

Presentation of the measures envisaged by Romania in order to implement WFD objectives for Black Sea Convention and for MSFD

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❑ General overview synergies WFD - MSFD

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 ☞ work in progress (“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 st cycle in 2009, draft of 2 nd cycle in 2014) ✓ 6 year reporting cycle	National marine strategy	National Biodiversity Strategy

❑ Differences: WFD vs MSFD

- Scale of assessment/reporting
 - ❑ WFD:
 - water bodies/river basin/district
 - ❑ MSFD:
 - Marine region, but this may vary by topic (use of subdivisions); covers also the exclusive economic zone
- Good status, baseline and targets
 - ❑ WFD: reference conditions and boundary setting – inter-calibration
 - ❑ MSFD: no specific approach and MS has to define GEnS/targets
- MSFD is broader, covering a greater range of **biodiversity** components and pressures

□ General overview synergies WFD - MSFD

Pressures	Economic activity	Subaactivities/ 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 coastal area/Danube

❑ Black Sea Convention & MSFD & WFD

- act with a view to achieve progress in the protection of the marine environment of the Black Sea and in the conservation of its living resources,
- Conscious of the importance of the economic, social and health values of the marine environment of the Black Sea,
- Convinced that the natural resources and amenities of the Black Sea can be preserved primarily through joint efforts of the Black Sea countries,
- Taking into account the generally accepted rules and regulations of international law,
- Having in mind the principles, customs and rules of general international law regulating the protection and preservation of the marine environment and the conservation of the living resources thereof,
- Taking into account the relevant provisions of the Convention on Prevention of Marine Pollution by Dumping of Wastes and Other Matter of 1972 as amended; the International Convention on Prevention of Pollution from Ships of 1973 as modified by the Protocol of 1978 relating thereto as amended; the Convention on Control of Transboundary Movement of Hazardous Wastes and Their Disposal of 1989 and the International Convention on Oil Pollution Preparedness, Response and Cooperation of 1990,

❑ Black Sea Convention & MSFD & WFD

- Taking into account their interest in the conservation, exploitation and development of the bio-productive potential of the Black Sea,
- Bearing in mind that the Black Sea coast is a major international resort area where Black Sea Countries have made large investments in public health and tourism,
- Taking into account the special hydrological and ecological characteristics of the Black Sea and the hypersensitivity of its flora and fauna to changes in the temperature and composition of the sea water,
- Noting that pollution of the marine environment of Black Sea also emanates from land-based sources in other countries of Europe, mainly through rivers,
- Reaffirming their readiness to cooperate in the preservation of the marine environment of the Black Sea and the protection of its living resources against pollution,
- Noting the necessity of scientific, technical and technological cooperation for the attainment of the purposes of the Convention,
- Noting that existing international agreements do not cover all aspects of pollution of the marine environment of the Black Sea emanating from third countries,

Realizing the need for close cooperation with competent international

❑ Program of measures in relation with coastal and transitional water bodies

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:

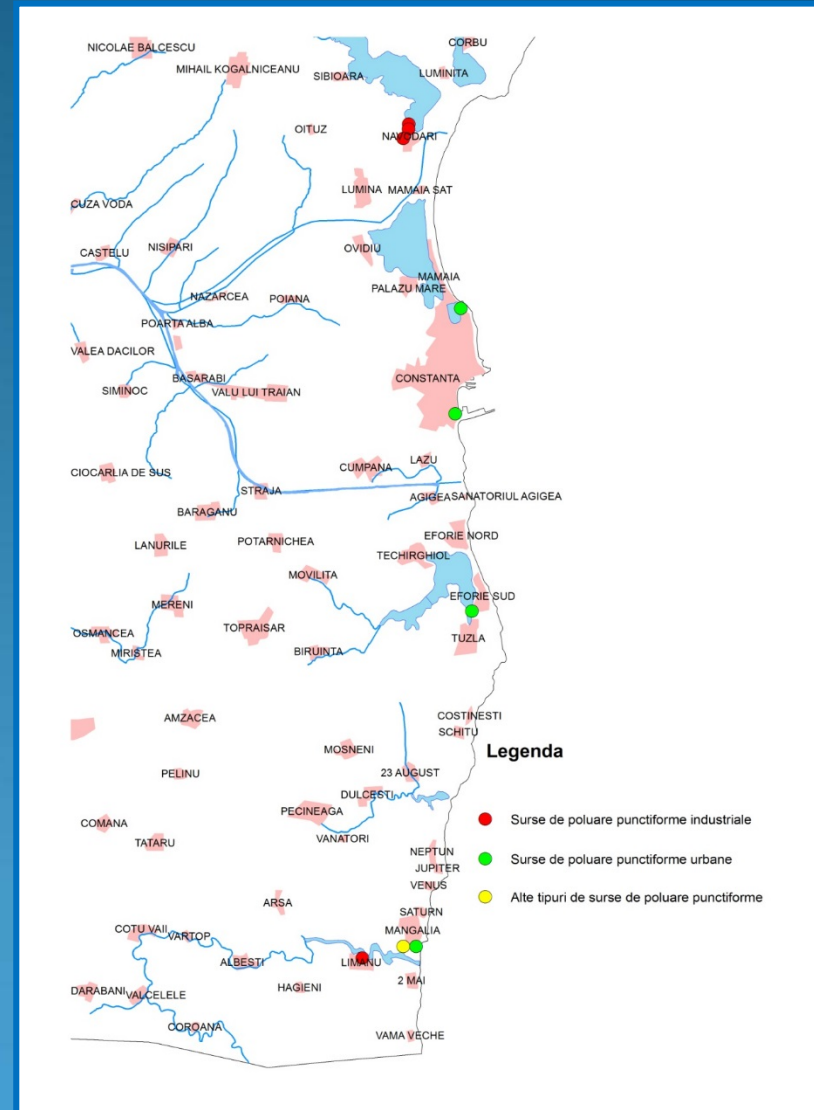
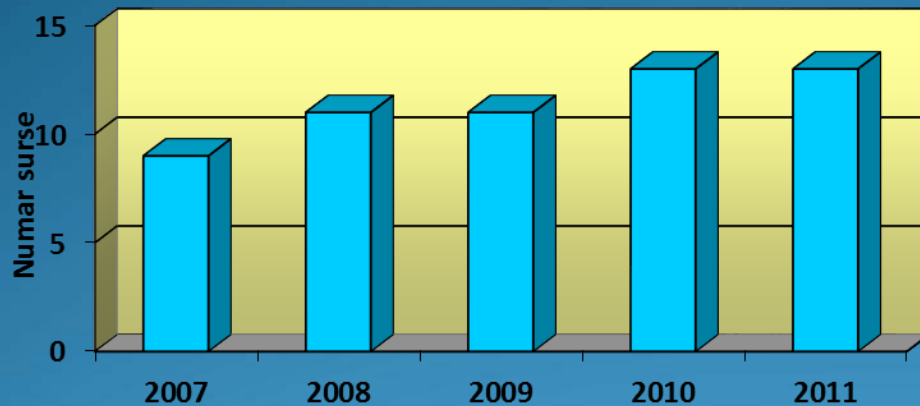
✓ Human agglomerations *(comply with requirements of UWWT Directive 91/271/ECC):*

- Rehabilitation and extension of sewage network in agglomerations with more than 10.000 p.e.
- Construction new sewage networks for collecting waste waters in agglomerations wit less than 10.000 p.e., especially in agglomeration which will be connected to the big UWWTPs
- Modernization of WWTP (tertiary treatment) on human agglomeration level in order to reduce the nutrients and organic substances discharged
- Increasing the connection levels to the collecting and treatment systems (fully comply)

Program of measures in relation with coastal and transitional water bodies

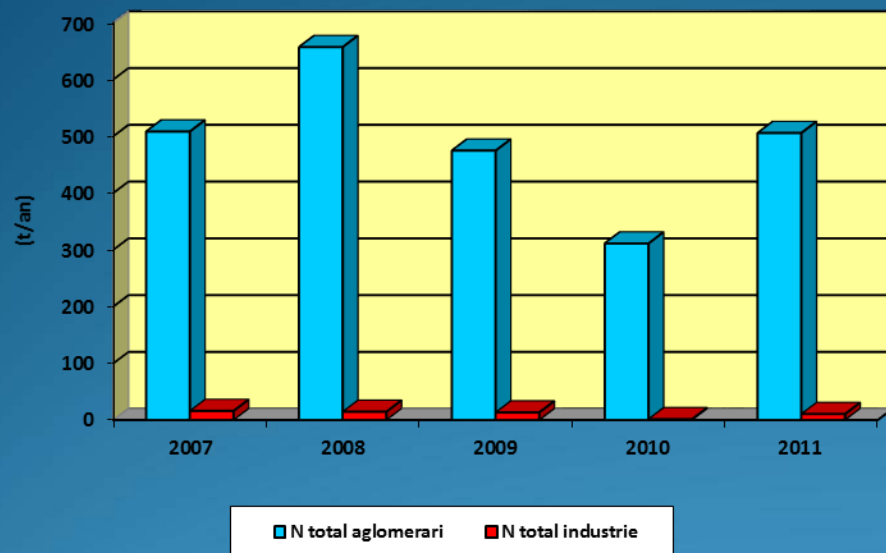
- ✓ Measures for improvement and extension of industrial WWTPs for decreasing the discharged pollutants loads (5 industrial units non complying with requirements of IED – plans for reduction or phasing out of emissions, discharges and losses of the priority substances)
- ✓ Measures for conservation of morphological status of Black Sea Shore
 - implementation of works included in the Master Plan for protection and rehabilitation of coastal zone for reduction of coastal erosion
 - development works for improvement of the sediment flow transported by Danube through Sulina and Chilia branches
- ✓ Measures for wastewaters and wastes management in the harbor (first version of the Master Plan for Constanța harbor)

Point Pollution sources 2007-2011

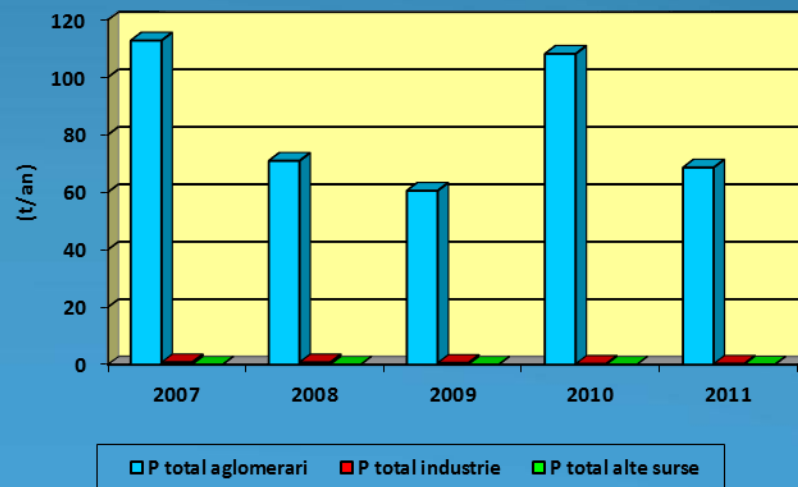


Point pollution sources on CW classified on water user categories Urban, industrial, other

Total N load 2007-2011



Total P load 2007-2011

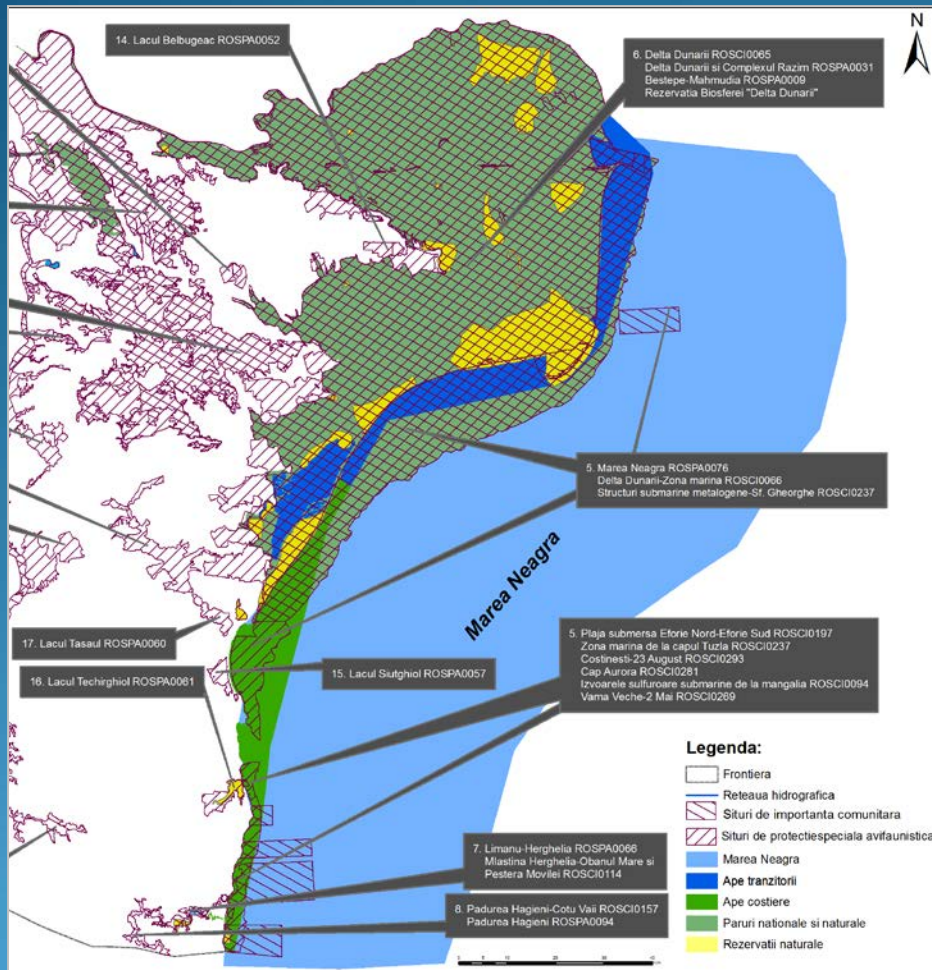


Program of measures in relation with coastal and transitional water bodies

✓ 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**

Protected species and habitats (Natura 2000 sites, Danube Biosphere)



ROTT03_B1 Chilia-Periboina

ROSPA0076 Black Sea

ROSCI0066 Danube Delta- marine zone

Biosphere Danube Delta Reserve

ROTT02_B1 Sinoe

ROSPA0031 Danube Delta and Razim – Sinoe Complex

ROSCI0065 Danube Delta

Biosphere Danube Delta Reserve

Natural Reserve Grindul Lupilor

Natural Reserve Grindul Chituc

Natural Reserve Cetatea Histria

ROCT01_B1 Periboina-Cap Singol

ROSPA0076 Black Sea

ROSCI0066 Danube Delta- marine zone

Biosphere Danube Delta Reserve

ROCT02_B1 Cap Singol-Eforie Nord

ROSPA0076 Black Sea

ROCT02_B2 Eforie Nord-Vama Veche

ROSCI0269 Vama Veche - 2 Mai

ROSPA0076 Black Sea

ROSCI0094 Submarine sulphurous springs Mangalia

ROSCI0281 Cap Aurora

ROSCI0293 Costinesti - 23 August

ROSCI0273 Marine Zone Capul Tuzla

ROSCI0197 Submersed beach Eforie Nord - Eforie Sud

Natural Reserve Vama Veche – 2 Mai

Program of measures in relation with coastal and transitional water bodies

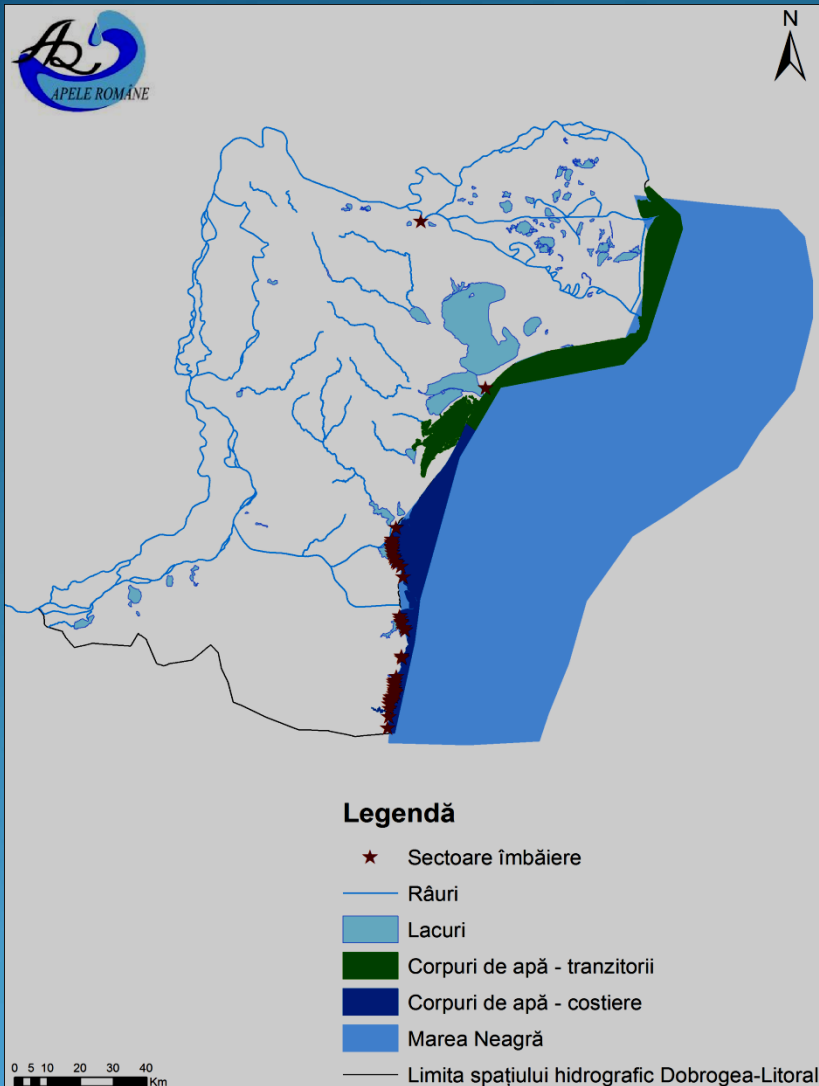
- ✓ **Monitoring of protected areas in order to assure the quality of marine waters for:**
 - breeding and exploitation of shellfish
 - bathing areas

Marine zones for breeding and exploitation of shellfish



- 4 marine zones for breeding and exploitation of shellfish (567 Mm²) between Sulina and Mangalia sea side
- *Mytilus* and *Rapana* – main species which has economic interest for human consumption
- Monitoring of the marine water quality for assuring the normal reproduction of shellfish and proper condition for feeding (National Institute for Marine Research and Development „Grigore Antipa”)

Bathing areas



- ✓ 50 bathing areas lying from Gura Portiței to Vama Veche
- ✓ Bathing seasonal period - 106 days (1st June – 15th September)
- ✓ Full complying with the mandatory values for parameters
- ✓ Public Health Directorate Constanta – monitoring, assessment and public information and awareness

Program of measures in relation with coastal and transitional water bodies

Instruments:

- **Regulatory acts for permitting and input control** (International Convention on pollution prevention from ships - MARPOL 73/78, national legislation)
 - forbidden the discharges of not treated waste waters from ships directly into Black Sea;
 - decreasing the discharged wastes from ships and product residues
 - reduction of accidental pollution risks from discharges of contaminants in the marine waters
- **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)

Program of measures in DRBMP – JPM

The Danube countries committed themselves in the DRPC, inter alia, to implement measures to reduce the pollution loads entering the Black Sea from sources in the Danube River Basin District.

- The measures applied at the basin-wide level for the reduction of organic and nutrient pollution and hazardous substances pollution will contribute to the **improvement of the Black Sea status**;
- It is based on the national programs of measures, which shall be made operational by December 2018, and describes the expected improvements in water status by 2021;

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

- **Organic pollution** from urban waste water, industry and agricultural point sources

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)

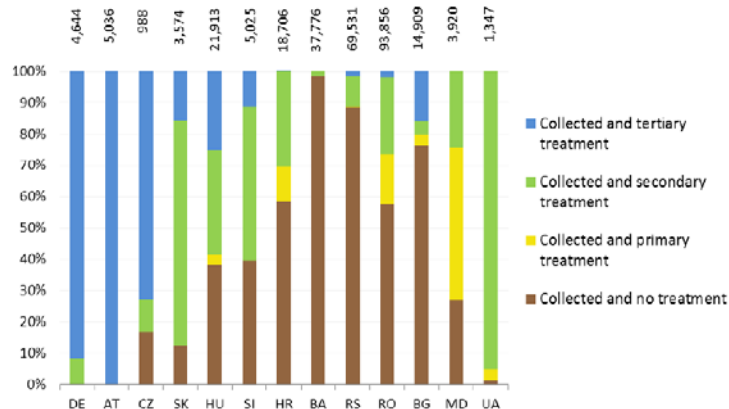
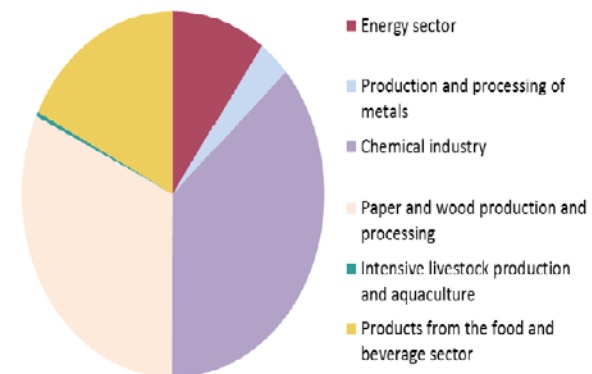


Figure 10: Share of the industrial sectors in the total organic pollution via direct industrial discharges in the Danube Basin (reference year: 2010/2011)



➤ **Nutrient pollution**

- Nutrient pollution from urban waste water
- Nutrient pollution from industry and agricultural point sources

Figure 12: Share of the collection and treatment stages in the total nutrient pollution of surface waters via urban waste water in the Danube Basin (reference year: 2010/2011); on the left: TN, on the right: TP

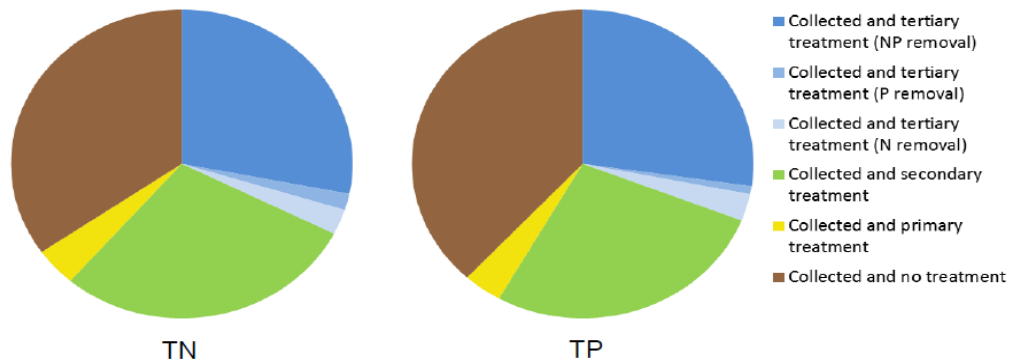
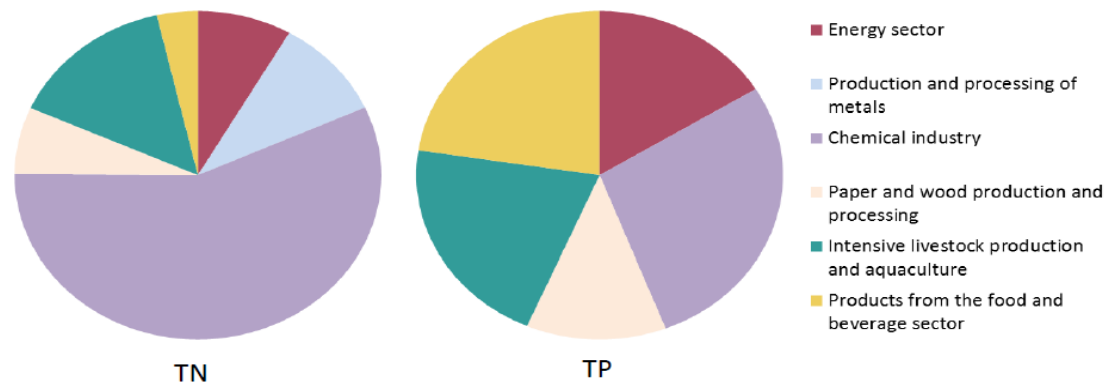


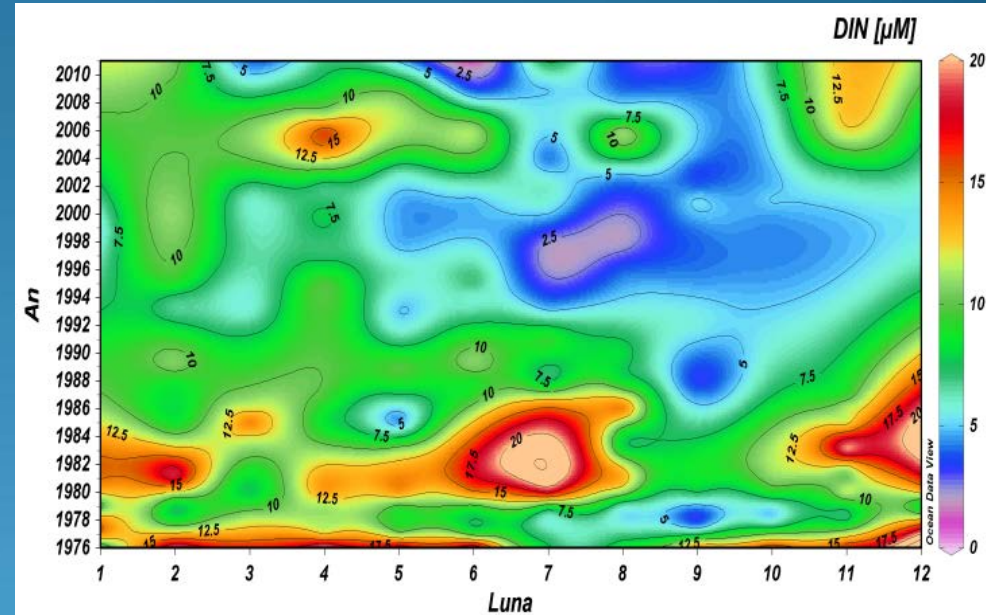
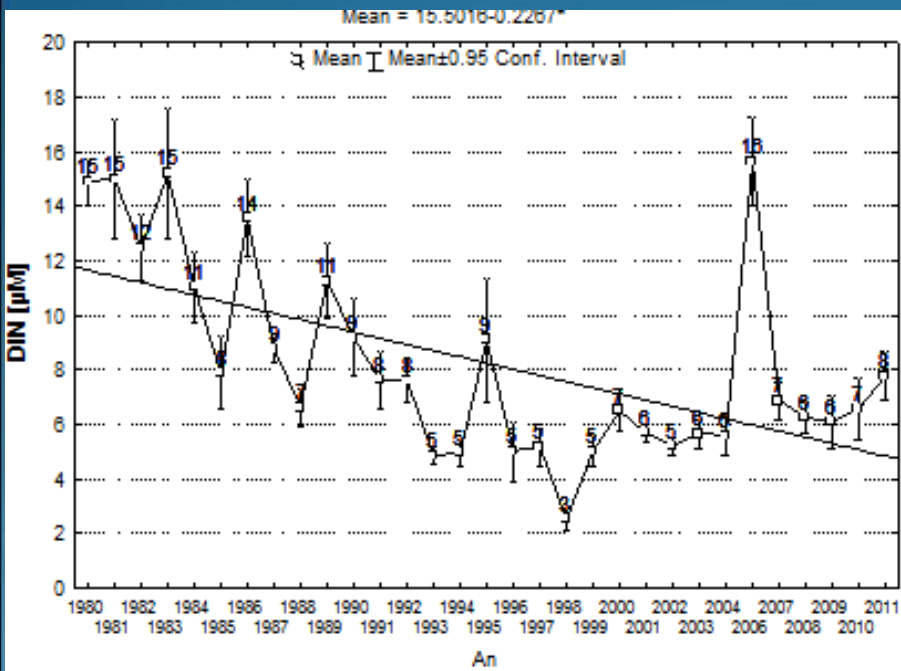
Figure 14: Share of the industrial activities in the total nutrient pollution via direct industrial waste water discharges in the Danube Basin (reference year: 2010/2011); on the left: TN, on the right: TP



Measures for reduction of the nutrient and organic pollution

- **Continuing the process of measures** implementation in urban waste water, industrial, production and agricultural sectors is necessary in the next WFD implementation stage.
- Since the Black Sea was significantly suffering from **eutrophication and the coastal areas** have been designated as a sensitive area under the UWWTD, **more stringent treatment technology than secondary treatment is needed at least at the medium-sized and large treatment plants;**
- **Application of phosphate-free detergents** in laundry is a great example for source control by reducing phosphorus inputs from laundry waste waters. Introduction of phosphate-free detergents is considered to be a fast and efficient measure to reduce phosphorus emissions into surface waters

On long term 1990-2011 there is a decreasing in Trend DIN (Dissolved Inorganic Nitrogen) comparable with level of 1990. In



➤ ***Hazardous substances***

- Involves contamination with priority substances laid down in Annex X of the WFD and other specific pollutants listed in Annex VIII of the WFD that might be toxic and have regional relevance.
- They include both inorganic and organic micro-pollutants
- Hazardous substances can be emitted from both point and diffuse sources.

Key findings

- Important steps to fill the existing data gaps
- The recent ICPDR investigations (particularly those related to the current JDS 3) on the priority and other hazardous substances have provided essential information on the relevance of these substances resulting in a much clearer picture on the pollution problem (relevant substances and their magnitude) than ever before.
- Elaboration of an inventory of emissions, discharges and losses of the priority substances can help to close information gaps on the sources.

Measures for reduction of the hazardous substances pollution.

- Appropriate treatment of urban waste water and application of BAT in the industrial plants and large agricultural farms are elementary measures and can significantly contribute to the mitigation of hazardous contaminations.
- Implementation of the UWWTD and IED is also highly beneficial for the reduction of hazardous substances pollution – plan for reduction of emissions, discharges and losses of the priority substances.
- Further efforts are needed to **compile the national inventories on discharges, emissions and losses in a comparable and coordinated way and develop a strategy** to improve and harmonize the approach for the elaboration of the inventory.

❑ Existing measures (EU legislation)

Law 17/2002 republished in 2014 regarding the legal regime of marine waters, territorial contigue zone and economic exclusive zone of Romania

**Regulations in relation with commercial fishery –
Establishing the periods and prohibition zones and also
protect zones for aquatic resources**

□ New Measures (RO-BG)

Descriptor	Long-list measures (outcome of CBE1)	Regional measures (new)	National measures BG (new)	National measures RO (new)	Valid for Bg/Ro/both	Relative importance of driver/source/activity (size/intensity)	Relative importance of driver/source to reduce pressure (1-5)	Expected effectiveness of type of measure (1-5)
D3-Commercial fish-stocks								
D3-Commercial fish-stocks	Limiting the impact of fishing on the marine environment (technical improvements to mitigate the impact on marine environment, e.g. mesh size restrictions) Aim: to achieve MSY	X	X	x	both	5	5	5
D3-Commercial fish-stocks	Amendment of the existing legislation regarding control activities and data collection on the catch and landings at fishing ports/landing spots and observation on board at-sea observers to quantify the amount of bycatch and discarding (to be specified).	X	X	x	both	5	5	3
D3-Commercial fish-stocks	Multiaannual management plan for certain stocks	X	X	x	both	5	5	3
D3-Commercial fish-stocks	Bilaterally adaptive measures for fisheries management	X	X	x	both	5	5	3
D3-Commercial fish-stocks	Control on use of turbot gillnets (material,mesh size and tickness)				both	5	3	3
D3-Commercial fish-stocks	Diversification into other maritime sectors (to stimulate fisherman to find other jobs, with aim to lower the number of fishing vessels)	X	x	x	both	5	1	1



Thank you for your attention!