

Differences, similarities and choices in selecting and assessment of the supplementary measures in the PoM in Romania



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- General overview. Legislative background
- List of potential supplementary measures
- Choices and assessment of supplementary measures
- Approach on the selection of the supplementary measures
- Example of prioritizing



General overview. Background legislation

Article 11 WFD states the need to **build a programme of measures**:

"Each member state shall ensure the establishment for each river basin district, or for a part of an international river basin district within its territory, of a programme of measures, taking into account the results of the analysis required under article 5, in order to achieve the objectives established under article 4."

Each programme of measures shall include the "basic" measures specified in paragraph 3 and, where necessary, "supplementary" measures.



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General overview. Background legislation

Supplementary" measures are those measures designed and implemented in addition to the basic measures, with the aim of achieving the objectives established pursuant to Article 4. Part B of Annex VI contains a non-exclusive list of such measures.

Member States may also adopt **further supplementary measures** in order to provide for additional protection or improvement of the waters covered by this Directive, including in implementation of the relevant international agreements



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List pf potential supplementary measures

Annex VI – WFD - a non-exclusive list of supplementary measures which Member States within each River Basin District may choose to adopt as part of the Programme of Measures

- legislative instruments
- administrative instruments
- economic or fiscal instruments
- negotiated environmental agreements
- emission controls
- codes of good practice
- re-creation and restoration of wetlands areas



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List pf potential supplementary measures

- abstraction controls
- demand management measures, inter alia promotion of adapted agricultural production such as low water requiring crops in areas affected by drought
- efficiency and re-use measures, inter alia promotion of water efficient technologies in industry and water saving irrigation techniques
- construction projects
- desalination plants
- rehabilitation projects
- artificial recharge of aquifers
- educational projects
- research, development and demonstration projects
- other relevant measures



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Choices and assessment of supplementary measures

Before choices and assessment : —————→

? Role of supplementary measures in the frame of RBMP

In the WFD implementation process, the identification of necessary supplementary measures is a key issue and an important intermediate step in the preparation of a River Basin Management Plan (RBMP)

The supplementary measures must provide the means to fill gaps identified between the status reached by implementing basic measures and environmental objective during the initial status at district level.



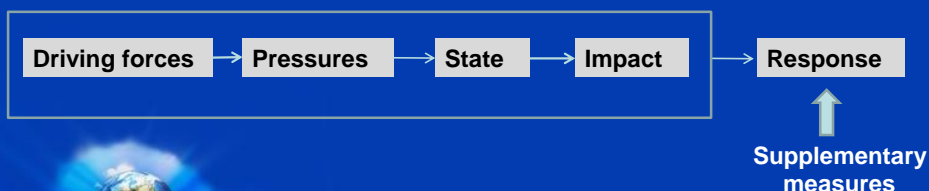
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Choices and assessment of supplementary measures

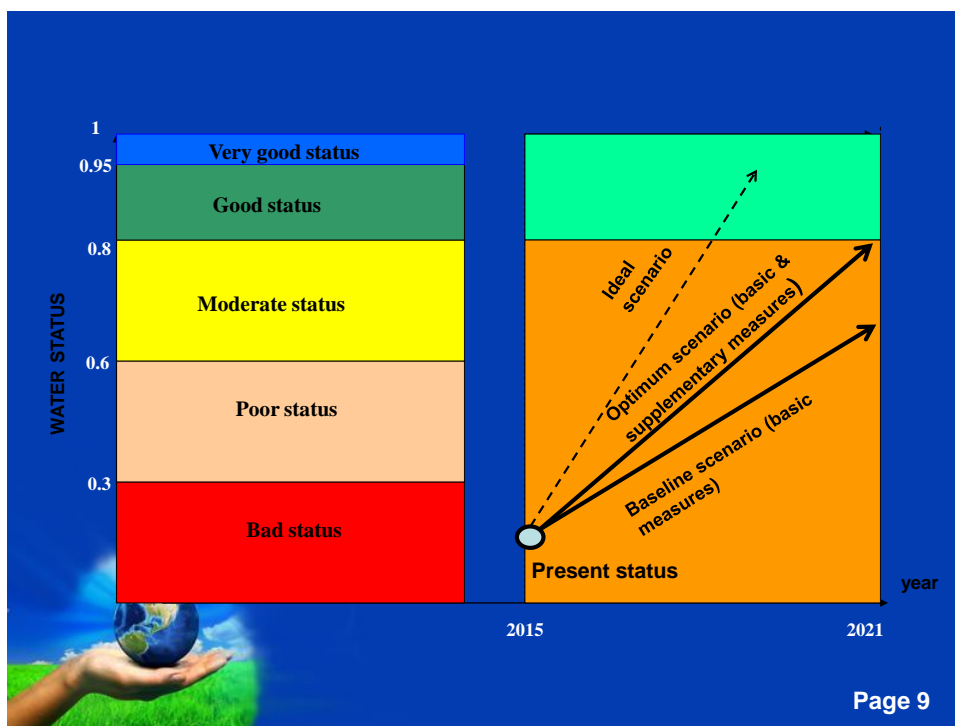
Before choices and assessment : —————→

? Role of supplementary measures in the frame of RBMP

In the spirit of the DPSIR scheme, the programme of measures (including supplementary ones) would represent the part of **R** of response



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Choices and assessment of supplementary measures

! The supplementary measures need to be **precise tasks that are clearly relevant to the final goal.**

! A supplementary measure is not to be considered as a general concept, but as a **pragmatic action** (structural, and non structural) established with the purpose of reaching an environmental objective.

! The **process of identification of supplementary measures should be pragmatic.** The including of supplementary in the preparation of the programme of measures should respect an overarching integrated approach in order to ensure that all significant issues are eventually taken into account.



Choices and assessment of supplementary measures

- ❑ When supplementary measures are needed to reach 2021 environmental objectives, **the active involvement of the interested parties** will guarantee the assessment of the technical feasibility, costs (marketable and non-marketable) and socio-economic impacts (including cross subsidies) of these measures.
- ❑ The **involvement of stakeholders** in the identification of supplementary measures will also make the identification of alternative and non-traditional measures easier. When the PoM is adopted, supplementary measures will have the same legal value as any basic measures.



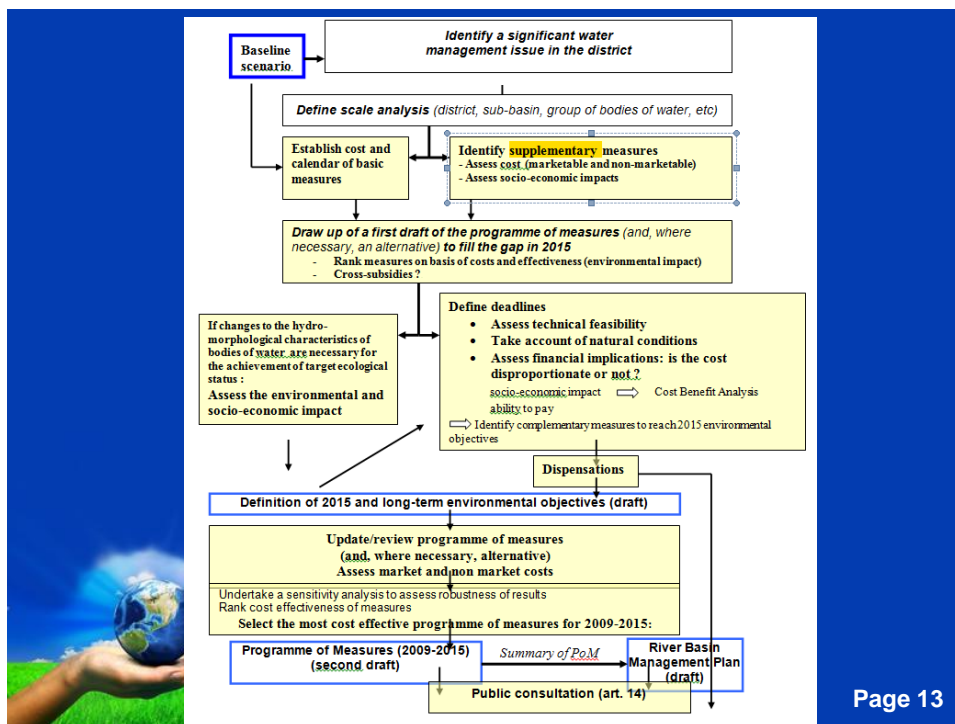
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Choices and assessment of supplementary measures

- ❑ Supplementary measures will be ranked according to their cost (both marketable and non-marketable) and their impact.
- ❑ The most cost efficient measures,, will be identified and a first draft of the programme of measures will be drawn up, along with an alternative. The target of this first draft of the programme of measures is to fill the gap in 2015.



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Choices and assessment of supplementary measures

Questions

- ☐ Is the list of supplementary measures complete or are there additional measures that need to be implemented to achieve compliance with the WFD requirements?
- ☐ Are any of the supplementary measures in fact basic measures?

Answers

- ☐ The supplementary measures need to be described in detail including information on specific local application which in most cases means its physical location, the water bodies that it affects, the expected effect

It should be known whether the river basin where the measure is applied is in compliance with all WFD requirements.

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Choices and assessment of supplementary measures

For example, if tertiary wastewater treatment is applied in a large city in a sensitive area, this is most likely a pre-WFD measure as this is a requirement of the Urban Wastewater Treatment Directive (UWWTD)

If applied in a small town or outside a sensitive area where it is not specifically required by the UWWTD, tertiary wastewater treatment is most likely a supplementary WFD measure as there is no requirement in the UWWTD to install tertiary treatment in these areas.



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Choices and assessment of supplementary measures

Ecological flow ? Why a basic measure ?

Many supplementary measures may be needed to support the achievement of WFD environmental objectives.

In many cases, the combination of hydrological measures (**ensuring the maintenance of ecological flows** by all abstractions and regulation) and morphological measures (improving the aquatic habitats in order to make them less vulnerable to flow impairments) may be the most cost-effective approach.

Protecting and restoring ecological flows, through the authorization process and regular – key measures in relation with reaching Good Ecological Status – Basic Measure



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Approach on the selection the supplementary measures

- ❑ In the beginning a significant number of supplementary measures has been identified...☺
But...we face a lot of problems ☹ technical feasibility, administrative
- ❑ In the process of selecting supplementary measures, the cost-effectiveness of competing alternatives (technical measure X vs. technical measure Y, technical measure vs. instrument, instrument X vs. instrument Y) should be considered.
- ❑ These considerations render a complex assessment of the different combinations of measures necessary, including both (constructing) as well as 'innovative' (e.g. renaturation of wetlands) measures.

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Approach on the selection the supplementary measures

It is recommended that the effectiveness of different supplementary measures not longer to be analyzed for individual parameters (such as P or N), but instead for an entire set of parameters, which together define good ecological status.

As a consequence, the development of appropriate programmes of measures becomes a highly complex issue that requires considering the various interactions between different factors influencing a water body.

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Approach on the selection the measures

SUPPLEMENTARY MEASURES

4 main categories was assessed in Romania

- ☐ *Restauration of longitudinal and lateral connectivity (fish migration facilities; ecological reconstruction of rivers; wetlands)*
- ☐ *Waste water infrastructure for human agglomeration less than 2000 p.e*
- ☐ *Agro-industrial measures (commune platforms for manures, extending the buffer zones)*
- ☐ *Regulatory actions (stringent limits for pollutants discharge)*



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Exemplification in Romania on selection/prioritization of supplementary measures

Classification /prioritization of supplementary measures

	Score Criteriu 1 Pollution reduction Chemical elements	Score Criteriu 2 Availability of financing sources	Score Criteriu 3 Contribution to fulfillment of other legal requirments	Score Criteriu 4 Impact on biological quality elements.	Total score 1-4	Score Criteriu 5 Level of investments	Cost effectiveness	Prioritization
New waste water infrastructure in 15 Localities less than 2000 p.e	3	3	3	2	11	3	0,273	2
Fish pass for 2 longitudinal interruption	3	2	1	3	9	2	0,222	4
Comunal manure platform (1)	2	2	2	1	7	3	0,429	1
Extend the buffer ziones (20 km)	2	2	2	2	8	2	0,250	3



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