

# **Lessons learned from the process elaboration of the 1<sup>st</sup> and 2<sup>nd</sup> Romanian River Basin Management Plans and 2027 deadline challenges for achieving the environmental objectives**

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- LEGEND**
- Danube River Basin District (DRBD)
  - Danube River
  - Tributaries (with catchment area > 4,000 km<sup>2</sup>)
  - Lake water bodies (with surface area > 100 km<sup>2</sup>)
  - Transitional water bodies
  - Coastal water bodies
  - Canals
  - Competent authority
  - National borders

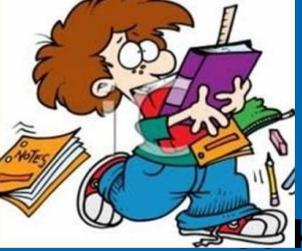
**Cities:**

- 100,000 - 250,000 inhabitants
- 250,000 - 1,000,000 inhabitants
- > 1,000,000 inhabitants

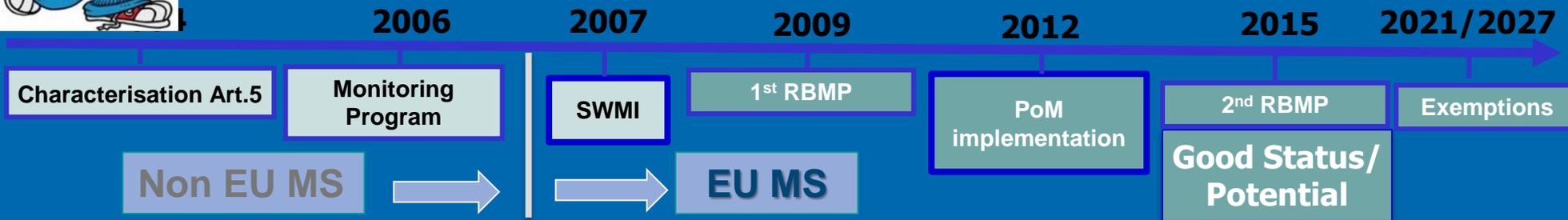
0 50 100 200 Kilometers

Scale: 1 : 4,500,000

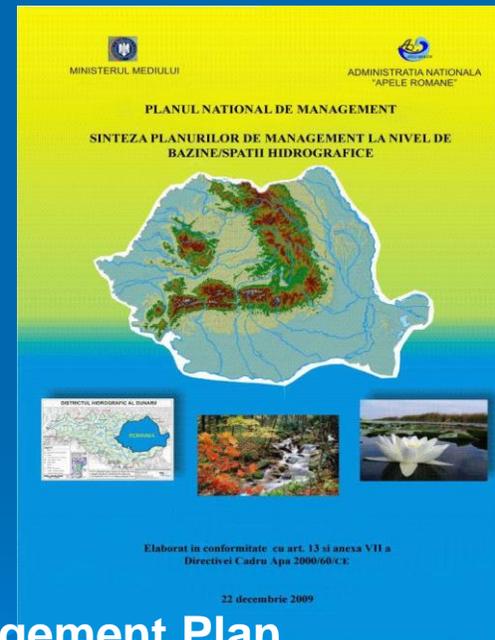
(Scale 1: 6,000,000 in A4 landscape paper format)



# RBMP development process



- 2009-2010: 1<sup>st</sup> RBMP was finalized and reported to EC
  - National Management Plan-synthesis at the national level of 11 River Basin Management Plans (RBMPs)
- 2012: Elaboration the interim report on PoM progress
- 2013:
  - Update of characteristics of the river basins, review of the environmental impact of human activity and economic analysis of water uses (Art. 5 of WFD)
  - Interim overview of significant water management issues
- 2014: Elaboration of the draft of the 2<sup>nd</sup> RBMPs and of the draft 2<sup>nd</sup> National Management Plan
- 2015: Elaboration of the 2<sup>nd</sup> RBMP and of the 2<sup>nd</sup> National Management Plan RBMP were presented, discussed and approved in the River Basin Committees
- 2016: Reporting to the EC, approval through GD



# Progress in the 2<sup>nd</sup> RBMP approach in comparison with the 1<sup>st</sup> RBMP

- Elements which are the basis for the 2<sup>nd</sup> RBMP:
  - same approach – strong points of the 1<sup>st</sup> RBMP kept
  - lessons learnt, bridging gaps and solving weaknesses of the 1<sup>st</sup> RBMP – improving knowledge base
  - main data and information used:
    - monitoring of first PoMs implementation
    - monitoring program



## Surface waters – main aspects

- Typology – biotic validation
- SWBs delineation and HMWB designation – updated
- Pressures and impact assessment: potential significant pressures definition, cumulative effect, WB level and sub-basin level (upstream and downstream), first inventory of priority substances emissions, discharges and losses → Driver Pressure State Impact Response approach with clear link between pressures, objectives and measures (updated risk assessment)
- Monitoring improvement: monitoring network further developed by increasing the number of monitored quality elements and parameters

# Lessons from the 1<sup>st</sup> and 2<sup>nd</sup> River Basin Management Plans

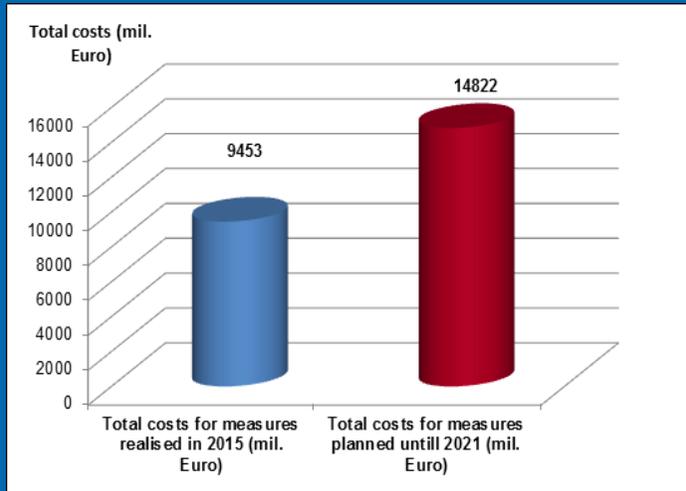
- ❑ The relationship between pressures-response and effectiveness of measures is a complex process, especially concerning hydromorphological pressures and biological quality elements due to:
  - ❖ approaches based in some cases on “*expert judgement*”( *suppose uncertainties, inaccuracy of the in-depth understanding of process*)
  - ❖ insufficient scientific knowledges
- ❑ The process is more complicated in the case of WBs with multiple pressures – aprox. 40% out of the SWBs with significant pressures are represented by WBs with multiple pressures (two or more pressures/WB)
- ❑ for all water bodies which do not reach good ecological status/good ecological potential in 2015 exemptions have been applied
- ❑ progress in the achieving the environmental objectives between planning cycles lead to reduction of exempted water bodies to ecological status
- ❑ RO approach: all WBs will reach their environmental objectives in 2027 estimation might be too ambitious
- ❑ the benefit of the restoration and mitigation measures addressing HYMO alterations is difficult to be assessed. The methodologies and case studies performed at European level are very different in terms of monetary assessment of the benefits
- ❑ additional measures addressing hydromorphological alterations are expected to be proposed, the costs will be significant higher due to their large investments costs (wetlands and floodplain conservation and restoration and fish facilities construction) disproportionate costs

*Result : it might be possible that not for all water bodies, their environmental objectives be reached up to/in 2027*

# Programme of Measures (1)

- ❑ **Driver-Pressure-State-Impact-Response (DPSIR) approach**
  - ✓ The measures are applied for drivers and pressures: Human agglomerations, Industrial activities, Agricultural activities, Hydromorphological alterations, Other activities
- ❑ **Basic measures – requirements for implementation and compliance with EU Directives**
  - measures for human agglomerations - building the drinking water and waste water infrastructure (*DWD, UWWTD and Sludge Directive*)
  - measures for industrial activities for reduction of industrial pollution, according to the IED permits and water management licenses requirements
  - measures for agricultural activities:
    - implementation of the provisions of Good Agriculture Practices Code and Action Programs - all territory approach under Nitrate Directive
    - reduction of pesticide emissions – implementation of the National Action Plan for pesticides
  - Hydromorphological measures regarding:
    - longitudinal continuity (for ensuring fish migration)
    - lateral continuity
    - establish the ecological flow for aquatic ecosystems
    - other measures and instruments
- ❑ **Other basic measures and supplementary measures**

# Programme of Measures (2)



**Almost 9.5 billion Euro has been spent in the 1st planning cycle implementation**

## Results:

- percentage of SWBs in GES/GEP has increased only by 6.71%
- percentage of SWBs in GCS has increased only by 4.43%
- the percentage of GWBs in GCS has increased only by 2.9%

- The DPSIR-approach is a cyclic, iterative and complex process:
  - new European legislative requirements - additional mandatory measures
  - continuous changes in assessment of the significant pressures and corresponding measures and their effect on environmental objectives of WBs
  - improvement of the monitoring data and the methodologies for assessment of the WBs status have consequences on changing of planned measures or adding new measures
- Insufficient knowledge on integrated environmental objectives (WFD, FD, MSFD, HSDs, etc)
- Not complete knowledge on impact of climate changes on each WB status and on necessary mitigation and adaptation measures
- Problems to convince stakeholders related to the needs for implementing certain measures - take more time than expected
- Planned costs for implementation of the measures can be affected by the macroeconomic context (i.e. recent crisis)

**Thank you for  
your attention!**

