

# Issues for integration in the WFD- MSFD applicable for Romania



**2<sup>nd</sup> Annual Meeting and the 3<sup>rd</sup> Screening Workshop at Pilot –  
Drina River Basin  
10-12 March 2015**

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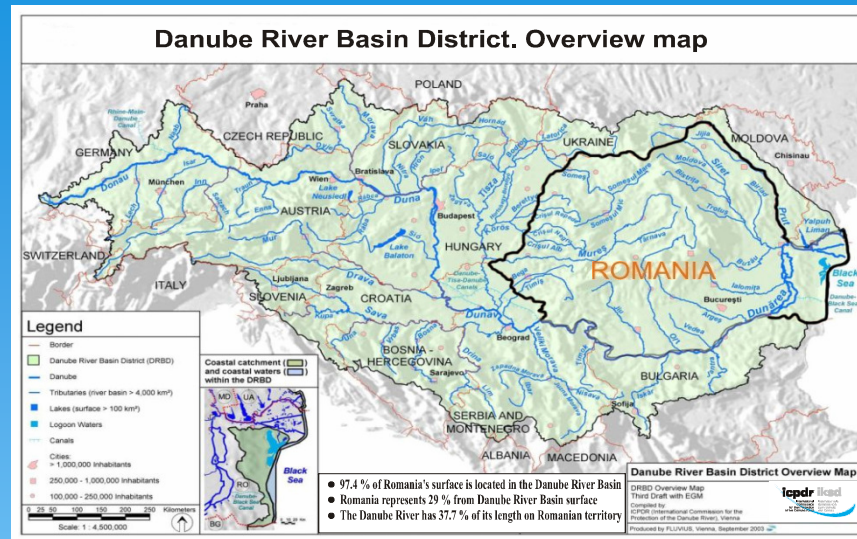
National Administration “Romanian Waters”

# CONTENT

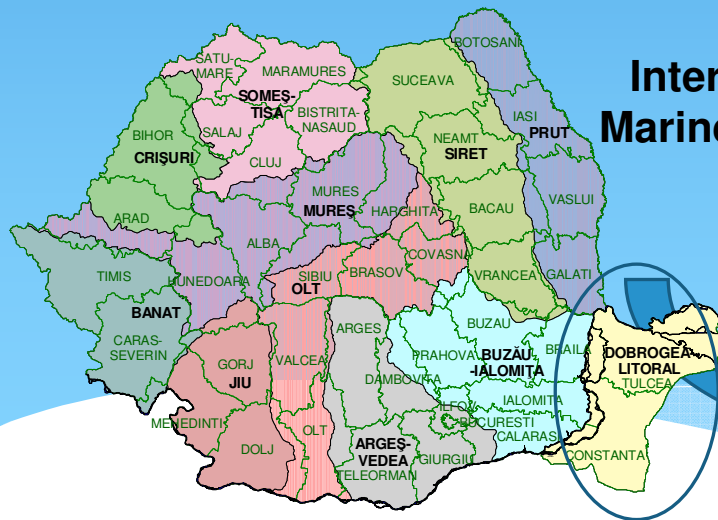


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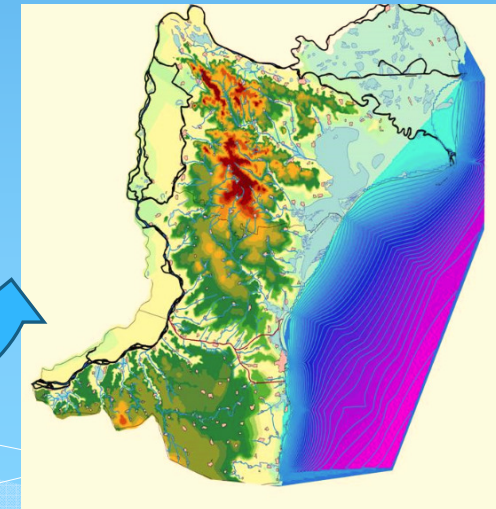
# General context



## International context






**Interested area: Coastal area,  
Marine Area , Hydrographic area  
Dobrogea**



# Requirements WFD- MSFD- ...BD



WFD 2000/60/EC 	MSFD 2008/56/EC 	BHD 2009/147/EC and 92/43/EEC 
Water Law 107/1996 s.a.	Law 205/2013	Law 49/2011
Analysis of the characteristics of the RBD, pressures and impacts and economic analysis of water use 2004, 2013 ✓ (and each 6 years thereafter)	Initial assessment (characteristics, pressures/impact, socio-economic analysis), determination of GEnS, ET 2012 (and each 6 years thereafter) ✓	Assessment of conservation status 2013 ✓ (and each 6 years thereafter)
Monitoring 2006 ✓	Monitoring 2014 ✗ <b>work in progress</b> ("Technical and administrative support for the joint implementation of the MSFD in Bulgaria and Romania")	
Measures 2009/2012 ✓ 2015 (and each 6 years thereafter)	Measures 2015/2016 (and each 6 years thereafter)	Assessment of effectiveness of measures 2013 (and each 6 years thereafter)
River Basin Management Plans (1 <sup>st</sup> cycle in 2009, draft of 2 <sup>nd</sup> cycle in 2014) ✓ 6 year reporting cycle	National marine strategy	National Biodiversity Strategy



## Overlaps WFD-MSFD(1)

- Environmental objectives:
  - Status objectives:
    - GS/GEP (WFD) – GEnS (MSFD);
    - protect and enhance/restore the status of aquatic ecosystems (WFD – MSFD).
  - Precautionary principle: prevent/reduce further deterioration of status (WFD) ~ preserve the marine environment (MSFD) ~ conserve the status for habitats and species directly depending on water (BHD)
- Geographical scale: WFD and MSFD address transitional, coastal and territorial waters
- **Economic assessment**



## Overlaps WFD-MSFD(2)

- **Assessment of pressures and impacts generated by anthropic activities:**
  - ☐ Nutrient and organic matter enrichment (MSFD – WFD – indirectly for BHD)
  - ☐ Contamination by hazardous substances (MSFD – WFD – indirectly for BHD)
- **Quality elements/descriptors for the status assessment:**
  - ☐ Water dependent species
    - ✓ Phytoplankton (WFD – MSFD)
    - ✓ Macroalgae, Angiosperms, Macroinvertebrates, Fish (WFD – BHD - MSFD)
    - ✓ Reptiles (MSFD – BHD)
    - ✓ Birds (MSFD – BHD)
    - ✓ Marine mammals (MSFD – BHD)



## Overlaps WFD – MSFD (3)



- ☐ Hydromorphology (WFD – BHD – MSFD)
- ☐ Physico-chemical and chemical parameters (WFD – MSFD)
- **Protected areas** (WFD: Register of protected areas for abstraction of drinking water, for aquatic species important from economic point of view, for habitats and species where water is an important factor, for vulnerable and sensitive zones, for bathing waters)
- **The program of measures:** measures taken under WFD for land based pressures and riverine input (e.g. contamination by hazardous substances) will contribute to reaching GEnS under the MSFD ➡ see WFD and MSFD example on reporting of Programmes of Measures



## Economic importance for water uses (WFD) vs Initial assessment of marine environment (MSFD)

WFD



Assess how important water is for the economy and socio-economic development of the river basin district. It will provide the river basin's economic profile in terms of general indicators, e.g. economic turnover, **GDP, GVA, employment, Production Values**, water abstracted volume

MSFD

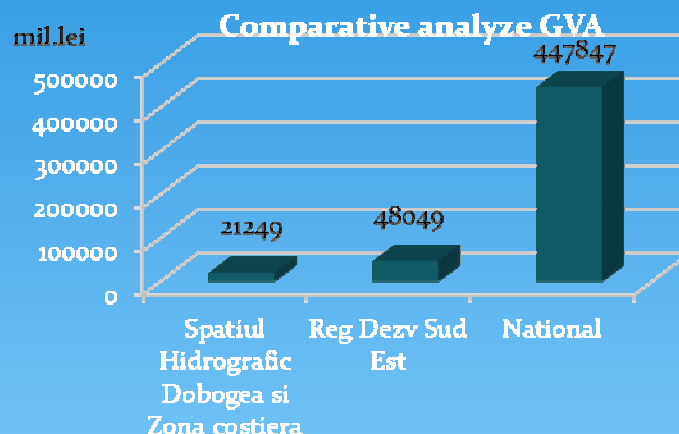
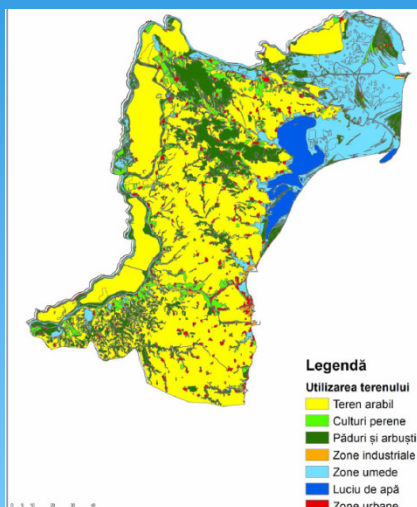


Assess the impact of use of marine environment on marine related economic activities including the positive and negative impact. Users of marine environment are subject of economic analyze based on **macroeconomic indicators (GDP, GVA, Production Values..)**



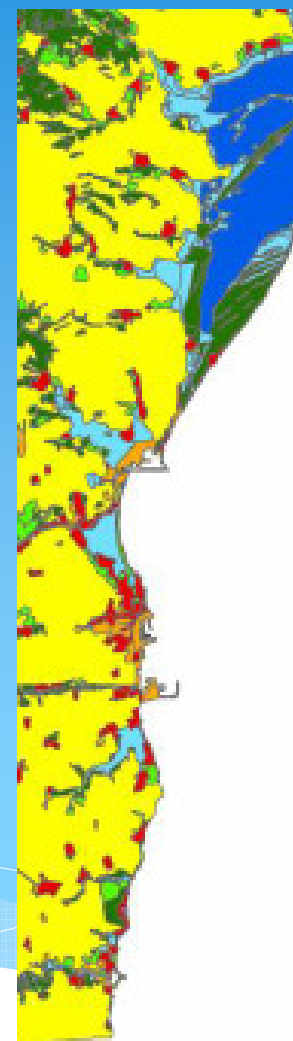


# Economic importance for water uses (WFD) vs Initial assessment of marine environment (MSFD)



Hydrographic area  
Dobrogea - Litoral

Nr.Crt	County	Surface (km <sup>2</sup> )	Populațion 2008	Population 2009	Population 2010
1	Constanța	7.071	718.330	722.360	723.796
2	Tulcea	3.742	235.641	247.444	245.899
3	Brăila	996	4.895	5.000	5.000
4	TOTAL	11809	958.866	974.884	974.965



# Pressures and measures (WFD/MSFD)



Pressures	Economic activity	Subactivities/ Use the marine waters
Biological disturbance	Fishery	Capture of living resources Fish/Shelfish
Physical damages	Antropic structures	Flood protection for coastal area Harbors operations Location and operation of offshore structures (other than energy production) Oil/natural gas extraction
Other physical disturbance	Transport	Marine transport Marine liters
	Turism	Turism and recreation
	Ships constructions	
Nutrients and organic substances discharge	Human agglomerations //Industry /Agriculture	Industrial waste water discharge Waste water discharge from municipalities Nutrients discharge from Danube
Contamination with Hazardous substances	Industry	Hazardous substances discharge from Danube.

# Pressures and measures (WFD/MSFD)



## ! International context : Significant water management issues in the DRBD

Significant Water Management Issues were identified for the DRBD represent pressures having a significant impact at the basin-wide level;

- Organic pollution
- Nutrient pollution
- Hazardous substances pollution
- Hydro morphological alterations

# Organic pollution

670000 tons/year - COD

280000 tons/year - BOD

## Secondary treatment class

18% - BOD

21% - COD

## Tertiary treatment

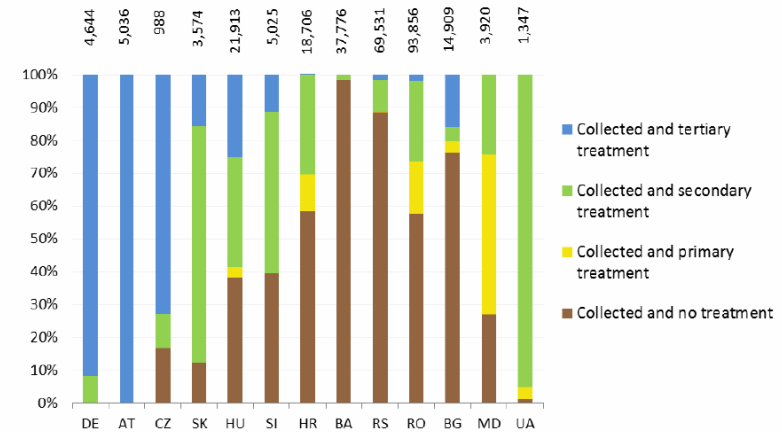
8% - BOD

15% - COD

## Collecting systems without treatment

67% - BOD

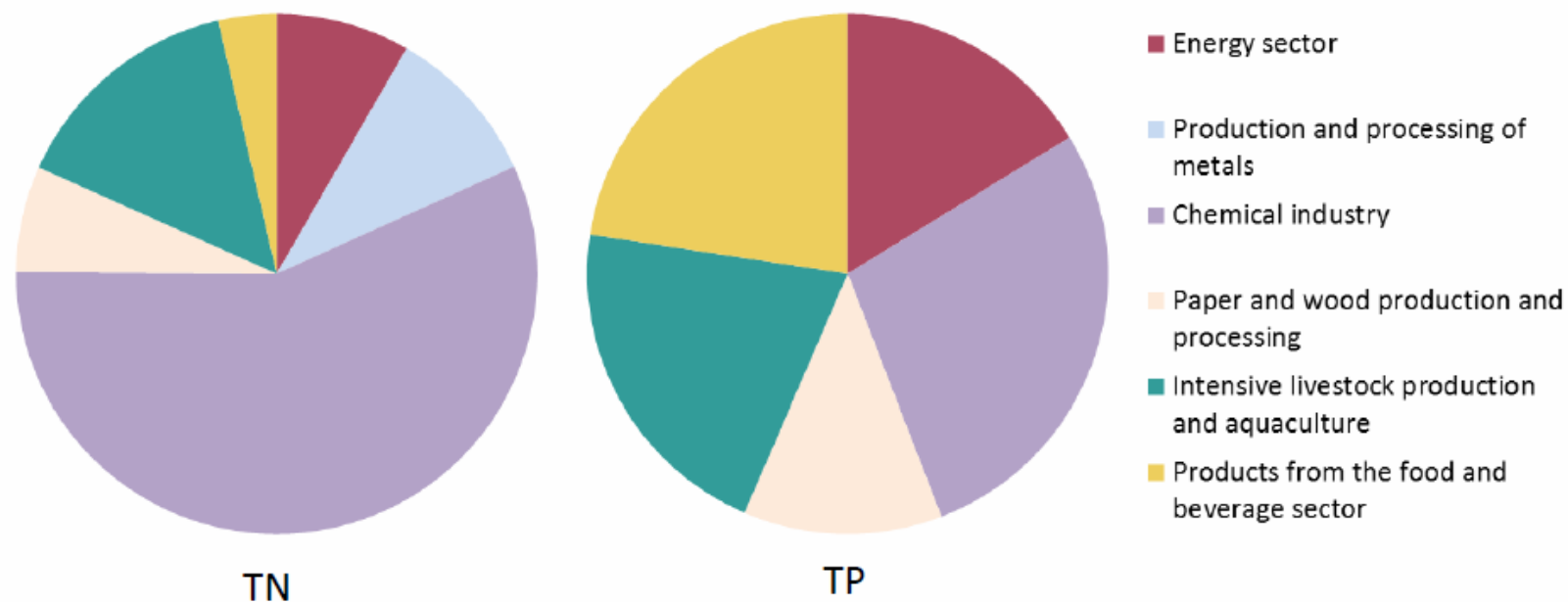
Figure 9: Share of the collection and treatment stages in the total organic pollution of the surface waters via urban waste water in the Danube countries (reference year: 2009/2010, absolute numbers on the top refer to tons BOD per year)



Taking into account that these agglomerations represent only 13% of the total PE and 10% of the total number of agglomerations in the basin, implementation of measures for a relatively small proportion of the agglomerations can result in substantial progress

## Nutrient pollution

Figure 14: Share of the industrial activities in the total nutrient pollution via direct industrial waste water discharges in the Danube Basin (reference year: 2010/2011); on the left: TN, on the right: TP



- For the nitrogen, the chemical industry has the highest importance emitting almost 60% of the total discharges

## Nutrient pollution

The long-term average (2000-2008) observed river loads estimated from river discharge and nutrient concentration data at the river mouth (station Reni) are 510,000 tons per year (TN) and 25,000 tons per year (TP).

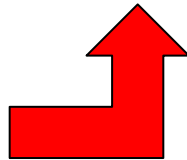
➡ higher than that of the early 1960ies representing the desired load targets (TN: 300,000 tons per year, TP: 20,000 tons per year), which means a TN and TP load reduction need of 40% and 20%, respectively. This requires further decrease of both, the point source and diffuse emissions generated in the Danube basin.

# Hazardous substances

- Annex X – WFD (priority substances)
- Annex VIII – WFD (other specific pollutants);
- Annex I MSFD

■ Point sources

■ Difuse sources



## Activities to fill gap data:

- JDS 3 (provides essential information on the relevance of these substances resulting in a much clearer picture on the pollution problem relevant substances and their magnitude).
- inventory of emissions, discharges and losses of the priority substances;
- measures under implementation in the waste water, industrial and agricultural sectors (BAT, regulated use of sewage sludge ..)

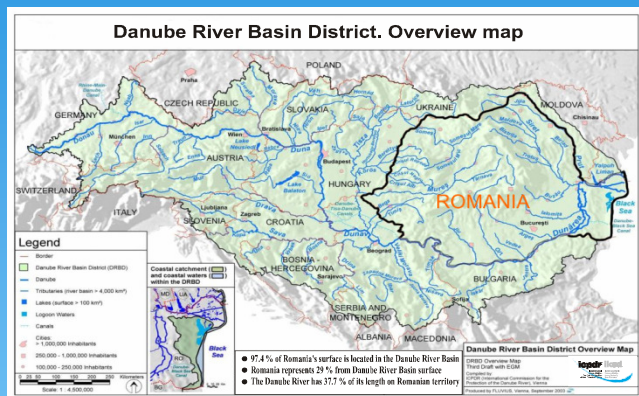


# Pressures and measures (WFD-MSFD)

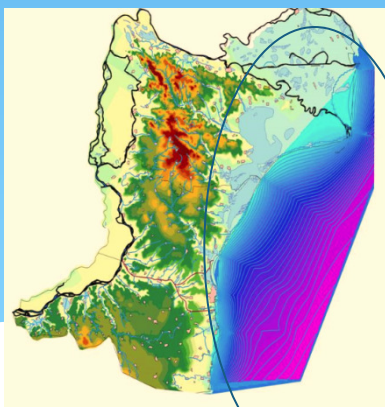


## ! National context

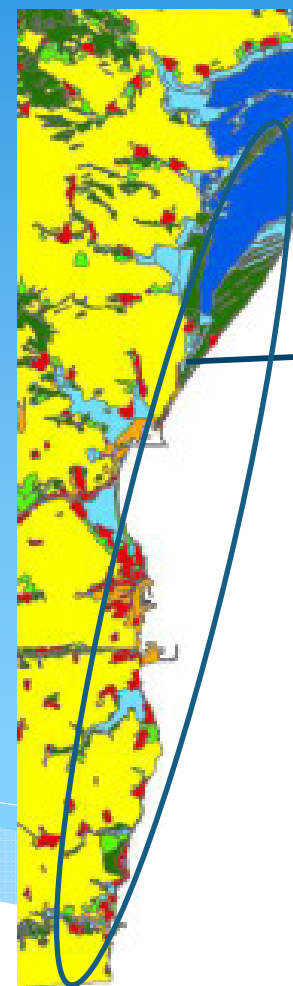
3 types of measures are relevant for WFD&MSFD



→ Danube



→ Marine area



Coastal and transitional WB

# Program of measures (WFD-MSFD)



## Coastal and transitional water bodies (1)

Draft of Dobrogea Litoral River Basin Management Plan contains **measures applied** in order to reduce the impact of significant pressures on coastal and transitional waters

### List of measures:

✓ Human agglomerations (comply with requirements of UWWT Directive 91/271/ECC):

✓ Measures for improvement and extension of industrial WWTPs for decreasing the discharged pollutants loads

✓ Measures for conservation of morphological status of Black Sea Shore

✓ Measures for wastewaters and wastes management in the harbor (first version of the Master Plan for Constanța harbor)

# Program of measures (WFD-MSFD)



## Coastal and transitional water bodies (2)

- ✓ **Monitoring of protected areas in order to assure the quality of marine waters for:**
  - breeding and exploitation of shellfish
  - bathing areas
- ✓ **Measures for conservation of natural habitat and species (Habitats and Birds Directives)**

Measures for reaching the conservation objectives of protected species and habitats (Natura 2000 sites, Danube Biosphere) by development and implementation of **management plans for natural protected areas in marine zones**

# Program of measures (WFD-MSFD)



## Coastal and transitional water bodies (3)

### Instruments:

- **Regulatory acts for permitting and input control** (International Convention on pollution prevention from ships - MARPOL 73/78, national legislation)
  -
- **Plan for improvement of availability and utility of waste collecting and processing plants in harbors**
- **Designation legal acts for protection of the marine natural reserves** (example: for Marine - Seaside 2 Mai - Vama Veche Reserve)

# Issues for further discussions

- ❑ Integration of all information and coordination of common issues under the 3 pieces of legislations are crucial in order to identify if additional actions are needed.

👉 solutions could be found such as...



- a common understanding of all aspects by all the actors;
- a common database ideally;
- MSFD as an integrative tool ?

BUT ..... implementation is not easy ...



Thank you for your attention

