

ROADMAPS TO IMPLEMENT EACH ACTION

Action 1: *“To implement fully the Danube River Basin Management Plan”*.

Action - “To implement fully the Danube River Basin Management Plan” - in the field of water management, cooperation between Danube countries is already well advanced mainly through the inter-governmental work which takes place under the umbrella of ICPDR and ISRBC. This Action Plan fully supports all the measures which have been agreed by the countries in the framework of their endorsement of the Danube River Basin Management Plan (DRBMP) and its accompanying Joint Programme of Measures. Therefore the Danube Declaration adopted by the Ministers of Environment on 16 February 2010 entitled "Danube Basin: Shared waters – Joint responsibilities" is an integral part of this EUSDR Action Plan and is seen as the key information source for the identification, prioritisation and financial support of agreed measures in the countries of the Danube Region.

Milestone n°1: Interim Report on the Implementation of the Joint Programme of Measures

Work: Development of an interim report, according to the EU Water Framework Directive, on the implementation of the Joint Programme of Measures as included in the 1st Danube River Basin Management Plan 2009. In this interim report should be presented responsibilities of all countries in effective implementation of JPM (“shared waters – joint responsibilities”).

Output: Overview on status of measures implementation

Responsible: ICPDR

Deadline: End 2012

Milestone n°2: Facilitate the alignment of funding and the support of the JPM of 1st and 2nd Danube River Basin Management Plan

Work: Based on the findings of the Interim Report identify the need for support and facilitate the dialog between the funding sources and national governments, explore existing and potential funding of the actions needed and mobilize funding to implement and cover remaining financing needs of the JPM set up in 1st DRBMP.

Output 1: Policy reflections and Plan on financing for 1st JPM

Output 2: Supporting documents to financing of 2nd Joint Programme of Measures

Responsible: EUSDR PA4 and ICPDR

Deadline 1: first quarter of 2013

Deadline 2: end of 2014

Milestone n°3: Update of the Danube Basin Analysis Report

Work: Development and update of the Danube Basin Analysis Report according to Article 5 of the EU Water Framework Directive

Output: Updated information inter alia on pressures, impacts, risk assessment

Responsible: ICPDR

Deadline: first half of 2014

Milestone n°4: 2nd Danube River Basin Management Plan

Work: Development of the 2nd Danube River Basin Management Plan according to the EU Water Framework Directive

Output: Information inter alia on water status in the Danube River Basin and jointly agreed Programme of Measures

Responsible: ICPDR

Deadline: End 2015

Action 2: *“To greatly strengthen cooperation at sub-basin level”*.

Action - “To greatly strengthen cooperation at sub-basin level”. The Danube has a number of important, international tributaries. For those, it is particularly important to develop specific river basin management plans (Tisza, Sava and Prut rivers). Where institutions are already established (e.g. the Sava Commission, Tisza Group), cooperation and exchange of information should be strengthened. Where this is not sufficiently the case (e.g. Prut), the process should be initiated or promoted. This also applies to necessary work in the Danube Delta where joint management agreements are necessary.

→ *Example of project - “To complete and adopt Danube Tributaries' River Basin Management Plans”* – this project is currently on-going for the rivers Tisza and Sava. For the Tisza, Romania, Slovakia, Hungary, Ukraine and Serbia are currently cooperating on the basis of the Memorandum of Understanding signed in 2004 and coordinated by the Tisza Group established in the framework of the ICPDR. The first draft of the Integrated Tisza River Basin Management Plan is under public consultation and should be finalised by the end of 2010. As regards the Sava, Bosnia Herzegovina, Croatia, Serbia and Slovenia have signed a Framework Agreement on the Sava River Basin and established the International Sava River Basin Commission (ISRBC). A full River Basin Management Plan is under preparation, with financial support from the European Commission, and should be completed by the end of 2011 (Lead : relevant river management body; Deadline : end 2011)

→ *Example of project - “To complete and adopt a Management Plan for the Danube Delta”* – the delta is one of the sub-basins identified within the wider Danube area. Much still needs to be done to develop joint data collection, joint research and joint initiatives in terms of delta water management. Despite complex socio-economic and political issues affecting the area, the three countries concerned (Romania, Moldova and Ukraine) have started cooperating more closely, with the support of the ICPDR. A full management plan should be prepared and agreed, possibly with the support of a project to be funded by the ENPI CBC Programme Romania-Ukraine-Moldova. (Lead: Romania, Ukraine and Moldova)

Milestone n°1: Implementation of the 1st ITRBM Plan

Work: Implementing the Integrated Tisza River Basin Management Plan in line with the MoU ‘Strengthening of Tisza River Basin cooperation’ supporting the sustainable development of the region’ signed by ministers of the countries of the Tisza River Basin on 11th April 2011 in Uzhgorod (UA) in the frame of the Tisza Ministerial meeting.

Output: Measures according to the 1st Integrated Tisza River basin Management Plan

Responsible: UA, SK, HU, RO, RS, (ICPDR Tisza Group)

Deadline: As set out in the ITRBMP Plan

Project 1: Case studies on Tisza sub-basin

Output: Tisza case study on climate change, Tisza case study on Agriculture and water management

Status of the project: ongoing

Funding: EU Grant

Responsible: ICPDR Tisza Group (HU, RO, RS, SK, UA)

Deadline: End 2012

Project 2: Early warning water quality monitoring system on transboundary rivers

Output: The project provides a new security for transboundary rivers in case of any kind of accident or not detectable contamination not only for downstream countries. For upstream countries information can be obtained on quality of leaving water courses as proof.

Status of the project: planed project
Funding: EU (preferably ETE/CBC project)
Responsible/Lead organisation: Water Boards on sub-region
Deadline: 2020

Milestone n°2: Interim report on the 1st ITRBM Plan

Output: Interim Report on the Implementation of the 1st ITRBM Plan
Responsible: UA, SK, HU, RO, RS, (ICPDR Tisza Group)
Deadline: End of 2013

Milestone n°3: Strengthening of cooperation in the Tisza River Basin

Work: *Proposal for a framework for a long term cooperation in the Tisza River Basin according to the MoU 'Strengthening of Tisza River Basin cooperation.'* The proposal should build on the experience of the operation of the Tisza Group as well as the cooperation established by the preparation and implementation of the Pro Tisza project. Tisza Group and Pro Tisza participants and stakeholders should be involved in the process of designing such a framework.

Output 1: Proposal for a framework for a long-term cooperation between Tisza countries

Output 2: *Alignment of funding and setup of the proposed framework*

Responsible: PA4, UA, SK, HU, RO, RS, ICPDR Tisza Group

Deadline 1: First half of 2013 (for the Proposal)

Deadline 2: End of 2014 (launching the framework)

Project: ProTisza (Promoting Strategic Partnership Enabling Cooperation in the Tisza River Basin)

Output: To build a lasting partnership between riparian countries by increasing knowledge and applying and coordinating expertise on integrated water management approach across the Tisza River Basin. The project will (i) facilitate and strengthen institutional and technical cooperation between the five Tisza countries, (ii) support implementation of the ITRMP and other relevant initiatives, (iii) support development of documents for future tendering procedures and (iv), increase absorption capacities for using EU available funding opportunities.

Status of the project: project proposal

Funding: EU

Responsible: PA4,UA, SK, HU, RO, RS, ICPDR Tisza Group

Deadline: 2014

Milestone n°4: Development of the 2nd ITRBM Plan

Work: Development of the 2nd Integrated Tisza River Basin Management Plan according to the requirements of the EU Water Framework Directive. The updated Plan will be developed based on the strengthened cooperation in the Tisza River Basin (output Milestone n°1).

Output: Updated information inter alia on Tisza relevant pressures, water status and an updated and jointly agreed Programme of Measures

Responsible: HU, RO, RS, SK, UA, ICPDR Tisza Group
Deadline: End 2015

Milestone n°5: Danube Delta Sub-basin Analysis Report

Project: Development of a Danube Delta Sub-basin Analysis Report between the three countries Romania, Moldova and Ukraine, based on the principles of the EU Water Framework Directive –

Output: Updated information inter alia on pressures, impacts, risk assessment and improved harmonisation of monitoring activities through accomplishment of a Joint Danube Delta Survey

Status of the project: project ongoing

Funding: Environment and Security Initiative (ENVSEC)

Responsible: MD, RO, UA, ICPDR

Deadline: 2013

Milestone n°6: Danube Delta Management Plan

Project: Towards integrated river basin management and a joint monitoring system in the Danube Delta sub-basin, Romania-Ukraine-Moldova.

Output: Harmonised standards of and common approaches to water policy; Harmonisation and modernisation of the RO, UA and MD systems of environmental monitoring; Development of a River Basin Management Plan for the Danube Delta sub-basin; Public access to information about the state of the environment and to encourage public participation in decision making related to the environment.

Status of the project: planned project

Funding: 2nd call of the ENPI CBC Programme Romania-Ukraine-Moldova

Responsible: RO, MD, UA

Deadline: 2015

Milestone n°7: Prut Management Plan

Project: The Development of the Prut River Basin Management Plan

Output: River Basin Management Plan for the Prut sub-basin based on WFD requirements.

Status of the project: planned project

Funding: Joint Operational Programme RO, UA, MD (concept note was handed in by 30 January 2012; Applicant: Prut River Basin Administration - Romania)

Responsible: MD, RO, UA

Deadline: 2015

Milestone n°8: Implementation of the Sava River Basin Management Plan

Work: The 1st Sava RBM is expected to be adopted in December 2012. The Parties to the FASRB will implement measures as agreed upon Programme of Measures (PoM). ISRBC will assist in facilitation of the process on the basin level towards the IFIs for allocating funds for implementation of measures. The reporting will be coordinated by the ISRBC on the basis of information submitted by the Parties.

Output: Report on implementation of PoM

Responsible: ISRBC

Deadline: End of 2014

Milestone n°9: Update of the Sava River Basin Analysis

Work: Development of 2nd Sava River Basin Analysis (characterization report) according to Article 5 of the EU WFD.

Output: 2nd Sava River Basin Analysis

Responsible: ISRBC

Deadline: 2015

Milestone n°10: Development of the 2nd Sava River Basin Management Plan

Work: Development of updated Sava River Basin Management Plan according to the requirements of the EU WFD.

Output: 2nd Sava River Basin Management Plan

Responsible: ISRBC

Deadline: 2017

Action 3: ***“To continue to invest in and support the information collection systems already developed by ICPDR”.***

Action - ***“To continue to invest in and support the information collection systems already developed by ICPDR”***, activities such as the Transnational Monitoring Network, the Danube Joint Surveys or the GIS (Geographic Information System) databases provide essential information necessary to identify key problems and take action in order to meet the objectives of the Water Framework Directive. Such tools need to comply to the measures, rights and obligations of the INSPIRE directive⁴⁵, be further supported by the countries involved and developed to meet new challenges and questions such as those connected to climate change scenarios or the migration of fish. There should be improvement in the standardisation of sampling and analysing methods and clear commitments to meet sampling and analysing targets.

→ Example of project - ***“To carry out the next Joint Danube Survey by 2013 and to complete the development of the existing Danube GIS Database”***. In the field of water management, collecting and analysing data, further harmonization of other national monitoring and assessment methods, is of the utmost importance. To this effect, the existing work already completed needs to be further developed and monitoring of water quality needs to be a permanent feature. As far as the GIS system is concerned, it will be critical to make it compatible with the WISE system developed by the EU and to make results available to other key actors. (Lead: ICPDR; Deadline : 2013)

→ Example of project - ***“To establish and complete the Sava GIS”*** - the Sava GIS Strategy was adopted by the ISRBC in 2008. The main aim of the Sava GIS Strategy is to establish an effective and efficient (geo) information system and spatial data infrastructure to support a wide range of water management planning activities. In December 2009, a grant was received from the European Commission to support the ISRBC in preparing and implementing its river management plan. In this way, collected national data sets will be refined and verified and initial activities in the establishment of the Sava GeoPortal core functionalities will be performed. (Lead: ISRBC; Deadline : December 2013)

Milestone n°1: ICPDR databases

Work: Collection of information and data to supplement the DRBMP gaps and provide support for the DRPC implementation at the national level

Output: databases related to the A(ccidental)R(isk)S(ites) inventories, C(ontaminated)S(ites) inventory, M(ining)S(ites) inventory, emission discharges inventories, hazardous substances and TNMN

Responsible: ICPDR

Deadline: end 2015

Project 1: Development of databases on inventories related to ARS, CS and MS

Output: databases on inventories related to ARS, CS and MS

Status of the project: ongoing project

Funding: EU, C(ontracting) P(arties)

Responsible: ICPDR

Deadline: end 2014

Project 2: Further development of TNMN database

Output: improved TNMN database

Status of the project: ongoing project

Funding: EU, CPs

Responsible: ICPDR

Deadline: end 2015

Projects 3: Development of database on inventories on H(azardous)S(ubstances)

Output: Emission inventories on HS

Status of the project: ongoing project

Funding: EU, CPs

Responsible: ICPDR
Deadline: end 2014

Milestone n°2: Joint Danube Survey 3

Work: The general objective of the JDS3 is to undertake an international longitudinal survey producing comparable and reliable information on water quality for the whole of the length of the Danube including the major tributaries on a short-term basis. The outcomes of the JDS3 should cover the information gaps as necessary for the implementation of the EU Water Framework Directive.

Output: Expedition surveys for collecting samples, Technical & Public Report of the JDS3 and the database.

Responsible: ICPDR
Deadline: 30/09/2014

Project 1: Monitoring survey on the Danube

Output: Samples collected
Status of the project: planned project
Funding: ICPDR Contracting Parties, SEE Programme, donors
Responsible: ICPDR
Deadline: 30/09/2013

Project 2: Preparation of the JDS3 reports

Output: Monitoring data collected, Technical & Public Report prepared
Status of the project: planned project
Funding: ICPDR Contracting Parties, donors
Responsible: ICPDR
Deadline: 30/09/2014

Milestone n°3: Joint Tisza Survey 2

Project 1: Monitoring survey on the Tisza River

Output: Samples collected
Status of the project: planned project
Funding: ICPDR Contracting Parties (partly), follow up of SEE Programme, donors
Responsible: ICPDR Tisza Group
Deadline: 2015

Project 2: Preparation of the JTS2 reports

Output: Monitoring data collected, Technical & Public Report prepared
Status of the project: planned project
Funding: ICPDR Contracting Parties (partly), follow up of SEE Programme, donors
Responsible: ICPDR Tisza Group
Deadline: 2016

Project 3: Survey and assessment of hydro-ecology of the Tisza River

Output: Monitoring data collected, Technical & Public Report prepared
Status of the project: planned project
Funding: EU
Responsible: University of Debrecen HU, research institutions of UA, SK, RO, RS and AT, HR as partners

Deadline: 2015

Milestone n°4: INSPIRE compliant DanubeGIS

Work: Completion of the existing Danube GIS Database complying with INSPIRE Directive

Output: Updated Danube GIS Database

Responsible: ICPDR

Deadline: 2015

Step 1: Refinement of system concept and preparation of implementation plan

Output: System concept and implementation plan

Funding: ICPDR

Responsible: ICPDR

Deadline: 2012

Step 2: Development of tools for integrated visualisation and interpretation of data

Output: Tools for integrated visualisation and interpretation of data

Funding: ICPDR, EU

Responsible: ICPDR IMGIS EG

Deadline: 2015

Milestone n°5: Establishment and completion of the SavaGIS

Work: Development of Sava GIS database

Output: Sava GIS database

Responsible: ISRBC

Deadline: after 2015

Step 1: First implementation phase (ongoing): Setup of the core Sava GIS functionalities.

Output: First implementation phase: Sava GeoPortal, tools, services and products in line with the preparation of the Sava River Basin management Plan.

Responsible: ISRBC

Deadline: ongoing - 2012

Step 2: Second implementation phase: Development of the advanced tools, mapping and reporting services as well as basic application and/or decision support systems.

Output: Second implementation phase: Report services - query access and generating report/content by using predefined set of templates; Advanced Mapping Service; Content Management System Catalogue Service.

Responsible: ISRBC

Deadline: 2015

Step 3: Third implementation phase: Extension of common data model to accommodate additional themes and datasets and the establishment of the most advanced service components

Output: Third implementation phase: Dynamic reporting and mapping, On-line monitoring and observing, Advanced decision support systems, Various assessments (e.g. assessing compliance to various directives), Comparisons analysis across Sava River Basin.

Responsible: ISRBC

Deadline: after 2015

Action 4: “To continue boosting major investments in building and upgrading urban wastewater treatment facilities across the Danube Basin, including measures to build capacity at the regional and local level for the design of such infrastructure”.

Action - “To continue boosting major investments in building and upgrading urban wastewater treatment facilities across the Danube Basin, including measures to build capacity at the regional and local level for the design of such infrastructure”, Requirements under EU environmental legislation need to be fully met and EU funding possibilities need to be used effectively in order to ensure full primary, secondary and tertiary treatment as foreseen in EU legislation. In addition, the Danube countries which are not members of the EU are also being urged to speed up their investments in WWTP, as they pledged to do when adopting the DRBMP at the end of 2009. This need is particularly acute in large agglomerations such as the city of Belgrade. A full list of the facilities needed is available from ICPDR

→ Example of project - “To implement the Blue Danube cooperation project to exchange technologies, experience and personnel in the field of urban waste water treatment”. The project initially involves the Danube cities of Ulm and Vidin and looks in particular at new technologies aimed at removing waste from pharmaceutical products. (Lead : University of Ulm; Deadline : 2014)

Milestone n°1: Updating the implementation programme of UWWT

Work: Update of the urban wastewater treatment plants implementation in the DRB as an input into 2012 Implementation Report on JPM

Output: Input into 2012 WFD Implementation Report

Responsible: ICPDR

Deadline: end 2012

Step 1: Information on national level of UWWTPs

Output: Collection of national information on the status of achieving UWWTP and make proposals on upgrading technology of UWWT Plants if needed to implement objectives committed in the 1st DRBMP

Responsible: ICPDR

Deadline: end 2012

Step 2: Revision and update of the ICPDR database on investments

Output: Update of databases related to the UWWT plants in the DRB

Responsible: ICPDR

Deadline: end 2013

Milestone n°2: -Financial planning for programme implementation

Work 1: Facilitate dialogue among donors and IFIs on financing options of the urban wastewater treatment plants in the DRB

Output 1: Financing options available, Assistance related to technical and funding gaps available

Funding: EU, EU DRS countries, EIB BDCP

Responsible: ICPDR

Deadline: first half of 2013

Work 2: Workshop for financing

Output 2: Mobilization of financing of municipal investments through a workshop

Funding: MS, EIB BDCP

Responsible: ICPDR

Deadline: First half of 2013

Work 3: Preparation of a financial plan for the implementation programme on update for the UWWT
Output: Financial plan for the update of UWWTP
Responsible: PA4, BDCP
Deadline: First half of 2013

Milestone n°3: Technology developments

Work: To promote investments to foster penetration, where necessary, of improved UWWT technology based on research or already proved “state of the art” technologies.
Output: Improving of UWWT technologies and “know-how” transfer in the Danube Region
Funding: MS, EIB BDCP
Responsible: EUSDR Countries,
Deadline: 2015

Project 1: New technology for specific contamination

Output: New technology transfer to UWWTPs for non-eligible purification level or specific contamination
Status of the project: planned project
Funding: EIB BDCP
Responsible: Project leader(s)
Deadline: 2015

Project 2: Blue Danube – “Improved framework conditions for fast track eco-innovation in waste water treatment”

Output: Applied research, development and technology transfer in the general field of micro and nanotechnology.
Status of the project: submitted project
Funding: LIFE+
Responsible: Germany (Ulm), Bulgaria (Vidin)
Deadline: 2015

Action 5: “To establish buffer strips along the rivers to retain nutrients and to promote alternative collection and treatment of waste in small rural settlements”.

Action – This action is composed dual objectives to retain nutrients load.

The first is aiming to reduce pollution of rivers from diffuse sources originated from very direct close and non suitable agricultural practice to water courses and /or standing waters (lakes). Buffer zones/strips made by condition considered can efficiently retain nutrients and pesticides coming from agricultural lands. They can work as nutrient barriers and consumer (e.g. such as forest’ strip).

Secondly, in the case of small rural settlements the local and non-eligible or illegal solid waste and /or waste water disposals can increase the pollutant load to waters, too (water courses using as ‘landfill’). Alternatives of WWTPs as unique and nature-friendly, local treatment solutions should be applied wherever they are cost-effective and acceptable from sanitary point of view.

Milestone n°1. Survey of the situation on buffer zones

Work: Assessment of the situation in the Danube basin based on separate questionnaires regarding existing buffer zones/strips and their efficiency, solid Each country will give an assessment on the

- legislative background (focusing on supplementary measures, but in non EU MS including the compliance with EU legislation, too),
- current subsidy system (if any),
- progress in implementation of existing measures (present status + planned changes in the legal and financing system + already approved projects, important deadlines).

Answers on the questionnaires will be summarised and conclusions will be drawn for setting up preparatory projects and recommendations.

Output: Survey

Responsible: HU, ICPDR , PA4

Deadline: First half of 2013

Milestone n° 2: Implementation of pilot projects on nutrient buffer zones

Work 1 Preparatory paper for evaluating different solutions of establishing buffer zones (width of zone, only buffering pollutants or combined/harmonised with ecological rehabilitation and/or flood protection, limited agriculture and/or ecosystem services). Based on case studies, effectiveness in retention of pollutants (eligibility of solid waste disposals and their legalities), feasibility and costs will be considered in the evaluation process.

Output: Exchange of experiences. Inventory on good practices of buffer zones related agriculture and removing of illegal solid waste disposals

Responsible: HU, ICPDR, PA4

Deadline: June 2014

Work 2: Programme planning on common methodology and applying solution of buffer zones engineering to use it jointly in the Danube region countries integrating (if any) adjacent floodplain restoration works as ecological services combined with mitigation of nutrient contamination into surface waters.

Output: Common tools for improving surface water quality.
Responsible: Danube region countries
Deadline: 2015
Funding: EU

Work 3 Projects generation and implementation
Output: Improved efficiency of the implementation. This activity will provide the appropriate small scale implementation: e.g. limited agricultural activity
Responsible: Danube region countries
Deadline: 2015

Milestone n° 3. Survey of the situation on management of solid waste in small rural settlements

Work: Assessment of the situation in the Danube basin regarding solid waste disposals, landfills and waste management with a licence with inadequate protection (e.g. against leakage) or conformity to regulations in small rural settlements. The assessment should also cover illegal waste dumping especially in buffer zones. Each country will give an assessment on the

- legislative background (focusing on supplementary measures, but in non EU MS including the compliance with EU legislation, too),
- current subsidy system (if any),
- progress in implementation of existing measures (present status + planned changes in the legal and financing system + already approved projects, important deadlines).

Answers on the questionnaires will be summarised and conclusions will be drawn for setting up preparatory projects and recommendations.

Output: Survey and country assessments

Responsible: HU, ICPDR, PA4

Deadline: First half of 2013

Milestone n°4. Survey of the situation on alternative collection and treatment wastewater in small rural settlements

Work: Assessment of the situation in the Danube basin based on separate questionnaires regarding wastewater treatment and management in small rural settlements. Each country will give an assessment on the

- legislative background (focusing on supplementary measures, but in non EU MS including the compliance with EU legislation, too),
- current subsidy system (if any),
- progress in implementation of existing measures (present status + planned changes in the legal and financing system + already approved projects, important deadlines).

Answers on the questionnaires will be summarised and conclusions will be drawn for setting up preparatory projects and recommendations.

Output: Survey

Responsible: HU, ICPDR, PA4

Deadline: 2013

Milestone n° 5: Promoting best practices in WWT and Programme of Measures for solid waste management and wastewater treatment for small settlements

Work 1: Analyses of solid waste management and WWT based on outputs of **milestone no. 3 and 4**, with an inventory and recommendations of good practices applied by Danube Region countries.

Output 1: Assessment, report and inventory on local waste disposals and good practices

Responsible: HU, ICPDR, PA4

Deadline: 2014

Work 2 Proposal for a supplementary, eco-friendly and site-specific waste water treatment units for less than 2000 PE small settlements where UWWTPs are financially non-feasible.

Output 2: Scenario(s) for local and site-specific solutions of waste water treatment for less than 2000 PE settlements within the Danube region

Responsible: HU, ICPDR, PA4

Deadline: End of 2013

Work 3 Generating policy response to the findings of the survey on waste management in small settlements

Output 3: *Proposal for policies and locality based actions in waste management for small settlements*

Responsible: PA4

Deadline: *End of 2013., in line with planning 2014-2020 MFF*

Milestone n° 6: Implementation pilot projects and promotion of site-specific and eco-friendly waste water treatment for less than 2000 PE settlements

Work: To comply with water quality objectives of WFD in the Danube region in the field of decreasing of nutrient levels in waters by an economic and eco-friendly way by WWT in small settlements.

Phase 1: Programme proposal for technical and financing solutions for the Danube region countries reflecting their different circumstances of topography (hydrology), spatial and settlements planning, economy, financing possibilities and experiences of this special engineering.

Output: Base documents for generation and financing of projects relevant for small settlements waste water treatment

Responsible: PA4, Danube region countries, BDCP

Deadline: 2013

Phase 2: Projects generation based on documents focusing on know-how exchange (BAT) and applying the most suitable technical solutions to small regions and/or settlements concerned.

Output: Projects can be submitted to IFIs. Application of the most suitable technical solutions concerned small regions and/or settlements.

Responsible: Project leaders

Deadline: 2015

Milestone n° 7: Promotion of the implementation of good practices

Work: Best practices and recommendations for policy makers based on the results of **milestone no. 5**. Output and dissemination in each country, integration to national developing programmes and providing adequate financing (technical assistance/subsidy contract to farmers modifying techniques, application of GAP). Integrate results to RBMPs at Danube region level, sub-basins and national levels. Non EU members are also need to speed up their activities in this field. This work aims at strengthening the implementation in the period 2014-2020, however projects can be launched by now.

Output: Report on best practices and recommendations

Responsible: ICPDR, PA4

Deadline: end of 2015 and continuously

Action 6: *To foster and develop an active process of dialogue and cooperation between authorities responsible for agriculture and environment to ensure that measures are taken to address agricultural pollution*

Action - "To foster and develop an active process of dialogue and cooperation between authorities responsible for agriculture and environment to ensure that measures are taken to address agricultural pollution". It is vital that key stakeholders from environment and agriculture (ministries but also farmers' associations and civil society) cooperate in order to jointly re-enforce concrete measures in reducing pollution from fertilisers and manure, using instruments such as Best Agricultural Practices and Green Farming. This work should expand to comply with the Nitrates Directive and lead to the full implementation in the region of a holistic/overarching plan to reduce nutrients discharge. In Member States, it can be supported by the 1st and 2nd pillars of the Common Agricultural Policy where such interventions already exist.

Milestone 1: Strengthen the cooperation between agriculture and water authorities agriculture

Work: Workshop on agriculture and water management with main goal to develop an Action plan to facilitate WFD objectives adjusted to the current discussion at the EU level to achieve WFD objectives

Output: Preparatory assessment (SK), Action plan

Responsible: SK, ICPDR

Deadline: 2013

Milestone 2: Implementation of Action plan

Work: Designing and implementation of projects, cooperation of neighboring countries and disseminating lessons learned according to Action plan developed.

Output: Projects, workshops, activities identified in Action plan

Responsible: Project leaders, Danube countries

Deadline: continuous

Action 7: ***“To legislate at the appropriate level to limit the presence of phosphates in detergents”.***

Action - ***“To legislate at the appropriate level to limit the presence of phosphates in detergents”.*** This key action is seen as a very cost effective pollution control initiative which can quickly and effectively reduce the nutrient pollution in the Danube region.

Milestone n°1: Implementation of Regulation (EU) 259/2012

Work: Update of the current status of countries preparation of the P-free detergent ban and investigate options for extending the P and its compounds limitation as well to dishwasher detergents, based on Regulation (EU) 259/2012.

Output: Overview report

Responsible: ICPDR, PA4

Deadline : End of 2012

Milestone n°2: Policy response on the Overview Report

Work: The overview report is discussed in the steering group. Based on the findings of the overview report recommendations are formulated for policy reflections (public reflections or high level discussion, other policy and visibility events or responses).

Output: Recommendations on short term policy responses

Responsible: PA4

Deadline: 2013

Milestone n°3: Scenarios calculation for P reduction in laundry and dishwasher detergents

Work: Update of the scenarios calculation with MONERIS

Output 1: Results of anticipated nutrients reduction effects and presentation of management options

Responsible: ICPDR PM EG

Deadline: End of 2013

Output 2: New model calculations of the anticipated P and its compounds reduction due to P - free detergent ban on providing evidence for the phosphates and its compounds limitation in dishwashers detergents

Responsible: ICPDR

Deadline: End of 2013

Milestone n°4: Facilitate implementation of JPM trough enhanced stakeholders' dialogue

Work: Dialogue with AISE and representatives of detergent industry and relevant stakeholders (such as WWF and others) establish future needed steps

Output: Clarity on the needed steps and intervention for DRB countries and the ICPDR

Responsible: ICPDR

Deadline: ongoing

Action 8: ***To treat hazardous substances and contaminated sludge with the newest and best available technology and to develop and promote remediation measures***

Action - "To treat hazardous substances and contaminated sludge with the newest and best available technology and to develop and promote remediation measures for hazardous producing or abandoned industrial sites and waste deposits"- Important to invest in research and innovation to reduce risks connected with the production of hazardous substances and their disposal, which can have disastrous consequences on the quality of ground and surface waters.

Milestone 1: Inventory of polluted sites by upgrading of 'hot spot' inventory 2001

Work: Make use of the ongoing update of the ICPDR inventories on Accident Risk Sites (ARS), contaminated Sites (CS) and the ~~new~~ mining Sites (MS).

Output: first draft of inventories ARS, CS and MS

Responsible: ICPDR

Deadline: end 2012

Milestone 2: List of activities and research needs

Work 1: To agree on the necessary activities to protect water from pollution, e.g. decision on the compounds that are considered pollutants and on what can be done about the contaminated sites and sources in operation. The sites where further investigation is needed will be included in the implementation projects.

Output: List of sites that will be involved in EU SDR projects

Responsible: ICPDR, PA4

Deadline: End of 2013

Milestone 3: Implementation of projects

Work: To find the funds for the implementation of the projects. Each country has to find the necessary sources for the implementation of the already prepared projects. Design of projects: preparation of feasibility studies and draft project documentations for selected sites of the final list. Tender procedure of already prepared projects. Issuing public procurement tenders, selecting the winner, contracting. Selecting of supervisors of work and contracting with them. Projects implementation.

Outputs: Cleaned sites, reduced loads to the environment, improved water quality

Responsible: Danube region countries, companies, to be defined as appropriate

Funding: EU, national budgets/funds for remediation, owners/operators

Deadline: End of 2020

Milestone 4: Knowledge transfer

Work: Spreading of lessons learned, projecting of know-how (e.g. TWINNING projects) in site cleaning on former contaminated areas given illegal, hazardous substances deposits.

Responsible: Danube region countries

Funding: EU

Deadline: continuous

Action 9: ***“To assure the proper control and progressive substitution of substances that are considered problematic for Danube Region”.***

Action - ***“To assure the proper control and progressive substitution of substances that are considered problematic for Danube Region”*** and which are identified under REACH as substances of very high concern, through the preparation of Annex XV dossiers for identification of those substances and their with a view to their eventual inclusion in Annex XIV of REACH.

Milestone n°1: Testing of the EU Guidance document on EQS Directive

Work: Participate in the testing of the EU Guidance document on the inventory on emissions, discharges and losses of priority substances in support of EQS Directive implementation

Output: Testing report

Responsible: ICPDR

Deadline: July 2012

Project: Testing of the Guidance

Output: Pilot study – 2 phases, for further use in the preparation of national inventories

Status of the project: planned project

Funding: EU

Responsible: ICPDR

Deadline: Dec 2012

Milestone n°2: Inventory on emissions, discharges and losses of priority substances

Work: Prepare for concluding of first ICPDR Inventory on emissions, discharges and losses of priority substances in support of EQS Directive implementation.

Output: Templates preparation, Collection of national information, interpretation of results, Inventory on emissions, discharges and losses of priority substances in support of EQS Directive implementation.

Responsible: ICPDR

Deadline: June 2013

Project: Emissions reduction of priority substances in the Danube Basin (PS – RED)

Output: Harmonized methodology to conclude basin wide inventories of PS in a comparable and coordinated way; basin wide inventory of emissions, discharges and losses; possibility to use the inventory as the basis for pollution reduction actions to achieve comparable results.

Status of the project: planned project

Funding: EU

Responsible: ICPDR

Deadline: December 2013

Milestone n°3: Harmonization of data

Work: Harmonise use of data from UWWTD and PRTR reporting on priority substances from urban discharges to ensure a joint report and provide first estimates of priority substances discharges by the end of 2013

Output: Reporting sheets available and input into Annex XIV of REACH

Responsible: ICPDR
Deadline: Sept 2013

Project: Contribution to REACH report

Output: Interface Emission inventory on hazardous substances and reporting on REACH

Status of the project: planned project

Funding: EU

Responsible: ICPDR

Deadline: End 2013

Action 10: ***“To reduce existing water continuity interruption for fish migration in the Danube river basin”.***

Action - “To reduce existing water continuity interruption for fish migration in the Danube river basin”. ICPDR has identified 900 spots where water flows are discontinued to the point of preventing fish migration. In the current DRBMP it is agreed that 108 migration aids will be built, which is a good start but which needs to be expanded in the coming years. It is also vital to implement fully the jointly agreed Sturgeon Action Plan and to invest into further research on fish migration routes and behaviour.

→ ***Example of project - “To make the feasibility study for restoring continuity at the Iron Gates”.*** The sturgeon and other fish population are decreasing because of the existence of big dams that prevent the fish migrating and thus reproducing. One of the biggest obstacles is the Iron Gate hydroelectric dam between Romania and Serbia. A feasibility study on the possibilities of fish migration through the dam should be carried out. (Lead: Romania and Serbia; Deadline: end 2012)

→ ***Example of project - “To carry out an assessment for restoration of the sediment balance in the Danube”.*** Trans-boundary solutions need to be found for the problem of riverbed incision and the lack of sediment. Hydropower dams and dredging activities on the Danube cause serious problems in the balance of the sediment of the river system, which drives the deepening of the riverbed on free flowing river sections. Co-ordination within the framework of the Strategy will help ensure identification and implementation of best solutions. This is also an important project in relation to flood prevention.

→ ***Example of project - “To examine biodiversity and environmental status of sediment, water and biota in the Sava River Basin” -*** The project should focus mainly on integration of EU environmental directives in Sava river countries. A system for efficient exchange of data will be established and know-how transfer between project partners and other relevant institutions in the Sava River Basin will be provided. The ecological status of the Sava River Basin will be evaluated on the basis of data collected. Outcomes of the project will serve as the basis for application of the EU directives and sustainable water management activities which are crucial for the Sava River Basin Management Plan, as well as the management of natural assets and protected areas. (Lead: ISRBC, Deadline: 2014)

Milestone n°1: Revision and update of the ICPDR ecological prioritisation approach for addressing longitudinal continuity interruptions in the Danube River Basin

Work 1: Revision and update of methodology with support from EU Grant

Output 1: Updated methodology

Responsible: ICPDR

Deadline: End 2012

Work 2: Application of new methodology with updated data from 2013 data collection

Output 2: Revised and updated ecological prioritisation approach

Responsible: ICPDR

Deadline: End 2013

Milestone n°2: Application of the approach for 2nd Danube River Basin Management Plan

Work: Application of revised and updated ecological prioritisation approach as support in decision on Programme of Measures of the 2nd Danube River Basin Management Plan

Output: Agreed measures on addressing longitudinal continuity interruptions

Responsible: ICPDR

Deadline: End 2015

Milestone n°3: Feasibility study for restoring continuity at the Iron Gate dams

Project: Feasibility study for restoring continuity at the Iron Gate dams

Output: Assessment on technical possibilities for restoring continuity and related costs

Status of the project: planned project

Funding: Still open; Discussions with FAO are ongoing but other possible financing mechanisms have to be investigated

Responsible: Romania and Serbia with support from ICPDR and PA4

Deadline: As soon as possible

Milestone n°4: To carry out an assessment for restoration of the sediment balance in the Danube

Project: Danube Sediment Management - Assessment for Restoration of Sediment Balance in the Danube River Basin

Output: Transparent harmonised database on sediments, sediment balance, pressures and impacts analysis, proposals for solutions for improving sediment transport and establishing a dynamic balance in the Danube River Basin

Status of the project: submitted project

Funding: EU, Danube countries

Responsible: Lead Partner - Budapest University of Technology and Economics; Other partners from Austria, Germany, Hungary, Romania, Slovakia, Croatia and Serbia

Deadline: end of 2014

Milestone n°5: Assessment of the establishment of a hydro-morphological monitoring system for the Danube and tributaries

Work: Based on practices of the different Danube Region countries planning and applying common methods for systematic surveys on rivers. These methods should reflect needs of the ecological and economic services of the river and should dynamically reflect hydro-morphological alterations due to different interventions affecting river-bed, river-bank and flow-regime. This monitoring should provide feedback on Programme of Measures of Danube River Basin Management Plans regarding changes of river morphology.

Output: Standardized hydro-morphological methodology and roadmap for implementation

Responsible: HU, Danube countries, ICPDR

Deadline: End 2014

Milestone n° 6: Study on the improvement of longitudinal continuity of rivers with operational changes in existing installations and low cost improvements in the light of the specific needs of various migratory fish species and taxa (coordination with PA6)

Output: Study on specific needs and operational regimes for various installations.
Best practices and recommendations.
Responsible: HU, Danube region countries
Deadline: 2014

Milestone n° 7: Examination of the biodiversity and environmental status of sediment, water and biota in the Sava River Basin

Project: Environmental Status of Sediment, Water and Biota in the Sava River Basin - SEWABIS

The project will focus on integration of EU environmental directives in SRB. A system for efficient exchange of data will be established and the ecological status of the Sava River Basin will be evaluated on the basis of data collected.

Outputs: Common sampling strategies, protocols and methodologies developed; Status of biological diversity of taxa and habitats provided; Ecological and chemical status assessed.

Status of the project: submitted project

Responsible: Lead Partner: Jozef Stefan Institute (SI), Other Partners from SI, SK, BA, HR and RS

Funding: EU

Deadline: June 2014

Action 11: ***“To promote measures to limit water abstraction”***.

Action - “To promote measures to limit water abstraction”- As there is competition for water for various purposes (drinking water, irrigation, industry, energy) and in view of possible reduced levels of water available in the future, actions should be developed to establish a water abstraction management concept with special attention to water demand management, e.g. the promotion of efficient irrigation techniques in agriculture, the reduction of water usage in industry and the fostering of a water-saving culture, as per the European Commission's Communication on Water Scarcity and Droughts in the EU.

Milestone n°1: Collection of good practice examples dealing with limiting water abstraction

Work: Collection of good practices dealt or dealing with mitigation of water shortages and adverse effects of climate change considering water demand issues (e.g. assessing, managing and meeting water demands for drinking, industry, agriculture and maintaining habitats; adaptation to drought; water retention; new techniques or change in land use).

Output: Inventory on good practices and policies

Responsible: HU coordinated with PA5 and ICPDR, PA4, GWP DS Task Force

Deadline: End of 2013

Milestone n°2: Dissemination of results of the best practices and policies for decision-makers and stakeholders

Work: High level endorsement on the principle of water conservation and smart resource management, limitation of water abstraction and water demand management.

Output: High level declaration supporting limiting water abstraction and smart resource management, endorsement for the application of good practices to the 2nd DRBMP

Responsible: HU, coordinated with ICPDR, PA4

Deadline: First half of 2014

Milestone n° 3: Integration of the results from the good practices collection into the Risk assessment and 2nd DRBMP

Work: Integration of the results from the good practices collection into the Risk assessment and 2nd DRBMP

Output: input into analytical report

Responsible: HU with coordination of PA5 and ICPDR, PA4

Deadline: End of 2013 and 2015 (DRBMP)

Milestone n°4: Pilot projects based on best practices of milestone n°1 and promotion

Work: Implement pilot project and promote achieved results; sub basin level water management with regard to effects of climate change and planned water uses with regard to quantity and quality

Output: projects and promotion activities

Responsible: project leaders

Deadline: continuous

Action 12: ***“To strengthen general awareness and facilities exchange of good practice in integrated water management issues in the Danube Basin among decision-makers at all levels and among the population of the Region”.***

Action - “To strengthen general awareness and facilities exchange of good practice in integrated water management issues in the Danube Basin among decision-makers at all levels and among the population of the Region” - It is very important that the population at large, and in particular young people, are aware of the challenges facing the region in terms of water quality and management. Existing initiatives such as Danube Day or the Danube Box should be built upon and expanded.

Milestone n°1: Danube Day 2012 held in 14 countries with more than 100 individual events.

Work: Coordination of national efforts to organise local events; international media relations; support of national organisers with posters and give-away items; production of review diaries to present Danube Day.

Output: Posters; give-away items; reviews published online and in diary; a minimum of 100 events in all 14 countries of the Danube region (completed for 2012)

Responsible: ICPDR

Deadline: 29 June 2012 and continuously every year for Danube Day; 30 November 2012 for review diary

Milestone n°2: Re-launch of the ICPDR Website as a tool to communicate accessible and appealing information on RBM efforts of the ICPDR as a contributing organization in implementation of some PAs of EUSDR. Link to the Danube region website.

Work: Coordination of contractors responsible for the development of the more user-friendly website (for laic users as well); continuous publication of contents and new information relevant for water management in the Danube River Basin extending to EUSDR countries

Output: New website at www.icpdr.org (completed)

Responsible: ICPDR and PA4

Deadline: June 2012 for re-launch of the ICPDR website
End of 2012 for including and linking EUSDR items

Milestone n°3: Organisation of the Danube Art Master as a basin-wide competition among schools and youth care facilities

Work: Coordination of national experts and international organiser; supply with awards/prizes

Output: 1 national winner identified in each of the 14 EUSDR countries in addition to an international art master

Responsible: ICPDR

Deadline: June of every year

Milestone n°4: Information for the broad public on the progress report of the DRBMP implementation through an appropriate article in Danube Watch

Work: Assigning editor, identifying sources, finding illustrations for article; publication of Danube Watch Article with edition of at least 7000 copies

Output: Article of at least 2 pages in Danube Watch Magazine

Responsible: ICPDR and PA4

Deadline: 15 December 2012

Milestone n°5: Information exchange on the progress, achievements and current events of EUSDR PA4 to strengthen of general awareness

Work: Website maintaining and updating with relevant events (project catalogue, outputs, events, project news, etc.)

Output: Living websites (www.danube-region.eu and www.icpdr.org) on water quality relevant news in EUSDR region

Responsible: PA4 and ICPDR

Deadline: continuous (in place since 06/2012)

Action 13: ***“To promote measures aimed at reducing knowledge deficits, developing and transferring tools, methods and guidelines concerning the safeguarding of drinking water supply.”***

Action - “To promote measures aimed at reducing knowledge deficits, developing and transferring tools, methods and guidelines concerning the safeguarding of drinking water supply”. Drinking water supply is a challenging issue in the region, and there are great disparities between the existing infrastructures, with some networks suffering from above average leakage rates and below-average quality assurance levels. This could be improved by fostering intense cooperation between drinking water suppliers. Ways in which to implement the cost recovery principle and general water pricing issues should be discussed and experience exchanged.

Milestone 1: Identify responsible authorities, enterprises, associations responsible for drinking water supply

Work: Each country identifies **responsible authorities and enterprises** for drinking water supply along its whole “path” from the source to the user, including authorities responsible for protection of the water sources.

Output: List of responsible actors, database

Responsible: SK, ICPDR

Deadline: End of 2012

Milestone 2: Develop joint actions with responsible authorities, enterprises, associations responsible for drinking water supply including transboundary issues on shared water resources

Work: Development of joint actions (workshop/conference). Share of information about methods, guidelines concerning security of drinking water supply on different levels, etc.

Output: reports/documents of joint actions

Responsible: SK, ICPDR, suppliers’ umbrella organizations

Deadline: 2013

Milestone 3: Implementation of joint actions with responsible authorities, enterprises, associations responsible for drinking water supply

Work: Design and implementation of transboundary models and actions with regard to supply region optimization and optimized supply management; management of peak loads; supply risk management in local drinking water supply systems with regard to peak loads, droughts and climate change; joint management of transboundary water resources and common aquifers and delineation of protection zones.

Output: projects, activities

Responsible: Danube countries and suppliers, BDCP

Deadline: continuous

Action 14: “To further strengthen Integrated Coastal Zone Management (ICZM) and Maritime Spatial Planning (MSP) practices on the Western shores of the Black Sea”.

Action - “To further strengthen Integrated Coastal Zone Management (ICZM) and Maritime Spatial Planning (MSP) practices on the Western shores of the Black Sea” – This action is meant to make connection between the Danube River and the Black Sea. Danube River is the most important tributary for the Black Sea and any actions taken within the Danube River Basin will influence the Black Sea marine environment. In this respect the Integrated Coastal Zone Management will address the area at the interface between land and sea while the Maritime Spatial Planning will focus on the activities developed on sea. Within both this type attention will be given to the water environment quality.

Milestone n°1: Development of specific project regarding the improvement of the Integrated Coastal Zone Management in the Black Sea Region

Work: Coordination with the Black Sea countries in order to elaborate an application concerning the assessment of the ICZM implementation in the Black Sea Region

Output: A common and coherent ICZM approach within the region, base for sustainable development of the area and improvement of environmental quality, an integrated support for the stakeholders (local and regional authorities, private companies and NGOs) and an increased level of public participation in the decision-making process on environment protection using innovative methods.

Responsible: Romania

Deadline: 2012 (project already approved)

Milestone n°2: Provide contribution to the development of the ICZM Strategy for the Black Sea

Work: Coordination with the Permanent Secretariat of the Black Sea Commission and its Advisory Group on ICZM in order to contribute to the finalization and approval of a Strategy on Integrated Coastal Zone Management

Output: An improved Strategy on ICZM

Responsible: Romania, Bulgaria and Ukraine

Deadline: 30 November 2013

Milestone n°3: Development of a project proposal concerning Black Sea marine environment protection considering the Marine Strategy Framework Directive and using the Maritime Spatial Planning

Work: Coordination with the Black Sea countries for developing an application regarding the planning of fishery, energy and transport activities within the Black Sea in order to protect the marine environment and to promote a sustainable use of the marine and coastal resources

Output: Background contribution to the development of the Maritime Spatial Planning in the Black Sea

Responsible: Romania

Deadline: 30 March 2013