



ROADMAP FOR AN ACTION

Priority Area 5 - To manage environmental risks

Action 1 - "To develop and adopt one single overarching floods management plan at basin level or a set of flood risk management plans coordinated at the level of the international river basin" - This overarching plan or set of plans should set a basin-wide common understanding regarding the planned measures and joint solutions in order to avoid that problems are "exported to the neighbours". The action should promote Green Infrastructure and ecosystem based approaches providing long-term, sustainable solutions often at a lower investment and maintenance cost, ensuring spatial and functional connectivity and providing win-win solutions.

Milestone n°1: Preliminary flood risk assessment on level A

- *Work:* EFD Article 4(2) stipulates that based on available or readily derivable information, such as records and studies on long term developments, in particular impacts of climate change on the occurrence of floods, a preliminary flood risk assessment shall be undertaken to provide an assessment of potential risks. For the Danube River Basin District a single roof report on preliminary flood risk assessment will be prepared on the level A describing the approaches taken by the countries including the coordination aspects. The report will also address the topics from the EU Reporting Sheet on preliminary flood risk assessment including description of coordination of the identification of the areas of potential significant flood risks (APSEFR) within an international river basin district in accordance with the EFD article 5(2).
- *Output n° 1:* Preliminary flood risk assessment report;
→ *Responsible:* FP EG
→ *Deadline:* end 2011

Output no 1: Ready. Presented to the 14th Ordinary Meeting of the ICPDR. Report adopted by the Heads of Delegations. Report sent to Brussels.

Milestone n°1 completed.

Milestone n°2: Preparation of flood hazard and flood risk maps

- *Work:* EFD requires that Member States shall, at the level of the river basin district, or unit of management, prepare flood hazard maps and flood risk maps, at the most appropriate scale for the areas identified under Article 5(1). The preparation of flood hazard maps and flood risk maps for areas identified under Article 5 which are shared with other Member States shall be subject to prior exchange of information between the Member States concerned. The ICPDR will use the templates developed at the EU level as well as the outcomes of the FLOODRISK project to develop its templates by the end of 2012 and to prepare flood hazard and flood risk maps by the end of 2013.

- *Output n° 1*: ICPDR templates for flood risk mapping (2012);
- *Output n° 2*: Flood hazard and flood risk maps on the level A (2014).
- *Output n° 3*: Flood hazard and flood risk maps on the level A endorsed by the SG (2014).
 → *Responsible*: FP EG
 → *Deadline*: end 2013

The ICPDR maps are based on of the EU document "Reporting of spatial data for the Floods Directive (Part II); Guidance on reporting for flood risk and hazard maps of spatial information" and the templates and basic layout of the flood hazard map and flood risk maps were agreed by the FP EG. At the 23rd FP EG meeting the first draft maps were discussed and the amendments in the map format were agreed. For the 24th FP EG meeting the revised maps were prepared by the Secretariat using the data from AT, BA, DE and SK:

- (i) map of hazard and flooding scenarios;
- (ii) map on risk and population;
- (iii) map on risk and economic activity;
- (iv) map on risk and IPPC installations and
- (v) two maps on WFD protected areas.

The flood hazard areas are submitted via DanubeGIS as shape files in cooperation with the IMGIS EG. For preparation of risk maps the data are collected by the template developed by the Secretariat. Using the national text contributions to the Secretariat prepared the first draft of the Summary Report on implementation of Article 6 of the European Floods Directive in the Danube River Basin District.

The national deadlines for map preparation reported by a number of countries at the 23rd FP EG meeting and reconfirmed at the 24th FP EG meeting extend until the end of 2014. Therefore, only a draft version of the ICPDR flood hazard and risk maps could be prepared for OM16 to obtain a general agreement of the ICPDR with the layout of the maps. These draft maps and text report will be uploaded on the ICPDR web-site so that the countries reporting to the EC can use the web-link to the ICPDR report in their national re-ports to the EC. The collection of missing data continued in 2014 but there were still (partly or completely) missing map data from a number of countries. The ICPDR at the 12th StWG Meeting therefore took note of the current version of flood hazard map and flood risk maps and encouraged the Contracting Parties to submit the missing data by 15 October 2014. This date was selected in connection to the deadline for preparing the advanced draft of the Danube flood risk management plan for the OM-17. 12th StWG Meeting agreed with the Summary Report on implementation of EFD Article 6 in the Danube River Basin District and mandated the Secretariat to send this Summary Report and the version of flood maps as of October 2014 as informal information to EC. In early 2015 the flood hazard and risk maps were updated with the missing information. [The Report on Flood Hazard and Flood Risk Maps of the Danube River Basin District was send by the ICPDR to the EC as an informal information in May 2015.](#)

DANUBE FLOODRISK project has been finished. "Harmonized Manual of Data & Methods"; "Harmonized Manual of Maps" and the "Danube Flood Hazard and Risk Atlas" printed.

Output n° 1: Prepared and adopted by the ICPDR FP EG.

Output n° 2: Flood hazard and flood risk maps on the level A was prepared by Nov 2014 and sent by the ICPDR to the EC in May 2015.

Output n° 3: Flood hazard and flood risk maps on the level A was endorsed by the SG on its 8th SG Meeting (27 Nov 2014).

Milestone n°2 completed.

Progress made between July 2014 and June 2015:

The collection of missing data continued in 2014 but there were still (partly or completely) missing map data from a number of countries. The ICPDR at the 12th StWG Meeting therefore took note of the current version of flood hazard map and flood risk maps and encouraged the Contracting Parties to submit the missing data by 15 October 2014. This date was selected in connection to the deadline for preparing the advanced draft of the Danube flood risk management plan for the OM-17. 12th StWG Meeting agreed with the Summary Report on implementation of EFD Article 6 in the Danube River Basin District and mandated the Secretariat to send this Summary Report and the version of flood maps as of October 2014 as informal information to EC. In early 2015 the flood hazard and risk maps were updated with the missing information. The Report on Flood Hazard and Flood Risk Maps of the Danube River Basin District was sent by the ICPDR to the EC as an informal information in May 2015.

Output no 2: Flood hazard and flood risk maps on the level A was prepared by Nov 2014 and sent by the ICPDR to the EC in May 2015.

Output no 3: Flood hazard and flood risk maps on the level A was endorsed by the SG on its 8th SG Meeting (27 Nov 2014).

Milestone n°3: Preparation of flood risk management plan for Non-Member States

- *Work: Where an international river basin district, or unit of management referred to in Article 3(2)(b), extends beyond the boundaries of the Community, Member States shall endeavour to produce one single international flood risk management plan or a set of flood risk management plans coordinated at the level of the international river basin district. In order to help coordinating this activity the following work need be done:*

Preparation of projects proposals and provision of funding for the preparation of flood risk management plans for Danube Region areas of Non-Members States.

- *Output n° 1: Project generation (June 2013).*
- *Output n° 2: Final flood risk management plan integrated into the respective flood risk management plan of the MSs (22 Dec 2015).*
 - *Responsible: SG, FP EG*
 - *Deadline: June 2013 and 22 Dec 2015*

Output n° 1: “Common Hungarian-Ukrainian flood protection development programme on the Upper Tisza” has been developed.

Output n° 2: Not relevant yet.

Progress made between July 2014 and June 2015:

Two projects (development of a flood protection dike and building of a flood retention reservoir) have been selected by the responsible water authority for implementation. The ENI sources of the Hungary-Slovakia-Romania-Ukraine CBC Programme starting in 2016 are planned to be used for financing these projects. Even in case of successful application the limited ENI fund would not cover 100% both thus further funding is needed.

Milestone n°4: Preparation of flood risk management plan

- *Work: On the basis of the maps referred to in EFD Article 6, Member States shall establish flood risk management plans coordinated at the level of the river basin district, or unit of management referred to in EFD Article 3(2)(b), for the areas identified under EFD Article 5(1) and the areas covered by Article 13(1)(b) in accordance with paragraphs 2 and 3 of EFD Article 7. Member States shall establish appropriate objectives for the management of flood risks for the areas identified under EFD Article 5(1) and the areas covered by EFD Article 13(1)(b), focusing on the reduction of potential adverse consequences of flooding for human health, the environment, cultural heritage and economic activity, and, if considered appropriate, on non-structural initiatives and/or on the reduction of the likelihood of flooding.*

Flood risk management plans shall include measures for achieving the objectives established in accordance with paragraph 2 of EFD Article 7 and shall include the components set out in Part A of the Annex to EFD.

Flood risk management plans shall take into account relevant aspects such as costs and benefits, flood extent and flood conveyance routes and areas which have the potential to retain flood water, such as natural floodplains, the environmental objectives of Article 4 of Directive 2000/60/EC, soil and water management, spatial planning, land use, nature conservation, navigation and port infrastructure.

Flood risk management plans shall address all aspects of flood risk management focusing on prevention, protection, preparedness, including flood forecasts and early warning systems and taking into account the characteristics of the particular river basin or sub-basin. Flood risk management plans may also include the promotion of sustainable land use practices, improvement of water retention as well as the controlled flooding of certain areas in the case of a flood event.

The preparation of flood risk management plan for the Danube River Basin is a natural continuation of the implementation of the ICPDR Action Programme on Sustainable Flood Protection in the Danube River Basin. Flood risk management plan represents the next step after developing of flood action plans in sub-basins. The ICPDR will prepare a roof plan for the level A providing the general overview of the measures and highlighting the principles of international coordination in DRBD.

- *Output no 1: Table of Contents of the flood risk management plan (end 2013);*
- *Output no 2: Draft flood risk management plan for public consultation (end 2014);*
- *Output no 3: Final flood risk management plan (end 2015).*
- *Output no 4: Flood risk management plan on the level A endorsed by the SG (2015).
→ Responsible: FP EG
→ Deadline: 2015*
- *Output no 5: Project generation to support the implementation of the Program of Measures of the DRFM Plan.
→ Responsible: SG
→ Deadline: Continuous*

The ICPDR agreed upon the following basin-wide goals of the flood risk management plan:

- (i) Avoidance of new risks;
- (ii) Reduction of existing risks;
- (iii) Strengthening resilience;
- (iv) Raising awareness;
- (v) Solidarity principle.

These goals will be linked with the respective measures. While the full list of measures will be provided at the national level, at the level of an international river basin district the focus should be given to the measures with the transboundary relevance. The plan should provide clear figures summarizing the actions already taken/to be taken by the countries and/or figures characterizing the effects of the measures. The Secretariat developed a draft template for collection of information on measures distinguishing between the implemented, ongoing and future measures. The template is structured according to the agreed goals and refers to the types of measures from the EU guidance. The template has been distributed to the FP EG to collect the data. Before the 24th FP EG meeting only Bosnia and Herzegovina and Moldova submitted the completed templates. Most of the other countries will report on measures by February 2014. The prioritization of measures on the level A will be done after most of the national measures will be collected by the templates. All countries were asked to provide at the next FP EG meeting a short description of the national prioritization methodologies and to come up for the next meeting with suggestions of priorities for measures at the level A.

The Secretariat prepared the table of contents of the ICPDR Flood Risk Management Plan 2015. The FP EG browsed through the table of contents line by line and suggested the necessary revisions. The Secretariat was asked to update the table of contents of the ICPDR FRMP 2015 accordingly and send it to the FP EG for a quick feedback before it will be presented to OM16.

To have sufficient time for discussing the ICPDR Flood Risk Management Plan 2015 it was agreed to organize a workshop on this issue back-to-back to the next FP EG meeting.

At the ICPDR Flood Risk Management Plan Workshop the FP EG agreed that the plan will show the strategic level measures, i.e., the measures with transboundary effects and measures applicable in more countries of the basin such as awareness rising, warning systems or ice protection measures. The FP EG also agreed that selecting the strategic level measures is already a basic prioritization criterion and that the measures with downstream effect shall have the key priority at the basin-wide level. All FP EG members were asked to check the types of measures in the ICPDR template and come up with a recommendation for additional candidates for top priority measures by 31 July. By this deadline the countries were also asked to submit the completed questionnaires on measures, as well as information about natural water retention measures, links between WFD and FD and about the cost-benefit analysis.

The ICPDR at the 12th StWG Meeting took note of the first working draft of the ICPDR flood risk management plan and asked the Contracting Parties to submit the national flood risk management measures using the agreed template as well as all additional information needed for preparation of the plan. The data collection for the plan was ongoing also in autumn 2014 and the plan was further discussed at the 26th FP EG meeting. [The draft Danube Flood Risk Management Plan was submitted to the OM-17 for adoption and then for public consultation.](#) At OM-17 the ICPDR (a) adopted the draft DFRM Plan, including its annexes and maps, as of 14 November 2014; (b) asked the Secretariat to publish the draft DFRM Plan on the ICPDR website latest by 22 December 2014 for launching the public consultation process and asking for comments until 22 July 2015; (c) took note of the proposed next steps for the elaboration and finalisation of draft DFRM Plan and asked the FP EG for the necessary data updates and the provision of outstanding data as soon as possible and latest until the end of February 2015; (d) asked the FP EG to prepare an updated draft DFRM Plan for adoption at the 13th Standing Working Group Meeting for an intensified public consultation process and in preparation of the Stakeholder Conference; (e) asked the

Secretariat to establish on the ICPDR homepage links to those websites where the updates of the national FRM Plans will be published; and (f) asked the delegations to publish the ICPDR draft DFRM Plan as well on the national level in addition to their updates of the national FRM Plans.

The ICPDR at the 13th StWG Meeting

- adopted the updated version of the DRAFT DFRM Plan – Update 2015, including its annexes and maps, as of 15 May 2015;
- asked the Secretariat to publish the updated version of the DRAFT DFRM Plan – Update 2015 on the ICPDR website for launching the intensified public consultation process and asking for comments until 22 July 2015;
- asked the delegations to publish the updated version of the DRAFT DFRM Plan – Update 2015 as well on the national level in addition to their draft updates of the national FRM Plans;
- took note of the proposed next steps for the further elaboration and finalisation of the DFRM Plan – Update 2015 and asks the delegations for the necessary data updates and the provision of outstanding data as soon as available and latest until the end of September 2015;
- asked the FP EG to prepare the proposed final version of the DFRM Plan – Update 2015 for adoption at the 18th Ordinary Meeting.

Danube Region Operative Flood Management and Cooperation Programme” (Danube Oper&Cooper)

The most important recent activity of Priority Area was the preparations of the “Danube Region Operative Flood Management and Cooperation Programme” (Danube Oper&Cooper). The “Flood Survey” – systematic consultations with all the Danubian countries in order to improve their flood protection capacities by operative coordination and cooperation on a Danube-basin, sub-basin or transnational level – was closed in October 2014. Based on these findings the document; “Danube Region Operative Flood Management and Cooperation Programme” has been completed. The SG Members and the Members of the ICPDR Flood Protection Expert Group commented the document through more rounds until all comments and supplements were included and elaborated into the DR Oper&Cooper.

The most important result is that the ICPDR Flood Protection Expert Group (FP EG) adopted the Programme of the DR Oper&Cooper at its 27th meeting on 17-18th March 2015 in Zagreb: the Measures of the Danube Region Operative Flood Management and Cooperation Programme have been included into the Annex2 of the “Flood Risk Management Plan for the Danube River Basin District” of ICPDR to be completed in 2015.

This points out to the settled relationship between the two bodies: ICPDR and EUSDR.

The adoption of the document (DR Oper&Cooper) by the PA5 SG Members was done on the next PA5 SG Meeting held in Budapest on the 28th of April.

For the implementation of Measure No. 1 of the DR Oper&Cooper a project proposal has already been formed and presented to improve the harmonization of the flood forecasting systems in the Danube Region. At this stage the project leaders are searching partners for the project which is planned to be submitted for the Danube Transnational Programme in autumn 2015 after having been approved by the SG and the ICPDR FP EG.

Also connecting to the Measures of the DR Oper&Cooper, a flood management training

project was implemented in Bosnia and Herzegovina in early June 2015 (Education and vocational training of Bosnian Herzegovinian professionals and municipality experts obligated to the direction of the protection) by the Hungarian Co-ordination of Priority Area 5 and financed by the Department for International Development of the Ministry of Foreign Affairs and Trade of Hungary. This is part of the initiative commenced by PA5, in which Hungary is promoting a closer cooperation between institutions dealing with water management training in the framework of the Danube Region Strategy. The project idea got some added complements and details also in December 2014 when a delegation of Bosnian water management experts visited Hungary and met with the representatives of the Hungarian Ministry of Foreign Affairs and Trade and of the Danube Region Strategy and with professionals from the Hungarian General Directorate of Water Management.

Output n° 1: Table of Contents of the ICPDR Flood risk management plan drafted

Output n° 2: ICPDR Flood Risk Management Plan submitted for public an intensified consultation.

Output no 3: Preparation of the Final Flood Risk Management Plan is on schedule (Due by the end of 2015).

Output no 4: Due after the output no 3 will be completed.

Output no 5: Project generation to support the implementation of the Program of Measures of the DRFM Plan. (Continuous)

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Output n^o 2: ICPDR Flood risk management plan submitted for an intensified public consultation.

Output no 3: Preparation of the Final Flood Risk Management Plan is on schedule (Due by the end of 2015).

Output no 5: A project idea is being developed on a “Development of Regional Flood Forecasting System” and project partner are sought.