effectiveness to achieve environmental objectives in relation to time and costs. These aspects relate to individual measure but also the PoM as a whole.

4.2.7 Allocate cost estimates and possible financing sources

Realistically it will be difficult to allocate exact costs to the proposed measures as this is usually up to the competent authorities in each country. However, as far as feasible it is recommended to give rough cost estimations for each measure but highlight that the estimations need to be verified and/or further elaborated by the competent authorities.

In any case, it is highly recommended to indicate possible funding sources for the measures referring to national, local and/or regional options as well as to international and EU funding sources. This information will be very valuable for each beneficiary country to undertake related planning towards measure implementation.

4.2.8 Allocate the measures to a timeline and consider exemptions (WFD Article 4)

Set environmental objectives refer to the timeline of the six-year WFD planning cycles. When the measures of the PoM are in place they need to be aligned to this timeline of the planning cycles re-emphasising when the environmental objectives will be achieved.

As mentioned above, the timeline needs to take into account exemptions according to WFD Article 4, which – under certain conditions – allow that (i) environmental objectives will be achieved later than in the first WFD planning cycle (EU MS = after 2015) and (ii) for less stringent environmental objectives.

The role of exemption according to EU WFD Article 4 need to be discussed in the frame of the 3rd RBMP workshop in Minsk (Belarus) on 7 October 2014.

4.2.9 Propose implementation steps

The PoM is the heart piece of the RBMPs that are developed in the frame of the EPIRB Project. Its implications can help the competent authorities of the beneficiary countries to ensure future WFD compliant river basin management.

In this context it is proposed to present the PoM and its implications in such a way that they clearly show (i) the key basic measures to be taken including a cost estimate as well as soft measures as part of the supplementary measures (ii) what national legal adaptations might be needed towards full WFD compliance and (iii) what technical and personnel gaps might have to be filled.

4.3 Stepwise proposal for the development of PoMs within the EPIRB Project

While the previous chapters outline the basic principles on (i) setting environmental objectives, (ii) the principle EU WFD requirements to develop POMs and (iii) proposals for PoM development within the EPIRB Project pilot basins, this chapter very briefly summarises as well as outlines a stepwise proposal how to develop PoMs with EPIRB project:

STEP 1	Set environmental objectives for each water body taking into account exemptions.
STEP 2	Align national legislation that directly correspond to the other EU Directives outlined in Table 2 (specifically the UWWT Directive, Nitrates Directive, Drinking Water Directive, habitats Directive) in order to be used within the PoM as basic measures.
STEP 3	Identify basic and supplementary measures in principle that will be needed in principle to achieve the set environmental measures
STEP 4	<p>Align the identified basic and supplementary measures to the environmental objectives and the six-year planning cycles.</p> <p>The first planning cycles should focus on soft supplementary measures that aim at ensuring full WFD compliance.</p> <p>For basic measures priority should be given to the UWWT Directive, Nitrates Directive, Drinking Water Directive, Habitats Directive.</p> <p>A proposal how to align basic and supplementary measures to the environmental objectives is given in Table 5, which should be discussed in the frame of the 3rd RBMP workshop and then be further developed.</p>
STEP 5	Align cost estimates to the identified measures.

In addition to the above, **Table 5** presents a proposal how to align basic and supplementary measures to the set environmental objectives and six-year planning cycles following certain priority ranking.

This proposal is for discussion at the 3rd RBMP workshop in Minks (7 October 2014) and for further development afterward by the contractors in support of the EPIRB Project team.

Table 5: Proposal to align basic and supplementary measures to environmental objectives and the six year planning cycles for the PoMs within the EPIRB Project.

Water Status 2015	Environmental Objectives	Align Implementation of Basic and Supplementary Measures
Water bodies in high or good status in 2015	need the setting of environmental objectives and measures that maintain water status over all six-year planning cycles up to 2032 and beyond.	<ul style="list-style-type: none"> Identify basic measures based on other EU Directives and national legislation that ensure maintenance of water status and no further degradation.
Water bodies that are (i) at risk to fail the environmental objectives in 2015 or (ii) in moderate status in 2015	need the setting of environmental objectives within the first planning cycle (= by 2021): (i) to have WFD compliant status assessment in place or (ii) to achieve good status by 2021	<ul style="list-style-type: none"> Identify soft supplementary measures to ensure WFD compliance by 2021 specifically regarding monitoring programmes and status assessment but also regarding other aspects that will ensure WFD compliance (e.g. technical capacities; legal basis; intercalibration). Identify a high priority basic measures that are financially/technically feasible focusing on UWWT Directive, Nitrates Directive, Drinking Water Directive, Habitats Directive.
Water bodies that are (i) at risk to fail the environmental objectives in 2015 or (ii) in poor status in 2015	need the setting of environmental objectives: (i) to have WFD compliant status assessment in place within the first planning cycle (= by 2021) or (ii) to achieve moderate status by 2021 and good status by 2027	<ul style="list-style-type: none"> Identify basic measures to achieve the set environmental objectives by 2027. Further identify soft and other supplementary measures to ensure WFD compliance beyond the ones that have been implemented by 2021.
Water bodies that are (i) at risk to fail the environmental objectives in 2015 or (ii) in bad status in 2015	need the setting of environmental objectives: (i) to have WFD compliant status assessment in place within the first planning cycle (= by 2021) or (ii) to achieve moderate status by 2021; moderate or good status by 2027 and for sure good status by 2033.	<ul style="list-style-type: none"> Identify basic measures to achieve these environmental objectives. Further identify soft and other supplementary measures to ensure WFD compliance beyond the ones that have been implemented by 2027.