Organic, Nutrient and Hazardous Substances
Pollution of Surface and Groundwater

Highlights:

• The ICPDR has identified three pollution related significant water management issues, the organic, nutrient and hazardous substances pollution of surface waters. For each of these issues detailed pressure assessments have been carried out and programs of measures have been elaborated in the DRBMP – Update 2015.

• Organic pollution can disrupt the dissolved oxygen balance of surface water bodies. It stems from urban sewage collecting and treatment systems and industrial dischargers having no or insufficient waste water treatment. Control of organic pollution needs to put in place appropriate (at least biological) treatment and/or Best Available Techniques.

• Nutrient pollution might trigger eutrophication in lakes, reservoirs and coastal areas and might hamper the use of water resources (e.g. for drinking water supply). Nutrients are emitted either directly from point sources or via several diffuse pathways particularly from arable and grassland and urban areas. Management of nutrient pollution requires appropriate sewage collection, stringent waste water treatment, application of nutrient free products (e.g. detergents) and best environmental practices to be implemented in agriculture.

• Hazardous substances pollution might have acute or chronic toxicity on living organism. Both, the point and diffuse sources can contribute to the hazardous contamination. Phasing out hazardous substances from the market products, enhanced treatment and industrial technologies, appropriate practices for safe application and runoff control can help capturing this pollution.

• Groundwater pollution is addressed by the ICPDR for 11 transboundary groundwater bodies of basin-wide importance. The overall assessment of significant pressures on the chemical status identified the nitrate pollution from diffuse sources as the key factor to be addressed.

• Danube countries have made significant efforts to reduce organic, nutrient and hazardous substances pollution of the surface and ground water bodies in the DRB by implementing respective measures. However, further actions are needed in the next management cycle in terms of both, measures implementation (e.g. improvement of waste water infrastructure in the new EU MS and non-EU MS, better implementation of good agricultural practices and agri-environmental measures) and reducing knowledge gaps on emissions and their impacts (e.g. more information on sources and fate of hazardous substances, better understanding of Black Sea ecosystem responses to Danube nutrient loads).
Organic, Nutrient and Hazardous Substances
Pollution of Surface and Groundwater

Questions:

1. What are new challenges that need to be addressed in the RBMP and that were not sufficiently covered in the previous planning documents?

2. Which measures need to be enhanced and revised in the RBMP because the pressures were not addressed sufficiently?

3. Which are the national priorities of the future development of waste water sector in the countries? How these priorities correlate with Danube RBMP vision?

4. How can it be ensured that agricultural measures are cost-effective and farmers are willing to implement them?

5. Which are the most important steps to be taken to close knowledge gaps related to hazardous substances pollution?

Hydromorphological Alterations & Integration Issues
(Flood risk management, Hydropower, Navigation, Agriculture)

Questions:

1. What are new challenges which are not yet sufficiently covered in the draft DRBM Plan – Update 2015?

2. Which measures need to be enhanced and/or supplemented in the draft DRBM Plan – Update 2015 because the pressures were not yet sufficiently addressed?

3. Which specific measures would you suggest to further enhance the cooperation and coordination with relevant sectors like flood risk management, navigation or hydropower, for the sustainable management of the Danube basin’s waters?

4. Do you see a need to further harmonize activities, assessments and measures on the basin-wide level?

5. Do you have suggestions for accompanying actions providing further support for the implementation of measures, like for instance financial incentives, regulatory measures, advisory services, etc.?
Hydromorphological Alterations & Integration Issues
(Flood risk management, Hydropower, Navigation, Agriculture)

Highlights:

- The modification and utilization of rivers due to flood risk management, hydropower use, navigation purposes or agriculture, has led to significant hydromorphological alterations impacting ecological status. Key pressures include the disruption of longitudinal ecological continuity, alteration of river morphology and habitats, hydrological alterations like impoundments, abstractions and hydropeaking, or the disconnection of adjacent wetlands and floodplains.

- Due to the high number of pressures restoration measures are gradually implemented and prioritized. 2009-2015 measures were successfully implemented with regard to
  - Restoration of river continuity and construction of more than 100 fish migration aids,
  - Reconnection and hydrological improvement of more than 50,000 ha of wetlands and floodplains, and
  - Restoration of ecological flows, measures at impoundments or addressing hydropeaking in dozens of cases.

- Further efforts are taken and measures are planned to be implemented until 2021 to further improve fish migration, restore river morphology, reconnect wetlands and floodplains or to address hydrological alterations.

- Inter-sectoral cooperation is key to ensure the sustainability of future infrastructure projects and to minimize impacts on water status. Cooperation mechanisms involve:
  - The integration of planning processes of the WFD and Floods Directive;
  - Further ensuring the exchange between the navigation and environmental sectors in the frame of the Joint Statement process;
  - Facilitating the practical application of the Guiding Principles on Sustainable Hydropower Development in the Danube basin at national level;
  - Involvement of economic sectors and stakeholders (agriculture, transport, nature protection, spatial planning, industry) in both planning and implementation of RBMPs and ERMPs.
Objectives and measures of Flood Risk Management Plans

Highlights:

- Floods are natural phenomena and appear due to the climatic circumstances of the whole river basin. The most important principle in the ICPDR Danube Flood Risk Management Plan (DFRMP) is the solidarity principle, which guarantees for the downstream located regions do not suffer from measures that were adopted in the upstream part of the watershed.


- Integration between the WFD and FRMD offers the opportunity to optimize the mutual synergies and minimize conflicts between these two legal and planning instruments.

- Opportunities include river and floodplain restoration, new retention and detention capacities. These measures should complement technical flood protection measures. Regulation of spatial and land use planning, prevention of accidental pollution have to be considered.
Objectives and measures of Flood Risk Management Plans

Questions:

1. What are challenges that need to be addressed in the FRMP at the international level and national level?

2. Which measures need to be enhanced in the FRMP (and integrate them into RBMP)?

3. Are you satisfied with the harmonized development of the FRMD and WFD planning documents?

4. Do you consider the ICPDR FRMP satisfactory? (e.g. sufficient international and national information, do you see gaps that should be covered)

5. Do you recommend good practices that should be highlighted in the document?

Support to implement both plans, Financing of the measures

Questions:

1. What are new challenges (regarding financing) that need to be addressed in the Danube Flood Risk Management Plan (DFRMP) and Danube River Basin Management Plan (DRBMP Update 2015) and that were not sufficiently covered in the previous planning documents?

2. Which measures need to be enhanced and revised in the DFRMP and in the DRBMP (Update 2015) because the pressures were not addressed sufficiently?

3. What funding opportunities presented in the DRBMP do you consider to be the most important ones?

4. What supportive actions at the basin-wide level would you suggest for the implementation of both plans (for the DFRMP, a list of transboundary projects is being currently prepared for supporting the DFRMP which reflect the objectives and priorities set in the DFRMP, have a transboundary character and help to implement the needs listed – see Annex 2)? How should these measures be financed?

5. Do you have additional ideas for approaches which are in support of the financing and implementation of the measures (e.g. application of economic instruments)?
Support to implement both plans, Financing of the measures

- Implementation of concrete measures in both plans are national responsibility with a support of various European (structural/cohesion funds, CAP, LIFE etc.) and international funding possibilities. A variety of funding instruments are available for the financing of measures for this planning cycle (see chapter 8.5 and in more detail Annex 15 of the DRBM Plan).

- Considerable efforts have been made/investments done in the previous years, esp. in the field of urban and industrial waste water collection and treatment (see Annex 10 of the DRBM Plan). For example, out of the approx. 2187 agglomerations in the Danube basin for which WWTPs will be constructed, upgraded or extended as indicated in 1st DRBM Plan (at a cost of approx. 7,4 Billion Euros), 40% of the measures have been completed, while another 48% are in the planning or construction phase. Also, a number of Danube countries and the relevant sectors have taken measures in the previous years regarding improvements of hydromorphology (river continuity, fish migration/fish passes etc.) and plan further ones in the future (see Annex 12 of the DRBM Plan).

- At a wide-Danube basin level, the DRBM Plan includes a “Joint Programme of Measures” in chapter 8 containing measures of basin-wide importance related to the “Significant Water Management Issues” at the Danube level. The general list of measures stipulated in JPM should be prioritized in the national plans.

- The DFRMP in chapter 5 (and Annex 2) presents the strategic level measures reflecting the activities on the level of the international river basin district (including measures with transboundary effect and measures applicable in more countries of the basin such as awareness rising, warning systems or ice protection measures).
Communication and Public Participation

Highlights:

• EU Water Framework Directive (Article 14) confers a general obligation “to encourage the active involvement of all interested parties in the implementation of the Directive”...Public consultations facilitated by ICPDR and the basin-wide level pursue the participation through (1) the involvement of observer organizations and (2) specific activities dedicated to public participation and information (Danube Day, Danube Box, Danube Watch, Danube Art Master, Business Friends of Danube, etc.). An important form of stakeholder involvement is an online access to all planning documents in every stage of their development. ICPDR organizes a public consultation workshop for all Danube countries.

• EU Flood Risk Management Directive (Article 10) requires a public access to the preliminary flood risk assessment, the flood hazard maps, the flood risk maps and the flood risk management plans.

• At ICPDR, raising awareness and informing wider stakeholder groups goes far beyond the legal obligations. Some actions include: Press-releases, publishing articles on ICPDR’s website, Danube Watch, partners’ websites and other media; social media campaign, target mailing to stakeholder groups; including links on ICPDR’s website to national activities and websites, include relevant statements in fact sheets and other technical reports, dedicated awareness raising projects for youth etc. (Online-Game), sharing of video-content, running water-competitions etc.
Questions:

1. What are the objectives and challenges of public participation and communication at international level? What are we trying to achieve? Is there a need for a mechanism to evaluate how these objectives were met?

2. What are the most important target audiences for the development of DRBMP Update 2015 and 1st FRMP? What are the most important target audiences for communication and public information efforts during the implementation of the plans (2015 to 2021)?

3. There is a lot of diversity in the DRB: on one hand a horizontal diversity among DRB countries; on the other hand a vertical diversity with different responsibilities at local, national, and transboundary level. Is this addressed in the management plans in an appropriate manner?

4. What communications measures are planned for the in-between period 2015 – 2021? Which are missing?

5. Who are the key-actors of PP and communication activities for both plans on the national and international level and how do they interact? What should be improved and how?