EUSDR Report June 2012

Priority Area *5*
To manage Environmental Risk

1. OVERALL PROGRESS

Priority Area 5 not only deals with environmental risks like flood, drought, forest fires, storms, erosion, icing and water scarcity, but also with manmade risks.

1.1. State of play

[Work done so far on policies, actions and projects; Any lessons learned, positive or negative; Next steps/ challenges? What, if anything, is missing in order to achieve the planned goals? Please describe the most important outcomes and explicitly highlight events/ discussions/ results that are happening or being speeded up because of the Strategy. Please also be as concrete as possible, while bearing in mind that progress that may seem obvious to you may not be obvious to outsiders. Please emphasise, when appropriate, the issues that are specific to your Priority Area]

Following the success of the Baltic Sea Region Strategy (EUBSRS), the EU Strategy for Danube Region (EUSDR) was announced on 9 December 2010 by adoption of two basic documents, namely the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (COM(2010) 715) accompanied by the Action Plan (by SEC(2010) 1489). The Communication and the Action Plan are the two basic documents that drive our work. Later other documents, like Guidance to the Priority Area Coordinators (PAC), were also issued to help and guide the priority area coordinators.

On 3 February 2012 Commissioner Hahn announced the countries that are responsible for the coordination of the priority areas. Hungary and Romania, among others, are responsible for the coordination of Priority Area 5 (PA5). The responsible ministries in Romania and Hungary nominated Ms Petra Szávics (RO) and Mr Péter Bakonyi (HU) to coordinate PA5.

The newly nominated PACs were invited to 2nd Working Meeting of the EU Strategy for the Baltic Sea Region (EUSBSR) held in Gdansk, Poland on 16-17 February 2011 to exchange information and to gather lessons learned from EU Baltic Sea Region Strategy.

The first meeting of the Romanian and Hungarian coordinating parties was held in Budapest, on 10 February 2012.

On 09-10 May the Joint Meeting of National Contact Points and Priority Area Coordinators of the EU Strategy for the Danube Region was held in Gödöllő, Hungary during the Hungarian EU Presidency. The Meeting provided opportunities to initiate cooperation between Priority Areas and between the EUSDR and other organisations:

- An agreement on cooperation between the State Commissionaire of the EUSDR Hungary and the Executive Secretary of the International Commission for the Danube River (ICPDR) was signed prior to the Gödöllő Meeting. The Parties

agreed that the ICPDR is going to be the leader in those actions where the ICPDR is mentioned in the Action Plan and the ICPDR will have observer status' in the relevant Steering Groups.

- The PACs of Pillar II (Environmental Pillar) agreed on close cooperation among ther Priority Areas to avoid overlapping and duplication and to show a uniform picture of the Environmental Pillar.
- DG REGIO also used this occasion to meet the PACs of PA5 and to hand over the management of the Priority Area.

The Steering Group (SG) of PA5 was set up on the 1st (Kick-off) Meeting in Budapest. So far altogether three SG Meetings were held. The major achievements per SG Meeting are listed in **Table 1**.

Table 1 Achievements on SG Meetings

Meeting No.	Date/Place	Achievements
1 (Kick-off)	09/06/2011, Budapest	- Steering Group founded - Targets of PA5 reviewed, extended and approved - Cooperation with the ICPDR approved - Rules of Procedure approved - Implementation Framework set up
2	08/12/2011, Bucharest	- 3rd target on water scarcity and drought added - Procedures for labelling and selection of flagship projects approved (project data sheet, recommend-dation letter, flowchart regarding procedures harmonized with Pillar II PACs) - 6 running projects were labelled EUSDR Relavant - 7 project proposals were returned to the proposers because they either not met the EUSDR requirements or the provided information was not sufficient - Two project proposals were advised to merge and be resubmitted again - Roadmaps for Actions 1, 5 and 6 were presented by ICPDR and approved by the SG
-	27/03/2012	- Letter of Recommendation issued to one project proposal (HYDROFOR) using written procedure
3	04/05/2012, Budapest	- Ms Simona-Olimpia Negru the new Romanian coordinator, successor of Ms Szávics, was introduced - 7 out of 8 Roadmaps for Actions ready and approved - Two milestones realized and approved by the SG (Action 1.1 and Action 7.1)

		- Four Letters of Recommendation were issued - One project was labelled EUSDR Relevant - Four project proposals were returned to the proposers for revision - Joint Pillar II description of Labelling Procedure for general public approved - "Implement Danube wide flood risk management plans - due in 2015 under the Floods Directive – to include significant reduction of flood risk by 2021, also taking into account potential impacts of climate change" was selected as highlighted target - Draft programme of the Joint Pillar II Annual Stakeholder Forum accepted

The number of participants on each SG Meetings was fairly high though the participation of non EU Member States is very low. For detail See **Table 2**.

Table 2 Participation of Danube Region countries on SG meetings

meeting	AT	BG	BIH	CRO	CZ	DE	HU	MD	MNE	RO	RS	SI	SK	UA	EU	ICPDR
1st	1			1		1	6		1	2	1		6		1	3
2nd	1			2	1	1	1			6					1	2
3rd	1			1		1	5			3			1	1	1	2

As it can be seen from the table above 4 out of the 14 countries have not shown up at all on the SG Meetings. Unfortunately two of them are Member States. Five (MS) countries and the ICPDR showed steady participation. The PACs and the NCPs should put pressure on the countries not showing up to be present on all meetings or at least to participate in the written procedures.

On 17 November 2011, the Pillar II PACs met in Vienna and agreed on using one common

- text for the description of Labelling Procedure (e.g. to show visual identity of Pillar II for general public),
- selection criteria and
- project idea description form.

Further we also agreed on organising a Joint Annual Stakeholder Forum for Pillar II Priority Areas in Budapest. The Forum was planned to be next to the Danube Day, but due to the were busy period (public holiday in Croatia, start of the holiday season in Germany, Standing Working Group Meeting of ICPDR and Commissioner Hahn's visit to Hungary) it had to be postponed to September.

The 2nd meeting of National Contact Points and Priority Area Coordinators was held on 30-31 January 2012 in Bucharest, Romania. This provided opportunity:

- to meet other PAC from other Priority Areas and NCPs,
- to exchange information on the progress of work,
- to better understand the requirements of the Commission with regards to the work of the PACs and
- to learn about financing possibilities.

In the first year the following project proposal received **Letter of Recommendation** (for details See Annex 2):

- **HYDROFOR**: Systems of optimal forest management for enhancing the hydrological role of forests in preventing the floods in Bodrog river catchment (submitted by the NGO «FORZA, Agency for Sustainable Development of the Carpathian Region»)
- **Sava FRMP**: Flood Risk Management Plan for the Sava River Basin (submitted by the International Sava River Basin Commission)
- **SOFTWARE**: Sustainable Operational Flood Forecasting in Real-Time and Water Resources Management (submitted by the International Sava River Basin Commission)
- **WACOSS**: Water Pollution Contingency Management Plan for the Sava River Basin (submitted by the International Sava River Basin Commission)
- **Danube Floodplain** (submitted by the Ministry of Environment and Forests, Romania and WWF).

The following list shows the projects were labelled **EUSDR Relevant** (for details See Annex 2):

- **Monitor II**: Practical Use of MONITORing in Natural Disaster Management
- **CC-WaterS**: Climate Change and Impacts on Water Supply
- Transboundary Risk Management in the Danube Delta
- **Danube Floodrisk**: Stakeholder oriented f lood risk assessment for the Danube floodplains
- Restoration of the Lower Morava floodplains
- **MoRe** - Revitalisierung der March/Morava: Maßnahmendetailplan entsprechend EU Wasser- und Naturschutz-Richlinien
- **SEERISK**: Joint Disaster Management risk assessment and preparedness in the Danube macro region.

The most important outcomes:

- The SG is up and working
- Rules of Procedures adopted
- Joint Pillar II Labelling Procedure adopted
- Seven projects were given EUSDR Relevant label and 5 Letter of Recommendations issued
- Seven out of eight roadmaps are ready and approved by the SG
- The homepage is working
- Two milestones reached
    - The "Manual of harmonized requirements on the flood mapping procedures for the Danube River" developed under the DANUBE FLOODRISK project delivered
    - The report on the "DANUBE STUDY – CLIMATE CHANGE ADAPTA-TION" has been finalised by the Ludwig Maximilians Unversity of Münich.

Lessons learned:

- The most important question is the (lack of) financing. The first question in all meetings: What can we do without financing? Efforts should be put into convincing the Managing authorities to give advantage to the EUSDR proposals when using the left over budget.

- Communication should be strengthened to let stakeholders know that EUDRS is about macro regional (e.g. large) projects. Many NGOs think of smaller, local projects and they are disappointed to hear that EUDRS is not a source of money.
- It should also be communicated that the time left until the next financial period starts is not lost. It can be used to develop EUDRS project proposals to take a jump-start in 2014.
- Effort should be made to convince countries of the Danube region to take active part of the work of the SGs.

1.2. Process

[Work done so far on governance: PACs, Steering Groups, links with stakeholders; Significant changes in your work/network approach resulting from the Strategy (e.g. larger networks, more visibility), including any problems encountered and any solutions found; Links with projects from other Priority Areas; Publicity measures (such as website, stakeholder seminars, publications,…) etc. Please emphasise, when appropriate, the issues that are specific to your Priority Area]

The work in PA5 started as early as February 2011. We had an easy start because Ms Szávics worked in Budapest until Mid-Summer 2011. The personal contact helped a lot preparing the kick-off meeting and getting the SG moving. The good working atmosphere remained even after the change in the coordination on the Romanian side. The agreement is that both PAC follow the development of all actions/projects.

The PA5 Steering Group meets twice a year. Between two meetings the communication is done via E-mails. The participation on the SG Meeting is a problem. Not all countries show up and the participation is not steady (See previous Chapter as well). Efforts are made to improve the situation.

An informal cooperation among the PACs of Pillar II has been developed (For details See the previous Chapter).

Within Hungary the NCP and the PACs meet regularly (twice a month in general). The NCP also convenes a meeting of the Hungarian representatives in the 12 Steering Groups and representatives of the relevant Ministries once a month. In this way we can follow the progress made in the other PAs. In PA4 and PA5 the work of the Hungarian PACs is assisted by nominated Action Leaders (14 and 8 respectively).

We tried to disseminate the idea of the EUSDR. For this we got in touch with the following organisations:

- Global Water Partnership (GWP),
- World Wildlife Fund (WWF),
- WWF Hungary,
- Regional Environmental Centre (REC Hungary)
- Hungarian Hydrological Society and
- ICPDR.

The cooperation with ICPDR is done at two levels. The PACs report on the progress of the EUSDR at the Standing Working Group Meeting of the ICPDR in June and also at the Ordinary Meeting in December. This provides an opportunity to discuss EUSDR

topics with the Head of Delegations of the 14 Danubian countries. More operative exchange of information is done at the level of the ICPDR's Expert Groups. Priority Area 5 has got a strong link to the work done in the Flood Protection Expert Group and the River Basin Management Group. The PACs report to each of these Expert Groups twice a year on their regular meetings. On the other hand two representatives of the ICPDR Secretariat attend the SG Meeting and report back on the progress made in those Actions that are coordinated by ICPDR.

Besides the large international and national organisations we also reacted to the invitations of different conferences where the EUSDR could be presented:

- GWP International Conference on the Danube and Baltic Strategies
- CASEE-Conference on The EU Strategy for the Danube Region – with specific emphasis on Land and Water Management and the Environment
- Bundesministerium für europäische und internationale Angelegenheiten: EU-Strategie für den Donauraum – Neue Impulse für Österreich?
- Annual Conference of the Hungarian Hydrological Society
- Workshop of the WATER CoRe project: Connecting Regions and Stakeholders Regional Experience Sharing Workshop
- Workshop of Tisza Group of ICPDR
- DANUBENET for NGOs: Environmental risk management in the Danube Basin (Satu Mare, Romania)
- DANUBENET for NGOs: Environmental risk management in the Danube Basin (Kráľovský Chlmec, Slovakia).

The lesson learnt from the contact with the stakeholders is that we have to strengthen our communication strategy to avoid the same questions popping up:

- Who is financing the EUSDR projects?
- Will the PACs distribute money?
- What can the EUSDR do without dedicated budget?
- What is the benefit of a LoR or an EUSDR Label?

The website seems to be not enough for spreading the information among the stakeholders. Apparently people prefer verbal communication and only some of them take the trouble of reading the available documents.

1.3. Funding

[Work done so far on identifying funding opportunities and sources: use of existing funds, new financial instruments, etc.. Please emphasise, when appropriate, the issues that are specific to your Priority Area]

Funding is a critical issue of the EUSDR. Most of the available funds are allocated to different funding programs like Cross Border Cooperation, European Territorial Cooperation etc. The problem is that these programmes have their own targets and evaluation criteria and the EUSDR is not among them although their targets are overlapping with the targets of the EUSDR to a large extent. The letter of the Commission to the Managing Authorities tried to ease the situation but as it was not obligatory the effect were not predictable.

The other problem of the existing funding opportunities is that most of them have already been committed and the final calls were out when the EUSDR started to work. As a

consequence there were only limited opportunities to develop projects and submit them to the financing agencies.

Having seen this situation besides trying to get some funding from the existing programmes we decided to use this interim period to develop projects for the new 2014-2021 budget. In this work we expect some (financial) help from the new Budapest Contact Point of the EIB (BCP). We already got in touch with the Leader of the BCP and we will start negotiation on how to get project preparation support from them.

As for finding financing opportunities the homepage http://www.danube-region.eu/ is a valuable asset. The funding sources are easily found there. It would be a great help for the PACs if information, like "next calls", would be offered as well. This could be provided by the Managing Authorities and it would highly facilitate finding the promising financing opportunities.

1.4. Next steps

[Work foreseen in the coming months.]

The Joint Pillar II Annual Stakeholder Forum will be organised in September in Budapest. In July the programme has to be finalised. The structure of the ASF has already been discussed and agreed among the Pillar II PACs and the SG. The morning plenary session will be devoted to the welcome speeches and to three scientific presentations about main problems of PAs. In the afternoon three parallel sessions will be organised one for each PA. There the PACs will present their Pas and the progress so far and then feedback from the stakeholders is expected. The ASF will be closed by a plenary where the rapporteurs will present the results of the workshops.

Next is the preparation for the 4th SG Meeting. It will be held in Bucharest and we will focus on further developing the roadmaps, monitoring the achievements of the actions and developing new project ideas.

A major event will be the Annual Forum of the EUSDR. We are looking forward to hearing about the progress made in the other Pas and also the lesson learnt from the other PACs.

We do not expect many opportunities for financing new EUSDR projects till 2014. Thus we would like to use this quiet period for increasing the visibility of PA5 by putting more effort into the communication. We will use both the webpage and the personal attendance of different conferences, workshops etc. We will have to find a way of better using the written media and write papers about PA5.

2. PROGRESS BY TARGET

[Remark: Please link the actions of the Action Plan to the targets proposed. If this link is difficult to establish, please indicate what needs to be done/ what is planned to solve this. Please also link the projects to the actions.]

Target 1: "Implement Danube wide flood risk management plans - due in 2015 under the Floods Directive – to include significant reduction of flood risk by 2021, also taking into account potential impacts of climate change".

Action 5.1 *– "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"*

Milestone N^{o}1: Preliminary flood risk assessment (PFRA) on the level of the Danube Basin (Region) has been finalized. The draft version has been prepared by the ICDR Flood Protection Expert Group. It has been approved by the ICPDR 14th Ordinary meeting. The PFRA has been submitted to the European Commission. With this the milestone N^{o}1 is achieved.

The roadmap, prepared by the ICPDR, follows the implementation required by the EU Floods Directive. The first version of the Preliminary flood risk assessment on level A will be submitted before the deadline. Though for the part of the preliminary flood risk assessment focusing on the identification of the area of potential significant flood risk there is not deadline is given in the European Flood Directive. Therefore the Commission allows an extra half a year for further decision and updating this information and this will be done until September 2012.

Under this Action, the following project is considered:

- ***DANUBE FLOODRISK - Stakeholder oriented flood risk assessment for the Danube floodplains*** project is focusing on the most cost-effective measures for flood risk reduction: risk assessment, risk mapping, risk reduction by involvement of stakeholders and adequate spatial planning. Gathering 19 institutions all along 8 Danube countries, the project obtained a budget of approximately 4.86 mil EUR financed by the EU from ERDF, through the SEE Programme. Its main purpose is the Danube foundations for ensuring sustainable development along the river Danube, by providing effective risk maps for the Danube and for important disclosures regarding the risk of floods, the necessary spatial planning requirements and economic.

  The Danube Floodrisk project has launched a major output: the "**Manual of harmonized requirements on the flood mapping procedures for the Danube River**". The Manual was endorsed by the SG on its 3rd SG Meeting in Budapest. This is a first product supporting PA5.

  Another main output of the project will be the preparation of the Danube Flood Risk Atlas with hazard and risks maps for Danube River. (*Lead: Ministry of Environment and Forests).*

Action 5.2 *– "To support wetland and floodplain restoration as an effective mean of enhancing flood protection and more generally to analyse and identify the best response to flood risk (including "green infrastructure")"*

The first deadline for this Action is December 2013. No progress has been reported yet.

Action 5.3 *– "To extend the coverage of the European Floods Alert System (EFAS) system to the whole Danube river basin, to step up preparedness efforts at regional level (including better knowledge of each other's national systems)"*

Milestone N^{o}1: Establishment of the three operational EFAS centres for hydrological data collection, computation, and dissemination of EFAS information as part of the initial

operational of GMES Emergency Management Service is going on. The winners of the public tenders for

i) ***EFAS computation centre*** (European Centre for Medium Range Weather Forecasts),

ii) ***EFAS dissemination centre*** (Consortium of Swedish Meteorological Hydrological Institute, the Dutch Rijkswaterstaat and the Slovak Hydrometeorological Institute) and

iii) ***EFAS hydrological data collection centre*** (Consortium of the Andalusia Environment and Water Agency, and the Spanish private company ELIMCO Sistemas)

is being setting up establishing the EFAS operational centres according to specific contracts issued by the JRC.

The deadline for this action is end of August 2012.

Action 5.4 *– "To strengthen operational cooperation among the emergency response authorities in the Danube countries and to improve the interoperability of the available assets"*

This roadmap has not been developed yet. Input has been received but it has to be turned into roadmap. Once this roadmap it will be ready it will be circulated in the frame of a written procedure.

Target: Update of the accidental risk spots inventory at the Danube River Basin level by 2013.

Action 5.5 *– "To continuously update the existing database of accident risk spots (ARS Inventory), contaminated sites and sites used for the storage of dangerous substances"*

Milestone N^{o}1: New templates for ARS are available. The templates were discussed by the Accident Prevention and Control Expert Group and as well with the Information Management and Geographical Information System Expert Group at the Secretariat for considering the DanubeGIS requirements. The group decided in 2010 to select the Seveso II and the IPPC installations for reporting on the risk to water of sites and communicate in addition to the specific information about the sites, the rough estimation of the quantities for the main water endangering substances.

It has been agreed that all inventories of ARS with potential of high risk of accidental pollution in the first draft form to be submitted to the ICPDR Secretariat by the end of September 2012. A final inventory will be completed before the Ordinary Meeting December 2012. The sites identified will be mapped and an updated map of ARS will be available by end of May 2013.

The deadline for this milestone is end of 2013.

Action 5.6 *– "To develop rapid response procedures and plans in case of industrial accidental river pollution"*

Milestone N^{o}1: **AEWS system upgrade and refining.**

The current Danube AEWS was developed in the frame of the UNDP/GEF Danube Regional Project in the year 2003 and was further refined based on experience gained during the use and regular tests coordinated by the AEWS Task Group of the ICPDR.

Despite its successful applications the system faces a growing problem that the software platform is outdated which entails potential security risks and accessibility issues and hinders further improvements of the system.

During the installation of a new virtual server for ICPDR websites in December 2010, the current AEWS could not be migrated to the new server, because of compatibility issues with the latest operating system version. Due to the age of the current AEWS hardware, there is now an additional risk of an unrecoverable system break down.

The aim of the upgrade is to build on the successful functions of the current AEWS system and enhance it with modern web tools. The following development goals are envisaged:

- Rebuild the system using the open-source software framework Drupal which was already used for developing latest ICPDR websites. Using open-source software eliminates the risk of dependency from specific software companies (currently Oracle Portal software) and provides increased flexibility to adapt the system to future needs.
- Migrate the new system to the new ICPDR virtual server to have a stable platform and minimize maintenance costs.
- Improve usability and flatten the learning curve for new users (PIAC staff) by optimising workflows and partial redesign of the system, e.g. by providing an improved overview on the current status of incidents and required actions.
- Ensure accessibility and compatibility with modern web browsers and smaller screens (netbooks, smart phones).
- Consolidate the provided information for incidents to provide a better overview during emergency cases and also later reporting needs.

The on-line demo version of the new system was presented by the Secretariat at the 3rd APC EG meeting. The main functions of the current AEWS stay also in the new system and improvements were made mainly related to a better overview for the user on possible actions in the current situation and on available information for an incident. Further additions should improve the usability of the system, e.g. attachments, print-optimised forms, lookup of substance information, geocoding and mapping of location.

The APC EG found the AEWS upgrade more user-friendly and less complicated to work with.

The deadline for the milestone is end 2013.

Milestone N^{o}2: **Regular AEWS maintenance**

The AEWS test in April 2012 was initiated on a week day's evening. Its main objective was to test the 24/7 operability of Principal International Alert Centres (PIAC) and the basic use of the system.

The test has confirmed that the system is working as expected from a technical point of view. The main results are the following:

- All 14 PIACs participated actively in the test.
- All 14 PIACs reacted considerable faster than the 3 hours required response time.

This milestone is checked every year till the end of 2015.

Target: To address the challenges of water scarcity and droughts based on the 2013 update of the Danube Basin Analysis and the ongoing work in the field of climate adaptation, in the Danube River Basin Management Plan to be adopted by 2015

Action 5.7 *– "Anticipate regional and local impacts of climate change through research"*

Milestone n°1: Danube Climate Adaptation Study summarising and assessing all existing information relevant for the adaptation of the water sector to climate change.

This milestone has been accomplished in January 2012. The study can be downloaded from the following link: http://www.icpdr.org/icpdr-pages/climate_adaptation_study.htm.

Milestone n°2: Danube Climate Adaptation Workshop

This milestone has been accomplished. The related documents and presentations can be obtained following the link:
http://www.icpdr.org/pls/danubis/danubis.wwv_main.main?p_siteid=1&p_cornerid=94648

Milestone n°3: Danube Climate Adaptation Strategy

Work on the development of the ICPDR Strategy on the Adaptation to Climate Change, as asked for in the Danube Ministerial Declaration 2010, is progressing. Actions related to climate adaptation in the Danube area are also supported in the frame of the EU Strategy for the Danube Region.

On 29-30 March 2012, the Danube Climate Adaptation Workshop took place in Munich (DE) with participation of representatives from the Danube countries, the Team of Experts, stakeholders and observers as well as other relevant experts. At the workshop, the results of the Danube Climate Adaptation Study were presented and discussed next to first proposals on the main elements for the Danube Climate Adaptation Strategy. The workshop allowed for input towards the development of a first annotated draft Table of Contents for the Adaptation Strategy, which was discussed at the 35th RBM EG Meeting.

Next steps

- 1st draft of the ICPDR Strategy on the Adaptation to Climate Change to be provided to the RBM EG and other relevant EGs and TGs for written comments in early autumn
- 2nd draft of the Strategy to be discussed at the 36th RBM EG Meeting in October 2012
- Written consultation of the RBM EG for final substantial comments
- Adoption of the Strategy at the 15th ICPDR Ordinary Meeting in December 2012.

The deadline of this milestone is December 2012.

Action 5.8 *– "To develop spatial planning and construction activities in the context of climate change and increased threats of floods"*

No progress has been made under this Action. We are looking for an organisation that can execute this Action.

ANNEXES

Annex 1: Roadmaps to implement each action

Annex 2: Projects approved by the Steering Group

Annex 1

Roadmaps to implement each 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"*

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 (APSFR) within an international river basin district in accordance with the EFD article 5(2).
- *Output*: Preliminary flood risk assessment report;
  → *Responsible*: FP EG

  →*Deadline*: end 2011

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*: ICPDR templates for flood risk mapping (2012);
- *Output*: Flood hazard and flood risk maps on the level A (2013).
- *Output*: Flood hazard and flood risk maps on the level A endorsed by the SG (2013).
  → *Responsible*: FP EG

  →*Deadline*: end 2013

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*: Project generation (June 2013).
- *Output*: 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

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*: Table of Contents of the flood risk management plan (end 2013);
- *Output*: Draft flood risk management plan for public consultation (end 2014);
- *Output*: Final flood risk management plan (end 2015).
- Output: Flood risk management plan on the level A endorsed by the SG (2015).
  → *Responsible*: FP EG

  →*Deadline*: 2015

Priority Area 5 *- To manage environmental risks*

Action 2 *- "To support wetland and floodplain restoration as an effective mean of enhancing flood protection, and more generally to analyse and identify the best response to flood risk (including "green infrastructure")".* Taking into account the new challenges brought by the effects of the climate change is clear that continue to use the same approach of only building levees alongside the river in order to keep the high level water inside will no longer work or will become a bigger threat to humans. Therefore we have to think to give back some of the floodplains and to leave more "room for rivers". This new approach will be good both for reducing the flood risk and for improving aquatic environmental conditions

<u>Milestone n°1</u>: Succesful implementation of the Morava-Thaya Basin initiatives

- *Work*: Protection of the 'Donau March-Thaya-Auen' wetland leading to the lowering of flood risks in the flooding areas and to the improvement of urban water courses.
- *Output*: Development of a plan and a strategy for promoting environmentally benign, soft, quality tourism, including leisure navigation
  → *Responsible*: Austria, Czech Republic and Slovakia

  →*Deadline*: December 2013

<u>Milestone n°2</u>: Development of a Master Plan for the restoration of Floodplains of the Danube and its tributaries from spring to its discharge into the Black Sea

- *Work*: Assessment of the existing projects and identification of the future possible areas where the floodplain could be restored and evaluation of the benefits for flood control and improvement of the aquatic environment including the connection between the main bed with the floodplain.
- *Output*: Development of an application to be submitted for financing from the EU funds
  → *Responsible*: ICPDR, Romania

  →*Deadline*: 31 May 2013

- *Output*: Development of Master Plan
  → *Responsible*: DRS countries

  →*Deadline*: June 2015

- *Output*: Development of Master Plans for Large Tributaries
  → *Responsible*: DRS countries

  →*Deadline*: June 2021

Milestone n°3: Organisation of national and regional workshops concerning the Danube Floodplain restoration

- *Work*: Development of the documents and organization of the workshops with the involvement of all concerned stakeholders in order to present the local and regional benefits of the wetland restoration as well as the Danube Floodplain Master Plan concept
- *Output*: 10 national winners identified in each of the 14 ICPDR countries
  → *Responsible*: ICPDR, Romania and Danube countries involved

  →*Deadline*: December 2013

Priority Area 5 *- To manage environmental risks*

Action 3 *- "To extend the coverage of the European Floods Awareness System (EFAS) system to the whole Danube river basin, to step up preparedness efforts at regional level (including better knowledge of each other's national systems) and to further promote joint responses to natural disasters and to flood events in particular, including early warning system."*

Milestone n°. 1:

- *Work*: Establishment of the three operational EFAS centres for hydrological data collection, computation, and dissemination of EFAS information as part of the initial operational of GMES Emergency Management Service, which has entered its Initial Operation (GIO) phase following Regulation (EU) n°911/2010 of 22 September 2010 on "The European Parliament and the Council on the European Earth monitoring programme (GMES) and its initial operations (2011 to 2013)".
- *Output*: The winners of the public tenders for i) ***EFAS computation centre*** (European Centre for Medium Range Weather Forecasts), ii) ***EFAS dissemination centre*** (Consortium of Swedish Meteorological Hydrological Institute, the Dutch Rijkswaterstaat and the Slovak Hydrometeorological Institute) and iii) ***EFAS hydrological data collection centre*** (Consortium of the Andalusia Environment and Water Agency, and the Spanish private company ELIMCO Sistemas) will be setting

up and establishing the EFAS operational centres according to specific contracts issued by the JRC.
→Responsible: JRC;

→Deadline: End of August 2012

Milestone n°. 2:

- *Work*: Operational running of EFAS at the operational centres mentioned in Milestone 1
- *Output*: EFAS running operationally at each centre as a 7/365 service producing probabilistic early flood forecasting information twice daily which will be distributed daily to the EFAS Danube partners via a username and password protected website and daily summary updates on the flood situation in Europe to the Monitoring and Information Centre (MIC), the operational heart of the Community Mechanism for Civil Protection in Europe to assist aid management during trans-national flood crisis in the Danube river basin.
  →Responsible: JRC;

  →Deadline: ending of GIO ERS in 2013 (initially, further continuation under discussion)

Milestone n°. 3:

- *Work*: Contact the relevant hydrological authorities in Bosnia and Herzegovina (remaining country with a significant part of the Danube basin which is not an EFAS partner yet) to become an EFAS partner
- *Output*: Memorandum of Understanding (or equivalent) with Bosnia and Herzegovina
  →Responsible: JRC;

  →Deadline: 31/12/12

Milestone n°. 4:

- *Work*: Annual training on EFAS, its methodologies, concepts, products and results for EFAS Danube partners
- *Output*: 1-2 day information day on EFAS for all partner organisations
  →Responsible: JRC;

  →Deadline: August 2012 & August 2013

Milestone n°. 5:

- *Work*: Bi-monthly bulletins distributed to all EFAS partners providing a summary of ongoing work, hydro-meteorological situation and description of case studies with special focus on Danube case studies if appropriate
- *Output*: Bi-monthly bulletins
  →Responsible: JRC;

  →Deadline: regular bi-monthly

Milestone n°. 6:

- *Work*: Specific ICPDR training workshop on EFAS, its methodologies, concepts, products and results
- *Output*: 1-2 day information day on EFAS for ICPDR partners
  →Responsible: JRC;

  →Deadline: December 2013

Milestone n°. 7:

- *Work*: Find financing possibilities for EFAS beyond 2013
- *Output*: Budget for the operation of EFAS beyond 2013
  →Responsible: JRC; PA5 coordinators

  →Deadline: June 2013

Milestone n°. 8:

- *Work*: Handling flash flood like events by using the modern monitoring and early warning systems and data dissemination for relevant authorities of the affected states.
  - Scientific definition, clustering and delineation of endangered areas (end 2013);
  - Building a pilot site (2015)
  - Expansion of the monitoring and warning system for the whole Danube Region (2020)

- *Output*: Flash flood warning systems. Pilot site. Monitoring network and data dissemination system.
  →Responsible: SG and the Flood Protection Expert group of the ICPDR

  →Deadline: 2013, 2015 and 2020 respectively

Priority Area 5 *- To manage environmental risks*

Action 5 *- "To continuously update the existing database of accident risk spots (ARS Inventory), contaminated sites and sites used for the storage of dangerous substances" – this requires to work with the institutions/organisations concerned to reduce the risk to minimum levels and should include harmonisation of safety standards, increased awareness and capacity in accident response and joint crisis management.*

<u>Milestone n°1</u>: ICPDR Accident Risk Spot Inventories

- *Work*: Preparation of templates for the inventories of ARS, collection of information and data and provide support for the data collection at the national level, especially for non MS
  → *Output*: ARS inventories available for all Danube countries

  → *Responsible*: APC EG

  →*Deadline*: end 2013

- *Project*: Integration of ARS inventories in the GIS systems and ICPDR databases
  → *Output*: databases on ARS inventories

  → *Funding*: EU, CPs

  → *Responsible*: APC EG, PM EG, IMGIS EG

  → *Deadline:* end 2013

<u>Milestone n°2</u>: ICPDR Accident Risk Spot Inventories Maps

- *Work*: The general objective is to produce ARS maps, to illustrate the risk associated with the sites posing a risk in the DRB, and assess progress in the implementation of preventive measures addressing accidental pollution in the basin.
  → *Output*: Maps of ARS in the Danube Basin.

  → *Responsible*: APC EG, PM EG, IMGIS EG

→*Deadline*: end 2013

<u>Milestone n°3</u>: ICPDR Guidelines and good practices for Tailing Management Facilities

There is evidence and understanding that environmental degradation of transboundary watercourses has occurred on numerous occasions as a result of (TMF) failures. As risks are posed by Tailing Management Facilities (TMFs) in all categories (active, inactive, neglected, temporarily closed; and abandoned) there is particular concern regarding the large number of neglected, abandoned or orphaned TMFs where active monitoring or maintenance is not undertaken. The integration of risk reduction of mining accidents in the ICPDR Accidental Risk Prevention policy in line with the EU legislation, especially the Management of Waste from Extractive Industries (2006/21/EC Directive) will be achieved through the preparation of a guidelines and set of good practices for TMF.

✓ *Output*: Guidelines and good practices for Tailing Management Facilities.

→ *Responsible*: APC EG, PM EG

→*Deadline*: end 2014

Priority Area 5 *- To manage environmental risks*

Action 6 *- "To develop rapid response procedures and plans in case of industrial accidental river pollution"*

<u>Milestone n°1</u>: AEWS system upgrade and refining

- *Work*: Rebuilding the AEWS system using then open-source software framework Drupal. Using open-source software will eliminate the risk of dependency from specific software companies and provide increased flexibility to adapt the system to future needs. Migrating new system to the new ICPDR virtual server to have a stable platform and minimize maintenance costs.
- *Output*: Danube AEWS based on an open-source software platform (2012);
- *Output*: Upgrade of AEWS design improving its applicability (2013).

→ *Responsible*: APC EG

→*Deadline*: end 2013

<u>Milestone n°2</u>: Regular AEWS maintenance

- *Work*: The AEWS tests will be organized with a view of checking the performance of the Danube AEWS. The major attention will be given to checking the preparedness (response time) of the Communication Units of the national PIACs as the recent tests revealed weakness in this aspect. Two unannounced tests will be organized each year

out of which one will be targeting 24/7 preparedness while the second test will be more technical, checking an overall management of an accident including assessment of the threshold levels and thus involving the Expert Units.
Every year during a meeting of the ICPDR AEWS experts a practical hands-on training on AEWS operation takes place, at which the Secretariat presents the AEWS system in detail, highlighting the frequently encountered problems and evaluating the performance of PIACs in the AEWS tests. The AEWS experts have then to disseminate the updated know-how on the system operation at the national level to the PIACs staff. To maintain high level of PIAC staff preparedness, organization of regular trainings on an annual basis will be continued.

- *Output*: Organization of regular performance tests of the Danube AEWS.
- *Output*: Regular training of AEWS Operators.
  → *Responsible*: APC EG

  →*Deadline*: end 2015

<u>Milestone n°3</u>: International standardization of AEWS

- *Work*: In the Danube River Basin there are numerous independent international activities addressing the emergency response (e.g., UN/ECE IAN, CECIS EC MIC, ICPDR AEWS, NATO Disaster Response, IAEA system for reporting on nuclear accidents in cooperation with EC IRIX - International Radiation Information Exchange and ECURIE - European Community Urgent Radiological Information Exchange). Running all these activities, in parallel, leads to overloading the staff at the national alarm centres (established usually under the Civil Protection / Ministry of Interior). To strengthen the operational cooperation between the emergency response authorities, the UNECE proposed to adopt common standards by all existing warning systems to ensure their full compatibility. It also should be made sure that there is only one point of contact in a given country. This approach would eliminate any potential confusion during an accident management and, at the later stage, it could avoid using of parallel overlapping systems by making them fully compatible & complementary so that triggering one system would be recognized by the others. The ICPDR has been invited by the UNECE to join this standardization process and mandated at its 8th StWG meeting the Secretariat to participate in the process of standardization in notification on chemical accidents upon request of UNECE with the view of maintaining the Danube AEWS as the key warning system in the DRB.
- *Output*: Danube AEWS based on an international Europe-wide standard.
  → *Responsible*: APC EG

  →*Deadline*: 2015 and beyond

Priority Area 5 *- To manage environmental risks*

Action 7 *- "Anticipate regional and local impacts of climate change through research"* Initiatives in this research field should address specific concerns in the Danube Region. Research projects on the impacts of climate change on infrastructure, health, food security and the environment should be initiated. Furthermore, the international scientific cooperation in this field should be supported, while ensuring close coordination with overall action at EU level. A preparatory action "Climate of the Carpathian Basin" will be launched before the end of 2010. This action will contribute to regional climate variability and change studies, and applied climatology. It will also encompass an analysis of the vulnerability of water and ecosystems of the region to climate change impacts and other man-made pressures and on identifying potential adaptation measures, focusing on adaptive water management and ecosystem-based approaches. This work should be used at basin level.

Milestone n°1: Danube Climate Adaptation Study

- *Work*: Preparation of a study, summarising and assessing all existing information relevant for the adaptation of the water sector to climate change
- *Output*: Overview and assessment of latest available information as a basis for the development of the Danube Climate Change Adaptation Strategy
  → *Funding*: Germany

  → *Responsible*: Germany in the frame of the ICPDR

  → Deadline: January 2012 (accomplished); study can be downloaded from the following link: http://www.icpdr.org/icpdr-pages/climate_adaptation_study.htm

Milestone n°2: Danube Climate Adaptation Workshop

- *Work:* Organisation and accomplishment of the workshop with participation of representatives from Danube countries and different water-related sectors and NGOs
- *Output:* Dissemination and discussion of the Danube Climate Adaptation Study towards the creation of a common understanding on expected climate change impacts on the water sectors in the Danube River Basin and discussion on adaptation needs
  → *Responsible:* Germany in the frame of the ICPDR

  → *Deadline:* March 2012 (accomplished); related documents and presentations can be obtained following the link:

http://www.icpdr.org/pls/danubis/danubis.wwv_main.main?p_siteid=1&p_cornerid=94648

Milestone n°3: Danube Climate Adaptation Strategy

- *Work:* Further exchange and discussions towards the finalisation of the Danube Climate Adaptation Strategy based on input from the Danube Climate Adaptation Study, respective discussions at the workshop and the different expert bodies of the ICPDR during 2012
- *Output:* Finalised Danube Climate Adaptation Strategy
  → *Responsible:* Germany in the frame of the ICPDR

  → *Deadline:* December 2012

Milestone n°4: Check the Danube Climate Adaptation Strategy for completeness

- *Work:* Check the Danube Climate Adaptation Strategy to see if further topics need be covered
- *Output:* Gap analysis
  → *Responsible:* ICPDR

  → *Deadline:* June 2013

Priority Area 5 *– To manage environmental risks*

Action 8 *– "To develop spatial planning and construction activities in the context of climate change and increased threats of floods".* Flood prevention activities imply the cooperation of national, regional and local authorities in terms of land-use and physical planning. Spatial Data Infrastructure for the Danube Region needs to be developed through increased cooperation, coordination and data exchange, as required under the INSPIRE Directive. Adequate land-use needs to be identified and agreed in an integrated way, and priority actions such as the promotion of sound forest and pasture management, the minimising of plough lands on the slopes of hills or the protection of biodiversity and restoration of ecosystems and natural river courses need to be taken across the Danube Basin area. Urban and housing development need to take account of climate change factors. Cities and towns in the Basin should be encouraged to share experience and best practice in this field.

Milestone n°1: Exploring areas stricken by droughts and water shortage, problem management in the Danube region

- *Work*:
    a) Exploring areas stricken by droughts and water shortage, and classifying them into clusters taking into account of the impacts of climate changes (spatial characteristic of the exposure and sensitivity to climate change)
    b) Developing special actions for each cluster to manage problems caused by droughts and water shortage
    c) Assessment of the spatial characteristic of the adaptive capacity and adaptation options for each cluster
    d) Elaborating integrated professional principles for transboundary regions
    e) Preparing action plan
    f) Preparing intervention plans
    g) Implementing interventions
- *Output*: Executing intervention plans
  → *Responsible*: SG

  → *Deadline*: 2015 for Works a.)-f.)

  end of 2020 for Work g.) (depending on Work f.))

Milestone n°2: Measurement of land use aspects (forestry, agricultural and land cover related land uses etc.) of protection against flood, and developing recommendations for the application of land use aspects in flood risk management plans.

- *Work:* Evaluating and comparing the land use of the flood prone area and land cover changes due to climate change; evaluating the land use of the regions exposed to flash floods taking into account the climate change impact; developing model recommendations on land use changes, integration into flood risk management plans
- *Output:* land use maps (current status and planned land use); flood risk management plans
  → *Responsible:* SG

  → *Deadline:* *2017*

Milestone n°3: Development of spatial planning research program and methodology for the sake of harmful effects mitigation of climate change

- *Work:* Laying down principles; underlying R&D (spatial vulnerability assessment, spatial characteristic of mitigation capacity); delimitation of special areas (zones) regarding climate change sensitivity and vulnerability; developing spatial planning and regulation directives; action plan
- *Output:* spatial planning and regulation directives; action plans

→ *Responsible:* SG

→ *Deadline:* *2018*

Milestone n°4: Principles of climate-friendly city structure and integration of climate-aware architecture solutions in the regulation of different sectors

- *Work:* R&D for understanding the maturation and dynamism of ‘urban heat islands’; erection of urban energy cycle model; elaborating planning and regulation directives for reduce heat-load; working out standard regulation background in connection flood-safe building construction and preparation of buildings for water shortage; action plans;
- *Output:* model of urban heat islands; planning directives for reducing heat-load; regulation
  → *Responsible:* SG

  → *Deadline:* 2021

Annex 2

PROJECT APPROVED BY THE STEERING GROUP

A EUSDR relevant project label issued to

Name of the project	*SEERISK- Joint Disaster Management risk assessment and preparedness in the Danube macro region*
Action related	*Action 04 "To strengthen operational cooperation among the emergency response authorities in the Danube countries and to improve the interoperability of the available assets"*
Countries involved	*Slovenia, Hungary, Romania(National Meteorological Administration, Arad), Bulgaria*
Funding	South East Europe Programme; *1,980,751.16 EUR Euro*
Stage of implementation	*has been approved by the Steering Group and proposed by financing*
Description	*Enhancing the coherence in regional risk assessment for natural hazard and preparedness to minimise their effects at the national and local levels, in particular in the case of risks arising from climate change in South-Eastern Europe*
Involvement of the PACs	*Follow the development of the project. Ask for progress reports.*
Next steps	*-elaboration of common methodology to be applied in all the case studies project which concerns the risk assessment and planning training for the minimization of climate change effects;* *-elaboration of a document concerning the risks associated with climate change and preparation for implementation in a case study in Arad County* *-development of a platform for debate on climate change and adapt to its effects in terms of risks and planning training to minimise their effects.*

Name of the project	***Monitor II**: Practical Use of MONITORing in Natural Disaster Management*
Action related	*Action 04 "To strengthen operational cooperation among the emergency response authorities in the Danube countries and to improve the interoperability of the available assets"*
Countries involved	*Austria, Bulgaria, Greece, Italy, Romania, Slovenia*
Funding	*EUR 2,358,000; SEE Programme*
Stage of implementation	*Under implementation*
Description	*Currently, natural hazards such as floods, mass movements, earthquakes and forest fires are major factors increasing the vulnerability of the population in Southeast Europe (SEE). Until now, neither hazard mapping nor contingency planning have been transnationally coordinated in a sufficient manner.* *To prevent natural disasters, the countries of SEE are increasing their efforts to develop measures to decrease risk factors, which lead to natural disasters. This can be done firstly, by enhancing preparedness and public awareness through communication and information, secondly, by devising land use plans and thirdly, by setting up reliable early warning systems.* ***Enhancing Preparedness*** *The prevention of natural hazards requires intensive awareness raising and training for preparedness. The ambitious communication structure and dissemination strategy of MONITOR II helps to achieve these objectives. Through permanent media work, which is based on a common communication and dissemination plan, the presentation of multi-lingual information material to a broad audience, the development of a project website to publish results for internal and external use as well as training courses, conferences and seminars of different stakeholder and target groups are strategies to achieve an enhanced preparedness.* ***Contingency Plans and Hazard Maps*** *Until now, in the case of trans-national emergencies and their prevention, the cooperation between member countries is often hampered by the existence of different procedures and standards. The aim of MONITOR II is to agree on a harmonised methodology for both, hazard maps and contingency plans. Moreover, guidelines are developed for the communication of complex information like forecasts and*

	warnings to allow an efficient cooperation in real-time beyond national borders. ***Continuous Situation Awareness*** *Due to the lack of a common early warning system in SEE countries, the "Continuous Situation Awareness" (CSA) system is developed. MONITOR II is offering a platform for public, politicians, emergency services and experts to discuss their needs concerning the development of a user-friendly CSA system, which is implemented and evaluated in test-beds. The CSA system supports users in planning tasks, situation assessment, decision making, communication and documentation of natural hazards.* *MONITOR II improves the usability of hazard maps and contingency plans in a transnational and harmonised manner. The newly developed CSA system allows communication in all phases of disaster management in order to improve the security in situations of natural disaster and provide a safe future for the inhabitants of SEE countries.*
Involvement of the PACs	*Follow the development of the project. Ask for progress reports.*
Next steps	*MONITOR II improves the usability of hazard maps and contingency plans in a transnational and harmonised manner. The newly developed CSA system allows communication in all phases of disaster management in order to improve the security in situations of natural disaster and provide a safe future for the inhabitants of SEE countries.*

Name of the project	*C-WaterS: Climate Change and Impacts on Water Supply*
Action related	*Action 08 "To develop spatial planning and construction activities in the context of climate change and increased threats of floods"*
Countries involved	*Austria, Bulgaria, Croatia, Greece, Hungary, Italy, Romania, Slovenia*
Funding	*4,224,503; SEE Programme*
Stage of implementation	*Under implementation*
Description	*Climate change affects fresh water resources and may have significant influence on public drinking water supply. Land use activities exert pressure on water resources and will change according to climate change. It is crucial for safeguarding future water supply to anticipate these climate and land use changes and to assess their impacts on water resources.* *Transnational action is needed to prepare the South East European Space for the challenge of ensuring water supply for society for several decades. Policy makers and water suppliers are required to develop sustainable management practices for water resources, considering existing and future influences of climate change. Therefore CC-WaterS will identify and evaluate resulting impacts on availability and safety of public drinking water supply for several future decades.* *Elaborated measures to adapt to those changes build the ground for a Water Supply Management System regarding optimization of water extraction, land use restrictions, and socio-economic consequences under climate change scenarios for water suppliers in SEE.* *The joint actions to produce this technical system will be performed on a transnational level in the Alps, Danube Middle and Lower Plains and coastal areas representing different SEE-characteristic climates and topography.* *In CC-WaterS, SEE governmental bodies, water suppliers and research institutions work together and implement jointly developed solutions, hence to be applied on a regional or local level in SEE. The complementary knowledge of the partners, enhanced by further applicable results of past projects, will provide a strong background.* *Capitalising already existing knowledge and data from EU-funded scientific projects and eliminating parallel investigations, CC-WaterS will make information applicable for*

	concrete solutions, develop tools and instruments for public water supply and implement safeguarding measures. An accessory dissemination strategy will ensure that CC-WaterS' durable results are transferred to the relevant users.
Involvement of the PACs	*Follow the development of the project. Ask for progress reports.*
Next steps	*Capitalising already existing knowledge and data from EU-funded scientific projects and eliminating parallel investigations, CC-WaterS will make information applicable for concrete solutions, develop tools and instruments for public water supply and implement safeguarding measures. An accessory dissemination strategy will ensure that CC-WaterS' durable results are transferred to the relevant users.*

Name of the project	*Transboundary Risk Management in the Danube Delta*
Action related	*Action 04 "To strengthen operational cooperation among the emergency response authorities in the Danube countries and to improve the interoperability of the available assets"*
Countries involved	*Germany, Moldova, Romania and Ukraine*
Funding	*EUR 837.000*
Stage of implementation	*Under implementation*
Description	*The goal of the project is to improve risk management within and between the three countries in the Danube Delta, in particular through strengthening the cross-border communication, hazard and crisis management and the after-math management. The assistance in this area should help to achieve the objectives of the UNECE IAC as well as to approach environ-mental standards of the European Union by the Republic of Moldova and Ukraine.* *The target group of the project are the experts from the ministries dealing with inspections of hazardous facilities and all cooperating authorities in the Republic of Moldova, Romania and Ukraine.* *They will be trained in workshops and capacity building activities organized in all three countries as well as during a field exercise. Moreover, the elaboration of safety guidelines for oil terminals is planned."*
Involvement of the PACs	*Follow the development of the project. Ask for progress reports.*
Next steps	*Experts from the ministries dealing with inspections of hazardous facilities and all cooperating authorities in the Republic of Moldova, Romania and Ukraine will be trained in workshops and capacity building activities organized in all three countries as well as during a field exercise. Moreover, the elaboration of safety guidelines for oil terminals is planned.*

Name of the project	*Danube Floodrisk - Stakeholder oriented risk assessment for the Danube floodplains*
Action related	*Action 01 "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"*
Countries involved	*Austria, Bulgaria, Hungary, Italy, Romania*
Funding	*EUR 4,800,000*
Stage of implementation	*Under implementation*
Description	*The overall objective of the FLOODRISK project is to develop and produce high quality, stakeholder oriented flood risk maps for the transnational Danube river floodplains to provide adequate risk information for spatial planning and economic requests. Risk information is the basis for sustainable development along the Danube River. The key objective will only be reached by intensive transnational cooperation and stakeholder integration. The goal is to link scientific progress in harmonization of approaches and data with practically oriented stakeholder and end user involvement. Vertical and horizontal cooperation are the two pillars of the project. The project's single objectives are:* - *Development of a joint mapping method for flood risk and harmonization of data sources.* - *Production and provision of risk maps and risk information.* - *Integration of relevant stakeholders and users on different levels into the definition and realization processes.* - *Involvement of different economic aspects of land use in the river basin like spatial planning, recreation and agriculture as well as energy supply or health service.* - *Linkage of flood risk mapping and provision of maps as basis for planning, e.g. within the EU Floods Directive.* - *Development and distribution of exemplary procedures within the Danube countries and beyond.* - *Reflection of the EU Directives, e.g. WFD, Floods Directive, providing feedback based on the experiences of the project cooperation by using the platform of the*

	ICPDR Flood Protection Expert Group. *The project contributes with these objectives to the improvement of the institutional cooperation of the ICPDR and further towards the realization of measures within the existing international cooperation structure. It supports decisions for investments on political and administrative levels by allowing the assessment of investments and land use decisions taking into account the Joint Program of Measures, based on the risk reduction aspects.*
Involvement of the PACs	*Follow the development of the project. Ask for progress reports.*
Next steps	- *Development of manual of harmonized mapping method for flood risk and harmonization of data sources* - *Printing the Danube Flood Risk Atlas.*

Name of the project	*Restoration of the Lower Morava floodplains*
Action related	*Action 02 "To support wetland and floodplain restoration as an effective mean of enhancing flood protection, and more generally to analyse and identify the best response to flood risk (including "green infrastructure")".*
Countries involved	*Austria*
Funding	*EUR 3,491,774; LIFE programme*
Stage of implementation	*Under implementation*
Description	*The aim of the project is to extensively restore near-natural river dynamics in the Lower Moravia floodplains, as well as to foster land-use practices, which preserve biodiversity and to specifically preserve endangered species and types of habitats.* *Under the terms of the EU Habitats Directive and the EU Birds Directive the projected measures will improve the conservation status of floodplain forests, floodplain meadows, as well as of Fire-bellied Toad (Bombina bombina), Danube crested newt (Triturus dobrogicus), Pond Turtle (Emys orbicularis), European Weatherfish (Misgurnus fossilis), Green Clubtail Dragonfly (Ophiogomphus cecilia), Red and Black Kite (Milvus spp.) and Common Tern (Sterna hirundo).* *At the same time the achievement of the quality goals specified in the EU Water Framework Directive can be furthered.*
Involvement of the PACs	*Follow the development of the project. Ask for progress reports.*
Next steps	*Near-natural river dynamics in the Lower Moravia floodplains restored* *The projected measures will improve the conservation status of floodplain forests, floodplain meadows*

Name of the project	*MoRe - Revitalisierung der March/Morava: Maßnahmendetailplan entsprechend EU Wasser- und Naturschutz-Richlinien*
Action related	*Action 02 "To support wetland and floodplain restoration as an effective mean of enhancing flood protection, and more generally to analyse and identify the best response to flood risk (including "green infrastructure")".*
Countries involved	*Austria, Slovakia*
Funding	*EUR 526,593.40; ERDF - Programm zur Grenzüberschreitenden Zusammenarbeit Österreich - Slowakei 2007-2013*
Stage of implementation	*Under implementation*
Description	*The main objectives are to generate a detailed plan to restore the original character of the meandering lowland river, to achieve a dynamic equilibrium according to the ecosystem approach and to improve the diversity of natural habitats in the floodplains. These aims are achieved through the gradual restoration of the natural interaction between the river bed and flood plain that are currently isolated from each other. The project objectives are in line with the requirements of the EU Water Framework Directive (achievement of good ecological status) to promote as well the favourable conservation status under the EU-Fauna-Flora-Habitat Directive and support the objectives of the trilateral Ramsar-site "March-Thaya-Auen".*
Involvement of the PACs	*Follow the development of the project. Ask for progress reports.*
Next steps	*The original character of the meandering lowland river restored*