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**ACTION PLAN**

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PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL  
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

**European Union Strategy for the Danube Region**

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## INTRODUCTION

The ‘EU Strategy for the Danube Region’ is described in two documents: (1) a Communication from the European Commission to the other EU Institutions, and (2) an accompanying Action Plan which complements the Communication.

The Action Plan is one of the outputs of the Strategy approach. Its aim is to go from ‘words to actions’ by identifying the concrete priorities for the macro-region. Once an action or project is included in the Action Plan, it should be implemented by the countries and stakeholders concerned. The projects are considered to be illustrative, providing examples of types of projects or approaches to be more generally encouraged.

### **Organisation of the Action Plan**

The organisation of the Action Plan seeks to identify priorities clearly, and make it explicit also who is responsible for their implementation and follow-up. It also aims to assign the responsibilities to different administrative levels and actors within the Region, with support from the other partners, notably the EU Institutions. The structure incorporates the following features:

- **Pillars**: These address the headline issues e.g. “connecting the Danube Region”. They are at the core of the Strategy and are essential to the success of its work, and how it is communicated.
- **Priority Areas**: These represent the main areas where the macro-regional strategy can contribute to improvements (either through tackling the main challenges or through seizing the main opportunities). For each priority area the Action Plan will present the issue and indicate main problems. *Examples: To support competitiveness of enterprises, etc.*

Coordination of each priority area will be allocated to a Priority Area Coordinator. These are at the heart of making the Strategy operational, and bear a central responsibility for its success. They work on its implementation, in close contact with the Commission, with all stakeholders involved, especially other countries, but also Regional and Local Authorities, Inter-Governmental and Non-Governmental Bodies.

- Each priority area has to be considered with other policy fields. The Strategy encourages an integrated approach (e.g. environment ↔ mobility ↔ economic development ↔ human resource development etc.). For example climate change mitigation and adaptation have an impact on transport, energy, tourism, research, etc. policies whilst the latter also have an impact on climate change. Therefore, for the implementation of each Priority Area, it is important that there is involvement of bodies and institutions representing other policy fields. **Actions**: An Action is an important issue requiring intervention by the countries and stakeholders involved to meet the objective of the Priority Area. It can be a new approach, an increased coordination in policy making, a support to a process already engaged, a networking initiative, etc. An action may not necessarily require financing. All actions should be understood without prejudice to the existing EU competences and requirements of the EU *acquis*. *Examples: New approach: “To legislate at the appropriate level to limit*

*the presence of phosphates in detergents”*; - *Increased coordination in policy making: “To develop a joint position of the region regarding the changes which could be introduced in the framework of the TEN-E Policy review”*; - *Objective that the countries can decide to achieve in their own way: “To support creativity and entrepreneurship”*; - *Support to a process already engaged: “To implement fully the Danube River Basin Management Plan”*.

- **Projects:** A project is concrete, with a start and end date. In general it requires financing, a project leader and project partners. The Action Plan presents projects by way of examples to stimulate further initiatives as the Strategy progresses, and as new ideas emerge. The aim is also to illustrate what is needed. *Examples: “To remove the shipwrecks, bridges debris and unexploded lethal weapons from the riverbed of the Danube”*; *“To implement the agreed infrastructure projects”*; *“To increase the use of electronic signatures”*; etc. These projects can be financed by national/ regional funds, EU funds such as the Structural Funds<sup>1</sup>, the Instrument for Pre-Accession Assistance (IPA) and the European Neighbourhood Policy Instrument (ENPI), International Financial Institutions or private investors, in line with the appropriate frameworks and practices.

The timeframe of the actions and projects varies. Some can be implemented in a short time (1-2 years) and some will need longer. As a general rule, each project would have a lead organisation/ country and a deadline. When not defined by the time of adoption of the Strategy by the Commission, the Priority Area Coordinators would ensure that this is decided by the countries.

In identifying the actions and projects suggested in the Action Plan, the following factors have been taken into account:

- **They should address identified priorities and be supported.** The need for the action or project should have been clearly expressed by countries, stakeholders or Commission’s services. In addition, the support of these partners is also crucial for the implementation and the proposals have been thoroughly discussed with them. In general, they should reinforce existing EU policies such as Europe 2020, Territorial Cohesion, Trans European Networks (transport and energy), the Energy and the future Transport Communities, or implementation of Directives. Finally they should also associate existing transnational bodies such as the International Convention for the Protection of the Danube River (ICPDR), the Danube Commission, the Regional Cooperation Council, the Danube Cooperation Process (DCP), the Council of Danube Cities and Regions, the Danube Tourism Commission, and other such organisations as appropriate.
- **They should have an impact on the macro-region (or a significant part of it).** Many projects should therefore be transnational. However, if a national project has a direct impact on the macro-region (e.g. the construction of a waste water treatment plant that improves the water quality of the rivers or the extension of a port to enable regional transport networks) or contributes to a policy objective of the strategy (e.g. the renovation of a town as part of a network to attract tourists) they could be included. However, most actions and projects having an impact on the macro-region will involve several countries who wish to cooperate. The impact should be articulated in the form of an impact indicator which can be

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<sup>1</sup> Structural Funds are available for Member States. They are managed through Operational Programmes agreed and managed by Member States, Regions and the Commission.

evaluated over time. Consideration should be given to the data which will need to be gathered in order to evaluate the impact (including the establishment of the baseline situation).

- **They should be realistic.** They should be feasible (technically and financially) and there should be overall agreement between countries, stakeholders and the Commission of their worth. In particular, a realistic source of funding should be identified. Indeed proposing a project for the Action Plan is not a funding request, and inclusion in the Plan is no guarantee of funding, but the feasibility and cost-effectiveness of a project should be established.
- **They should be coherent and mutually supportive.** Actions and projects must be compatible with each other and create win-win solutions. For example transport projects or energy efficiency initiatives cannot jeopardise achieving environmental targets.

The Action Plan should be stable for a certain period of time. However, over the years, the priorities may evolve and hence, the actions and projects may be updated, transformed or replaced. The Action Plan is therefore “rolling”, and will be regularly reviewed.

**A) CONNECTING THE DANUBE REGION**

## CONNECTING THE DANUBE REGION

This pillar focuses on transport, energy and culture/ tourism issues. The overall objective is to improve connectivity within the Danube Region and with the rest of Europe, in terms of infrastructures, systems and people. This can be done by improved coordination in infrastructure works, improved operation of transport and energy systems, exchanges of experience on clean energy, and promotion of Danube culture and tourism.

It will focus on three Priority Areas: (1) To improve mobility and multimodality (covering road, rail and air links as well as inland waterways); (2) To encourage more sustainable energy (covering energy infrastructure, markets and clean energy) and (3) To promote culture and tourism, people to people contacts.

This pillar strongly supports the Europe 2020 Strategy:

1. It aims to contribute to smart growth. Better transport and energy infrastructures are conditions for innovation (attracting skilled researchers and workers). Innovative solutions can reduce costs, improve efficiency and encourage sustainable solutions. Modern, sustainable tourism also demonstrates strong potential in the Region.
2. It aims to contribute to sustainable growth. It supports reduction of energy consumption, increase of renewable energy, modernisation of the transport sector to make it more environmentally friendly (e.g. by promoting multimodality) and more efficient, and promotion of 'green' tourism. This is also with the perspective to improve the business environment and hence the competitiveness of enterprises.
3. It aims to contribute to inclusive growth. Energy can be made more secure and affordable. New jobs can be created. Territorial cohesion is supported e.g. through better connections, enabling people and enterprises to modernise even the more remote regions. Building on Danube culture harnesses the diversity of people in the Region.

The priority areas have to be considered with other policy fields. The Strategy encourages an integrated approach. For example, whilst improving transport infrastructure has a positive impact on elements such as the business environment, the attractiveness of cities and regions or the quality of life of citizens, it also has impacts on landscapes, on biodiversity or on air pollution. These cannot be taken in isolation, but have to be balanced against each other, to reach the most sustainable solution.



## **Examples of financing covering the Region**

### *Expenditures budgeted by the Structural Funds<sup>2</sup> in 2007-2013<sup>3</sup>*

#### **Transport EUR 24.8 b**

Roads and motorways	EUR 13.5 b
Railways	EUR 8.5 b
Ports and inland waterways	EUR 0.7 b
Multimodal nodes	EUR 0.5 b
Airports	EUR 0.2 b
Other (urban, cycle, etc.)	EUR 1.4 b

#### **Energy EUR 3.0 b**

Energy efficiency	EUR 1.5 b
Renewable energy	EUR 1.2 b
Other (electricity, gas, etc.)	EUR 0.3 b

#### **Tourism EUR 6.7 b**

Urban and rural regeneration	EUR 3.0 b
Natural & cultural heritage	EUR 1.4 b
Cultural & touristic services	EUR 1.2 b
Cultural infrastructure	EUR 0.6 b
Other	EUR 0.5 b

### *Other sources of financing*

Other EU programmes contribute to this pillar, in particular: the Trans European Transport and Energy Networks (TEN-T and TEN-E), the 7<sup>th</sup> Research Framework Programme, the Instrument for Pre-Accession Assistance (IPA) National, Cross-border Cooperation and Multi-beneficiary country programmes, several programmes of the European Neighbourhood and Partnership Instrument (ENPI) (such as the Regional programmes or the Cross-border Cooperation Programmes), the European Agriculture Fund for Rural Development (EAFRD), the European Fisheries Fund (EFF) and the Competitiveness and Innovation Programme. National, regional and local policies are also financing important projects. In addition, significant financing is already provided to a large number of projects via lending and/ or co-financing from various International and Bilateral Finance Institutions such as the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD), the World Bank, the Council of Europe Development Bank (CEB) or other lenders. More recently, for the countries of the Western Balkans, additional efforts have been made to better coordinate and blend instruments for grants and loans via the Western Balkans Investment Framework<sup>4</sup> (WBIF). A similar instrument to the WBIF, the Neighbourhood Investment Facility operates for the Republic of Moldova and Ukraine.

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<sup>2</sup> European Regional Development Fund (ERDF) including cross-border cooperation, Cohesion Fund and European Social Fund for the Member States. The Instrument for Pre-Accession Assistance and the European Neighbourhood and Partnership Instrument (ENPI) are not included.

<sup>3</sup> However, the use of Structural Funds depends on the specific operational programmes, developed and agreed upon at the beginning of the 2007-2013 programming period in close collaboration between the European Commission and the respective Member States/ Regions. These should offer opportunities for funding for specific actions/ projects, depending on the priorities and measurements/ actions identified in the respective operational programmes.

<sup>4</sup> The Western Balkan Investment Framework (WBIF) is a blending instrument for grants and loans for candidate countries and potential candidates.

## 1) TO IMPROVE MOBILITY AND MULTIMODALITY

### Presentation of the issue

Mobility goes beyond technical aspects and infrastructure. It includes organisational issues, meeting overall transport demand and seasonal/ daily traffic peaks, spatial planning, life-styles, innovations, etc. Together with inland waterways, road and rail provide important international connections within the Region. Ports on the Black Sea and ports of the northern Adriatic, as well as railway lines and airports, are immediate entry points to the basin from abroad. An appropriate transport policy has to take into account all these, promoting multimodality, while also considering environmental respect, economic growth and social development.

Sustainable mobility overall is a clear objective of Europe 2020, as well as the common European transport policy. Given that inland navigation has a relatively low environmental impact (it emits 3.5 times less CO<sub>2</sub> per ton-kilometre than trucks) it is an important mode of transport. Linked by the Main-Danube canal, the Rhine and the Danube are directly connecting eleven countries from the North Sea to the Black Sea over a length of 3,500 km. Hence, the Danube river represents the backbone of the Region<sup>5</sup>. However, the development of waterways as navigation corridors must go hand in hand with the creation of modern and efficient intermodal ports to integrate navigation with rail and road.

### Danube Region specifics

There is general agreement that good, inter-linked and sustainable transport systems are important for the region. The coordinated improvement of transport on the basis of holistic and integrated development concepts accompanied by the development and use of appropriate technical, eco-sustainable solutions can increase the attractiveness of the Danube river as a cost-effective corridor for effectively delivering regional sustainable development and mobility. More specifically, a multidisciplinary approach for waterway infrastructure projects can ensure preservation and restoration of the valuable ecosystem of the Danube. This needs to be complemented by upgrading of the railways. Here especially the implementation of rail freight corridors as part of the European rail network for competitive freight<sup>6</sup> play a crucial role. The Danube region is served by several of the Rail Freight Corridors to be implemented within the next 3 to 5 years.

In this context, ensuring the interoperability of the railway lines in the area, e.g. the capacity of locomotives to cross borders is essential to improve the competitiveness of rail. In particular, lines upgraded with the support of EU funds shall be equipped with the ERTMS<sup>7</sup>.

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<sup>5</sup> From Kelheim in Germany to Sulina in the river's Romanian delta, the navigable length of the Danube totals 2,414 km serving more than 40 ports of international importance. The annual transport volume on the entire Danube amounts to about 50 millions tonnes, which is equivalent to 2.5 million trucks or 62,500 block trains. With 10 riparian countries and 1,025 km of shared borders the Danube is also the most international river in the world. Together with the overland routes running through the Region, it constitutes a vital link east-west, as well as being a crossroads for many North-South routes.

<sup>6</sup> Regulation (EU) No 913/2010 of the European Parliament and of the Council of 22 September 2010 concerning a European rail network for competitive freight

<sup>7</sup> European Rail Traffic Management System

Interlinked with help of efficient intermodal terminals the Danube river, the Rail Freight Corridors and connecting railway lines can mitigate road congestion and contribute to an efficient transport system and a more environmentally sustainable modal-split.

For inland navigation, the Danube River is clearly not used to its full potential. Cargo volumes transported on the Danube are only between 10% and 20% (depending on the parameters used) of those carried on the Rhine. This potential could be better exploited by, e.g., enhanced multimodality, improved infrastructure, improved logistics management or better equipment (e.g. innovatively designed vessels, modern computer-based navigation aids). Throughout the year, the waterway infrastructure, on some sections of the network, partly limits the competitiveness of navigation on the Danube River (primarily in case of extended low water periods). Ports need to be modernised and adjusted to multimodal requirements. Over the last decades there has been a lack of investments and little innovation in the river fleet. A shortage of personnel (especially captains and pilots) is the result of insufficient training facilities, migration tendencies and the high proportion aged 50+.

For roads and railways, infrastructure is often not efficient or simply missing, especially regarding cross-border connections (to which national authorities do not give priority). There is a lack of investment on cross-border links, partly because state borders in the Danube basin have changed considerably in the recent past, disrupting connections (elimination of roadways, demolition of bridges and dismantling of railway lines). As a consequence, settlements with great potential for mutual cooperation in the enlarged EU still lack the necessary links, and speed restrictions due to outmoded infrastructure is widespread.

Airports need to be easily accessible, safe and secure. In certain parts of the Danube Region airports are undergoing privatisation and/or management decentralisation processes and need to have a strong and efficient management system. The potential for regional airports is being put into light by point-to-point flights and the growth of air cargo. Such growth must take place in a harmonious and unconstrained way.

Problems are largely linked to a lack of coordinated planning, funding and implementation. The existing inter-governmental bodies need support to deliver sufficient concrete results. Since mobility and accessibility require costly investments, it is important to plan so that these investments are used to their full potential (e.g. joint investments, planned transnationally with shared costs and benefits).

Multimodal nodes need to play a more significant role not only in terms of accessibility but as optimal places for concentrating business and industry. The Rail Freight Corridors already mentioned above comprise also intermodal terminals, ensuring efficient trimodal interfaces between inland waterways, railways and roads as logistical hubs in the Danube Region.

Mobility and accessibility are also linked to other policy fields such as environment, and socio-economic development. An integrated approach means overall benefits are more realistically assessed, to include the benefits for all the countries and sectors concerned. Modern technological advances (e.g.: ICT) also allow mobility needs overall to be re-examined.

## **Actions**

### **Inland waterway transport**

The EU has committed itself to pursue the goal of shifting transport to less energy-intensive, cleaner and safer transport modes. Inland waterway transport can play a prominent role in reaching

these targets.

Concrete actions are needed to exploit fully the market potential of inland navigation and to make its use more attractive. Given that inland navigation is mostly an international transport mode, actions at both national and EU level are required.

The actions and projects of this chapter complement and build on already on-going activities in the Danube Region. They are in line with the goals set forth by the European Action Programme for Inland Waterway Transport (NAIADES). The time perspective of the current NAIADES programme will finish in 2013. There is thus a need to set up a follow-up programme to ensure that the respective long-term transport goals for the Danube basin can be met.

### ***Improvement of infrastructure and economic performance of waterway navigation***

- ***Action - “To complete the implementation of TEN-T Priority Project 18 on time and in an environmentally sustainable way”***. Work is ongoing to identify environmentally sustainable solutions for improved navigability in order to eliminate existing navigation bottlenecks. This should also take into account likely impacts of climate change, the preservation of functioning ecosystems and planning guidelines contained in the “Joint Statement on the Development of Inland Navigation and Environmental Protection in the Danube River Basin”<sup>8</sup> and in the “Manual on Good Practices in Sustainable waterway Planning”<sup>9</sup>. TEN-T projects have been identified in Germany, Austria, Slovakia, Hungary, Bulgaria and Romania. The objective is to remove existing navigability bottlenecks on the river which shall accommodate type VI b vessels all year round by 2015<sup>10</sup>.
- ***Action - “To invest in waterway infrastructure of Danube and its tributaries and develop the interconnections”***. In order to enable economic hinterland connections, there is a need to improve the existing waterway network in the Danube River Basin. This should include consideration of infrastructure for missing links, as well as how best to develop the onward links to the Black Sea and beyond.
  - ⇒ ***Example of project - “To remove shipwrecks, bridges debris and unexploded weapons from the riverbed of the Danube”***. On some stretches of the lower Danube these create disruptions and have had long term repercussions on Danube navigation. Although good progress has been made, they are still hindering traffic and endangering safety of navigation on certain stretches especially in low water periods.

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<sup>8</sup> The “Joint Statement on the Development of Inland Navigation and Environmental Protection in the Danube River Basin” was developed by the International Commission for the Protection of the Danube River, the Danube Commission and the International Sava River Basin Commission. These guidelines call for an integrated planning team including the main stakeholders, to assess the needs for navigation and the aquatic environment on a case-by-case basis, and to include as much as possible win-win measures for both improving navigation and the ecological status.

<sup>9</sup> The manual was developed in the framework of the PLATINA initiative and aims at presenting good practises in sustainable waterway planning. The document provides guidelines for planning waterway development projects that are compatible with environmental protection requirements, creating a win-win harmony. It offers general advice for waterway infrastructure projects and addresses both technical planners and other interested stakeholders who want to be involved in a waterway development planning process.

<sup>10</sup> The international classification of European Inland Waterways (UNECE/TRANS/120/Rev.4, p. 28/29) in the European Agreement on Main Inland Waterways of International Importance (AGN) classifies the parameters for motor vessels and pushed convoys. In the present text, category VIB uniquely refers to pushed convoys and inland waterways vessels with a draught of up to 2.5m.

⇒ *Example of project - “To build the Danube – Bucharest Canal”*. The main goals pursued by the complex development of the Danube - Bucharest Canal system are: connecting the capital city of Romania with the Danube river through a waterway, defending 11 localities and 30,000 hectares of farming land against floods; producing power, establishing the necessary conditions for leisure and tourism, providing favourable ecological influences and other similar elements; supplying the necessary water for irrigation, providing drinking water for the neighbouring localities and for aqua-farming. (Lead: Romania).

➤ *Action - “To modernise the Danube fleet in order to improve environmental and economic performance”*. Environmental and economic performance of Danube navigation can be improved by means of innovation, dedicated fleet modernisation and optimised waste management measures. For this purpose, a common approach for the modernisation of inland vessels should be established. Technological developments in terms of innovative vessels, engines and optimised fuel consumption (e.g.: retrofitting with particle filter, using low emission fuel, using onshore power while docking) and logistics operations can make inland navigation more attractive giving it extra advantages.

⇒ *Example of project - “To build on the Waste management for inland Navigation on the DANUBE (WANDA) project”*. WANDA aims at establishing a sustainable, environmentally sound and transnationally coordinated approach in ship waste management along the Danube by (1) elaborating national ship waste management concepts, (2) implementing pilot actions and (3) developing a financing model for the operating system based on the polluter-pays principle (Lead: Via Donau; Deadline: March 2012).

#### ***Improvement of the organisational framework and human resources for inland waterway navigation***

➤ *Action - “To coordinate national transport policies in the field of navigation in the Danube basin”*. The European action programme NAIADES (Navigation and Inland Waterway Action and Development in Europe) defines a comprehensive set of measures in order to exploit the full potential of inland navigation. In order to create coherent links in the Danube region, the national administrations are called upon to pursue an active integration of inland waterway transport into their national transport strategies and policies, in a coordinated way.

⇒ *Example of project - “To build on the Platform for the implementation of NAIADES (PLATINA)”*. identifies the necessary policy actions, brings together the required stakeholders (working groups, expert meetings) and develops the necessary knowledge and tools. Key experts and stakeholders elaborate technical proposals for policy actions in the five NAIADES action areas. (Lead: Via Donau; Deadline: May 2012)

➤ *Action - “To support Danube Commission in finalising the process of reviewing the Belgrade Convention”*. The revision of the Convention has been almost completed, however has not yet been signed and ratified. The completion of the process would strengthen the role of the Danube Commission and will also allow the accession of the European Commission as Member.

➤ *Action - “To develop ports in the Danube river basin into multimodal logistics centres”*. In order to increase the opportunities to bundle cargo flows for inland waterway transport and reduce negative transport externalities elsewhere. A coordinated and harmonised development concept for multimodal ports should be elaborated by Danube river basin countries and relevant stakeholders. As a basis for this activity, national port development plans shall be elaborated or reviewed with a view to their integration into local and regional development

strategies.

- **Action - “To improve comprehensive waterway management of the Danube and its tributaries”.** National waterway management bodies are responsible for the continuous maintenance of the waterway infrastructure (e.g. surveying and dredging activities), as well often for implementation of flood protection and ecological measures (e.g. required by the EU Water Framework Directive). These bodies shall continue further to intensify their cooperation, in particular by creating common standards for waterway management<sup>11</sup> in the Danube basin.
  - ⇒ *Example of project - “To build on the network of Danube Waterway Administrations (NEWADA) project”.* The aim of this project is to facilitate the coordination of activities and future plans and the exchange of experiences among organisations which are responsible for waterway administration along the Danube. Building on this, a second step will consist in the identification of model activities and implementation of pilot projects to increase the effectiveness of waterway management (Lead: Via Donau; Deadline: March 2012).
- **Action - “To promote sustainable freight transport in the Danube Region”.** An intermodal interface should be established between Danube inland waterways freight transport and railway freight transport to strengthen existing economic ties and foster cohesion in the region. The project would help increase the multimodal freight transport and lead to more evenly and efficiently spread traffic across the existing infrastructure.
  - ⇒ *Example of project - “To develop container transport on the Danube”.* The goal of this transnational project is a strong cooperation between ports and partners of the private sector (e.g. logistics) in order to exploit the potential of container navigation. Upgrade of the required infrastructure in order to develop the most important partner ports as well as the establishment of a network within those ports is needed. Main activities within this field could comprise the preparation of feasibility studies, the connection of ports, the development and implementation of projects. The project should also help to increase the use of multimodal transport (Lead: City of Vienna/Vienna Port; Deadline: to be defined by the PA Coordinator).
  - ⇒ *Example of project - “To create an approach and a web platform to provide complete real-time information concerning Danube navigation and connections with all modes of transport”.*
- **Action - “To implement harmonised River Information Services (RIS)”.** RIS contribute substantially to increasing the safety, efficiency and environmental-friendliness of inland navigation. Shipping operators, ports and logistics service providers can optimise their logistics operations, thus reducing overall transport costs. The full potential of RIS can however only be realised if they are implemented along the entire Danube and its main navigable tributaries and canals.
  - ⇒ *Example of project - “To build on the IRIS Europe projects - support the co-ordinated implementation of River Information Services (RIS) in Europe”.* The project IRIS Europe II aims at the further enhancement and fine-tuning of RIS key technologies, services and applications such as international data exchange. Emerging topics are the implementation of agreed European service levels.

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<sup>11</sup> This is also in line with the “Danube River Basin Management Plan 2009” which has defined a “Joint Programme of Measures” to be implemented by the Danube region countries.

➤ **Action - “To invest in education and jobs in the Danube navigation sector”.** Danube navigation is currently experiencing a shortage of nautical personnel, which is also caused by limited training and education opportunities in the Danube countries. Existing education institutions use different curricula. In order to facilitate labour availability and mobility at the European level, common education and training profiles should be pursued. Within this framework, the Danube countries should attract and educate young people for the profession of Danube crewman. Companies involved in inland waterways transport (ports, shipping companies, customers, etc.) and educational and research bodies should establish educational platforms and networks to increase competitiveness and competence of all actors.

⇒ *Example of project - “To establish cooperation networks for logistics and nautical education focusing on Inland Waterway Transport in the Danube corridor supported by innovative solutions (NELI)”.* The main aim of the project is the improvement of education and training in the field of inland waterway transport in the Danube region. In cooperation with existing networks like EDINNA (nautical education in Europe) the NELI partners aim to facilitating the exchange and future cooperation regarding educational and training matters. Concrete results are eLearning services for inland navigation, the conception and implementation of Information and Training Centres and the promotion of specific activities among youngsters. (Lead: Romanian Maritime Training Center; Deadline: March 2012).

## **Rail, road and air transport**

While inland waterway transport has considerable unused potential in the Danube Region, other modes of transport also need attention. Modern, well connected road infrastructure is essential, but this needs to be complemented by rail transport to avoid congestion and ensure an efficient and environmentally sustainable transport system, while air transport is also crucial to ensuring the Region can fully play its part in a globalised world. The actions and projects proposed also take into account mobility needs overall.

### **Improvement of access to and connectivity**

➤ **Action - “To bring to completion the TEN-T (rail and road) Priority Projects crossing the Danube Region, overcoming the difficulties and the bottlenecks including environmental, economic and political, particularly in the cross-border sections<sup>12</sup>”.** Project implementation should focus on completing existing projects, eliminating bottlenecks. It should identify the sustainable financing means, and improve the coordination, especially between the different rail companies in order to develop and modernise the rail systems. Most of the priority projects

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<sup>12</sup> By way of examples:

- Priority Project 22 (rail): from Nurnberg / Dresden to Constanta and Athens via Prague, Vienna, Budapest and Arad through the whole region. The Western part, from the Alps to the Danube valley, including the Vienna – Bratislava area, through rail Priority Project 17, connects Paris to Vienna and Bratislava;
- Priority Project 7 (road): This project runs partly in parallel to the Danube in the Eastern part through the motorway PP-7 which connects Budapest to Constanta on the Black Sea and the Greek cities of Thessaloniki, Athens and Igoumenitsa;
- Priority Project 23 (rail): This project goes from Gdansk to Vienna via Warsaw, Brno and Bratislava;
- Priority Project 25 (road): This project connects the Baltic Sea to the Danube via Gdańsk–Brno/Bratislava-Vienna;
- Priority Project 6 (rail): This projects goes from Lyon to the Ukrainian border connecting the Iberian peninsula with the eastern part of Europe and beyond via Trieste-Divača/Koper-Divača-Ljubljana-Budapest.

The above mentioned Priority projects should be complemented by the connections to the non-EU Member States in order to complete the transport network in the Danube river Basin. In so doing, parts of the Corridors will be incorporated into the TEN-T Priority Projects Network for a homogenous development of the transport system

are already under implementation and the main focus must now be timely completion. To achieve this, it could include ***“To set-up a Joint Platform to coordinate the work on transport issues in the Danube Region with a view to accelerate the implementation of projects”***. That would be done in close cooperation with the European TEN-T coordinators.

⇒ *Example of project - “To construct two new bridges over the Danube”. The two bridges would be built on the stretch of the Danube between Romania and Bulgaria. One of the bridges would link Bechet (RO) with Oriahovo (BG) while the other one would connect Calarasi (RO) with Silistra (BG).*

➤ ***Action - “To implement the Rail Freight Corridors forming part of the European rail network for competitive freight”<sup>13</sup>***. Of the nine initial corridors four<sup>14</sup> have direct connection with the Danube Region. The implementation should focus on ensuring sufficient capacity for rail freight services of high quality and reliability and to improve and harmonise rail infrastructure standards relevant for freight traffic, especially axle-loads, train-lengths and loading gauges, along the entire corridors. Special attention should also be given to the development of modern intermodal terminals connecting the Danube River with the rail network, laying the ground for efficient cooperation of two transport modes with low environmental impact.

➤ ***Action - “To enhance cooperation between air traffic stakeholders in order to prepare a plan to implement shorter plane routes”***. Better coordination between the ‘Functional Airspace Blocks’ (mainly FAB CE and FAB Danube) in the Danube Region can ensure a needed transition from domestic air traffic management arrangements to a more integrated European dimension, with 2012 as a deadline for implementation.

⇒ *Example of project - “To implement SESAR, the technological part of the Single European Sky, in the Danube Region”. Intelligent traffic systems in the air transport sector contribute to reduce airports' environmental footprint and to minimise nuisances like noise and air pollution. Technological tools can contribute to a more efficient management of flights both on the ground (airport management systems) and in the air (Functional Airspace Blocks)*

➤ ***Action - “To ensure sustainable metropolitan transport systems and mobility”***. This contributes to the competitiveness and attractiveness of metropolitan regions in the Danube area while at the same time will make a strong contribution to climate protection and to improve health in urban/ city-region areas. ICT will help to reduce information costs and make sustainable modes of transport easily accessible for all. It includes the further development of e-mobility by developing markets and infrastructure in densely populated areas in cooperation with enterprises. Public and private transport companies of metropolitan areas will be able to cooperate in public procurement for environmentally friendly vehicles and the development of standardised high-quality transport and mobility internet information platforms for citizens.

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<sup>13</sup> Regulation (EU) No 913/2010 of the European Parliament and of the Council of 22 September 2010 concerning a European rail network for competitive freight.

<sup>14</sup> The four Rail Freight Corridors with direct connection to the Danube region are:

- The Orient Corridor connecting Prague via Vienna and Bratislava with Bucharest and Constanta on the Black Sea and with Sofia, Thessaloniki and Athens;
- The Balt-Med Corridor connecting Gdynia at the Baltic Sea coast via Southern Poland, Slovakia and Czech Republic with Vienna and Bratislava and continuing to Slovenia, Northern Italy and the Adriatic coast;
- The Central North-South Corridor connecting Sweden via Hamburg, Southern Germany and Innsbruck with Italy and ending in Palermo;
- The Mediterranean Corridor connects Spain and Southern France along the Mediterranean coast with Northern Italy, Slovenia, Budapest in Hungary and reaches the border to Ukraine at Zahony.



The action should enable the capitalization of a wide range EU-projects already dealing with urban mobility and help to implement the EU Action Plan for Urban Mobility (2009).

⇒ *Example of project - “To create river-bus and other connections between urban centres along the Danube (Danube Express Project)”*. The project aims to create river-bus connections between the big metropolis along the Danube and their satellites. The river-bus should be a solution especially for the longitudinal travel needs and for the areas where there are no bridges across the Danube. That would improve the mobility of people and could also be used for tourism purposes. The project should help increase the intermodal passengers transport leading to an optimal and sustainable utilization of resources

➤ **Action - “To improve the regional/ local cross-border infrastructure and the access to rural areas”**. The regional and local cross border transport links should be reinforced by cross border transport infrastructure (small bridges, crossing points, public transport connection). Another relevant reality is that, in the Danube Region, the percentage of the population living in rural areas is much higher than in the rest of Europe which makes the need for access to these areas of primary importance.

⇒ *Example of project - “To extend public transport lines”*. This is a programme to encourage the public transport companies of the Danube valley countries (bus and rail) to extend their existing lines, charging a local fare, to connect settlements on both sides of the border.

### **Multimodal links**

➤ **Action - “To develop further nodal planning for multimodality”**. The overlap of different freight and person transport leads in many nodes to congestion and loss of productivity. Terminal infrastructure is also missing or little developed to combine the different modes. In this context air transport can play a key role in allowing access to remote regions. Beginning with corridor VII, the Danube axis, unbundling of types of transport by elimination of bottlenecks on feeder routes can lead to capacity increases in several cases. This would at the same time improve the conditions for location development on the spot and for shifting transport volumes to more energy efficient and environmentally friendly transport modes like rail and water. Networks between relevant stakeholders should be set up in order to improve the quality of the transport system and logistic chains between the nodes and within the nodes – with a focus on sustainable transport modes such as railways and waterways.

⇒ *Example of project - “To implement the South North Axis (SoNorA) project”*: The aim of this project is to develop accessibility between the Adriatic and Baltic seas by making the network real through support for the completion of transport infrastructure, by activating and improving multimodal freight logistics services, by developing transnational action plans for future realisations and by supporting new regional development opportunities arising from transport network improvements.

➤ **Action - “To develop further Intelligent Traffic Systems by using environmental-friendly technologies, especially in urban regions”**. The quality of transport nodes highly depends on the capability of its transport system. Existing problems such as congestion or bottlenecks also can be solved by introducing an efficient transport management system to optimize the existing capacity. For example the implementation of intermodal route planner in real time could be spread to larger parts of the Danube Region in particular its important nodes like capital

regions and major port regions.

⇒ *Example of project - “**To implement the European Digital Traffic Infrastructure Network for Intelligent Transport Systems (EDITS)**”. Better information about the transport system allows a more efficient management of the existing transport infrastructure, reducing congestion and environmental damage. This is the overall objective of the project EDITS (e.g.: traffic management, traffic planning and modelling, traffic information), using transnationally harmonised traffic geodata. Vienna Region" can serve as a good practice example. Also supporting transport planners to manage the existing transport infrastructure in a more efficient way. Local/ regional/ national administrations will be provided with technical guidance. (Lead: Public Transport Association of the Vienna Region)*

## 2) TO ENCOURAGE MORE SUSTAINABLE ENERGY

### Presentation of the issue

The energy systems are made up of energy networks and energy markets. The two are interrelated as networks are essential for the effective operation of the markets. The opening of the EU electricity markets, pursued by the third internal market package, contributes to both competition and security of supply and will be facilitated by the creation of the 'European Network of Transmission System Operators'<sup>15</sup> and the 'Agency for Cooperation of Energy Regulators'<sup>16</sup>. In particular in the gas sector, the interconnections between national markets have to be improved and countries in the region need to gain access to new external sources. Reinforcing gas transmission infrastructure will be key for preventing potential supply disruption in the future. Well functioning networks, interconnections and interoperability are needed for energy security, diversification and effective energy operation.

In addition, all the countries of the Danube Region have policies to support the use of renewable energies. Many have large natural potential to develop renewables (especially solar and wind). They also have potential for improvement regarding energy efficiency in residential buildings, and district heating.

The Directive on renewable energy (2009/28/EC) sets ambitious targets for all Member States in order to ensure that the EU will reach a 20% share of energy from renewable sources by 2020 and a 10% share of renewable energy specifically in the transport sector. The Directive should be implemented by Member States by December 2010. The EU supports these policy goals through a significant contribution towards investment in renewable energy<sup>17</sup>.

### Danube Region specifics

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<sup>15</sup> Two 'European Network of Transmission System Operators' (ENTSO) have been foreseen by the third internal market package and subsequently created: (1) ENTSO-e for electricity transmission grid and ENTSO-g for gas transmission network.

<sup>16</sup> The European Union has recently set up the 'Agency for the Cooperation of Energy Regulators' (based in Ljubljana, Slovenia) which will be operational in March 2011. The agency will coordinate the work of national regulatory authorities, take - under certain conditions - binding individual decisions on cross-border infrastructure, and monitor and report developments at the European energy markets

<sup>17</sup> Structural and Cohesion Funds and the European Agricultural Fund for Rural Development (EAFRD) are the European Commission's most relevant support budget (an amount of 9 billion EUR is allocated to energy efficiency and renewable energy projects under the Structural and Cohesion Funds during 2007-2013). Additional funding possibilities for energy efficiency and renewable energy investments in existing building stock have been opened by the amendment of the European Regional Development Fund (ERDF) regulation in May 2009. This could make additional EUR 5 to 8 billion available for sustainable energy investments in buildings. Based on the amendment of the ERDF regulation, expenditure on energy efficiency improvements and on the use of renewable energy sources in existing housing sector for all Member States shall be eligible up to 4% of the total ERDF allocation. As all Member States are obliged to comply with EU directives applicable to the housing sector, in particular the Energy Performance of Buildings Directive (EPBD) and related requirements on the use of renewable energy in buildings included in the Renewable energy directive, such a reallocation would serve a double purpose by also creating low carbon economy related jobs in the Region.

Energy prices are high in the Region<sup>18</sup>. Much energy is imported, its transport is costly, the markets are fragmented. Energy infrastructures are not well interconnected. In addition, the Danube Region is specifically vulnerable regarding security of supply, as demonstrated in January 2009 when gas supplies were cut. Energy production and use is also a significant source of pollution.

Investment in infrastructure is a key priority. Cooperation is necessary in relation to planning, funding and implementation<sup>19</sup>. There are several EU policies supporting energy, in particular the Trans European Energy Networks programme (TEN-E), the European Energy Programme for Recovery<sup>20</sup>, the third energy package, Renewable energy directive, the ‘Green for Growth Fund Southeast Europe<sup>21</sup>’ and the Europe 2020 Strategy. In addition, the Structural and European Agricultural Fund for Rural Development provide good funding opportunities for projects, in particular for decentralised production of energy from local renewable sources, and for research networks. Energy efficiency improvements and increased use of renewable energy are important for the whole area. The Danube Region has a high potential for improvement in energy efficiency, e.g. in residential buildings and district heating, as well as in combined heat and power facilities. There is also scope for a wider exploitation of geothermal resources for heating and cooling purposes as well as for energy production. Some countries have built up distinctive know-how regarding efficiency and renewables, which could now be usefully promoted and spread in the Region, as there is often a lack of expertise.

Regarding market organisation, cooperation helps to ensure security of supply, to balance supply and demand more effectively, and to realise economies of scale on investments. Regarding energy efficiency and renewable energy, there is potential to increase security of supply by reducing energy needs and increasing the share of energy produced (including small scale energy production at local level). Regarding nuclear energy, there must be respect for the high levels of safety established, especially where the river is an important source of cooling water.

## **Actions**

### **Energy systems**

#### ***Energy infrastructure***

Regarding energy infrastructure, the aim is to coordinate the long-term energy policies as well as the national investment strategies (power plants, grids, pipelines, interconnectors, etc.), taking into account where appropriate the Strategic Environmental Impact Assessments<sup>22</sup>. The Strategy should contribute to the 10-year network development plan as proposed in the internal energy package.

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<sup>18</sup> There is high diversity of the level of prices among separate markets in the Region. Moreover, especially in the eastern part of the Region, energy prices corrected with the Purchasing power index are high.

<sup>19</sup> Reinforcement of the TEN-E network (especially in the context of the upcoming revision) and implementation of the Energy Recovery Plan using the Structural Funds in a coordinated manner is essential.

<sup>20</sup> The European Energy Programme for Recovery (EEPR) adopted in 2009 provides EUR 1.440 m for gas projects of which EUR 510 m is for projects within the Danube Region. The largest single project - the Nabucco gas-pipeline which is supported with EUR 200 m, contributes to the construction of the southern gas corridor. The Nabucco project has a potential to bring new gas which originates from the Caspian region and the Middle-East to the Danube Region countries and other European gas markets. Several further gas interconnectors are supported in central and south east Europe with an amount of EUR 310 m.

<sup>21</sup> The ‘Green for Growth Fund Southeast Europe’, created in 2009 at the initiative of the European Investment Bank (EIB), focuses on measures for energy savings and energy efficiency in the Balkans and offers financing through the banking sector as well as direct lending accompanied by technical assistance. Until 2014, the Fund intends to invest around EUR 400 m.

- **Action - “To develop a joint position of the region regarding the changes which could be introduced in the framework of the TEN-E Policy review and the modalities of the new Energy Security and Infrastructure Instrument, especially regarding the energy infrastructure gaps”.** It will be in the interest of the region to ensure that the instrument supports projects and concepts of key importance to the region such as a north-south gas interconnection, investments in gas networks, investments in supply routes benefiting the region, etc..
- **Action - “To ensure that actions are coherent with the general approach of the Energy Community<sup>22</sup> and explore synergies between the Energy Community and the Danube Strategy processes”.** The Energy Community aims at extending the EU internal energy market to South East Europe (Parties: Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Serbia, and Kosovo<sup>23</sup>; Participants: Austria, Bulgaria, Cyprus, Czech Republic, France, Germany, Greece, Hungary, Italy, The Netherland, Romania, Slovakia, Slovenia, and United-Kingdom as well as the European Union).
- **Action - “To enforce regional cooperation with a view to develop and implement the North-South gas interconnection projects”.** The strategic concept of the North-South natural gas interconnection is to link the Baltic Sea area (Poland) to Adriatic and Aegean Seas and further to the Black Sea, covering the following EU Member States (Bulgaria, Hungary, Poland, Romania, Slovakia, Austria and the Czech Republic). This would provide the overall flexibility for the entire Central East European (CEE) region to create a robust, well-functioning internal market and promote competition. The concept would make the best use of existing and new import infrastructures, such as new LNG regasification plants and projects of the Southern Corridor.
- **Action - “To develop gas storage capacities”.** A secure energy supply for Europe cannot rely on the construction of pipelines only. Additional flexibility through storage capacity is therefore necessary as well. Support should be given to the realisation of storage projects<sup>24</sup> to ensure that all countries of Central and Eastern Europe have adequate access to such facilities. The regional approach to planning the storage facilities should in particular apply to ensure that the new infrastructure is developed in the most efficient manner.

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<sup>22</sup> The aim of the Energy Community is to (a) create a stable regulatory and market framework capable of attracting investment in power generation and networks in order to ensure stable and continuous energy supply that is essential for economic development and social stability; (b) create an integrated energy market allowing for cross-border energy trade and integration with the EU market; (c) enhance the security of supply; (d) improving the environmental situation in relation with energy supply in the region; and (e) enhance competition at regional level and exploit economies of scale.

<sup>23</sup> Under UNSCR 1244

<sup>24</sup> The new storage projects should not be limited to those included in the European Energy Programme for Recovery. For example, in 2010, the EU via the Neighbourhood Investment Facility has granted €2.5 million to finance one project in this field in Ukraine. The project “Preparatory studies for the modernisation of Ukraine's gas transit corridors and underground gas storage facilities” comprises two preparatory studies for investments in the gas sector in Ukraine including an environmental and social impact assessment. It will improve energy security for European countries while contributing to increased regional integration in the field of energy, including cross-border linkage with the EU. After the result of the studies, the project will be lead by the European Bank for Reconstruction and Development (EBRD) and co-financed by the European Investment Bank (EIB) with an estimated total cost of EUR 2 billion.

- ⇒ *Example of project - “To implement the already agreed infrastructure projects on time, in particular the TEN-E and the European Energy Programme for Recovery projects in the Region, especially the important interconnectors and pipelines<sup>25</sup>”.*

### **Energy markets**

Regarding energy markets, the aim is to establish an integrated and well functioning market for energy”. This should include better coordination of national energy strategies, measures to promote diversity of supplies and measures to improve the functioning of the energy market, a adequate legal framework, financial schemes based on public-private partnerships etc..

- **Action - “To tap possible cooperation opportunities with the Energy Community”**, which aims in particular at creating an integrated energy market allowing for cross-border energy trade and integration with the EU market.
  - **Action - “To cooperate to implement the Regional network integration and the New Europe Transmission System (NETS) in line with the feasibility study”**. The harmonised operation of national transmission grids could alter the dynamics of south-eastern and central European gas markets by the time new gas sources (e.g. through the Southern Corridor) become available. The initiative to create a single network involves Bulgaria, Hungary, Romania, Serbia, Slovakia, Slovenia, Croatia and Bosnia-Herzegovina. The feasibility of the concept, including the commercial, regulatory and management issues possibly associated with NETS, is currently being studied.
  - **Action - “To build a working relationship with the Central Eastern European Forum for Electricity Market Integration; this could be enlarged to neighbouring countries”**. The integration of electricity markets and market platforms, as well as handling the generation capacity in the region, require specific harmonisation of legislation and market rules, which can be best coordinated at regional level. The following ‘Central Eastern European Forum for Electricity Market Integration’ (Austria, Czech Republic, Germany, Hungary, Poland, Slovakia and Slovenia) – “Heptalateral Forum” should be further developed.
- ⇒ *Example of project - “To work together towards the implementation of the Coordinated Auction Office”*. The Coordinated Auction Office (CAO) project implements the principles of Regulation n°1228/2003 on the harmonisation of congestion management and optimisation of cross-border capacity allocation. The Coordinated Auction Office in South East Europe is estimated to be operational in 2011. This office will manage auctions and load flows for the entire region of South East of Europe. In terms of operations, the principle of a one stop shop will apply.

### **Energy efficiency and renewable energy**

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<sup>25</sup> By way of examples:

- Interconnectors: Gas interconnections between Bulgaria, Romania and Serbia; Electricity interconnection projects between Romania-Bulgaria, Romania-Moldova, Hungary-Croatia, Hungary-Romania and Austria-Hungary (Wien-Győr); Electricity transmission system connecting Slovenia and Hungary - a transmission of 2 x 400kv between Cirkovce and Pince -; Romania - Serbia High voltage Interconnection project; Adria Liquefied Natural Gas terminal on the island of Krk (Croatia); Study on the feasibility of the Liquefied / Compressed Natural Gas terminals in Romania and Bulgaria; “Power Transmission Network Reinforcement” between Ukraine and the EU (co-financed by the Neighbourhood Investment Facility).
- Pipelines: Nabucco gas pipeline; Constanta-Trieste (PEOP) pipeline including option for a parallel gas pipeline; Bratislava-Schwechat pipeline; gas pipeline connecting Slovenia and Austria; Modernisation the Druzhba oil pipeline (as well as its interconnections); Energy Community Gas Ring.

- **Action - “To extend the use of biomass (e.g. wood, waste), solar energy, geothermal, hydropower and wind power”**, especially by research and exchange of experiences / good practices / dissemination of information on related activities undertaken at national level. This would imply networking and cooperation between national authorities in order to promote awareness on renewable energy.
  - ⇒ *Example of project - “To foster the sustainable usage of biomass building on the ‘4Biomass’ project”. The Danube region has a high potential for biomass. As opposed to other renewable energy sources biomass is limited, which involves a danger of unsustainable production. In addition, competition of use between food and non-food applications arises. The ‘4Biomass’ project will address the implementation of national Biomass Action Plans and bioenergy policies by bringing together expert knowledge on the use of renewable energy sources and energy efficiency. Thus, this project will contribute substantially to the goal of 20% share of renewable energy sources to energy supply in Europe. (Lead: Germany, Deadline: September 2011)*
- **Action - “To reinforce the Carpathian Convention to share best practices on using biomass for energy purposes”**. The Carpathian Convention includes a provision that Parties shall pursue policies aiming at introducing environmentally sound methods for the production, distribution and use of energy, which minimises adverse effects on biodiversity and landscapes, including wider use of renewable energy sources and energy-saving measures, as appropriate.
  - ⇒ *Example of project - “To create a network to exchange experiences (and to test pilot projects or replicate existing good practices) in the fields of refurbishments and modernisation of small hydropower plants<sup>26</sup>”. Practical experience has clearly demonstrated that refurbishment and modernisation of facilities in place may increase hydropower production while at the same time meeting modern environmental standards by being equipped with appropriate fish passes and residual water. (Lead: ICPDR and Austria, Federal Ministry of Agriculture and Forestry, Environment and Water Management; Deadline: December 2013)*
  - ⇒ *Example of project - “To set-up a cooperation mechanism between the regions of the Alpine Convention and the regions of the Carpathian Convention for the transfer of best practices, best available technologies, environmental and social know-how”.*
- **Action - “To implement the National Renewable Energy Action Plans and to prepare a Danube Region Renewable Energy Action Plan”**. These should be prepared in light of a Strategic Environmental Impact Assessment where appropriate<sup>27</sup>.
- **Action - “To explore the possibility to have an increased energy production originating from local renewable energy sources to increase the energy autonomy”**. Energy autonomy not only diminishes dependency on energy import but creates also new jobs by requiring new energy

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<sup>26</sup> “Statement of the Water Directors - Hydropower Development under the Water Framework Directive”: [http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework\\_directive/thematic\\_documents/hydropower/development\\_directivepdf/EN\\_1.0\\_&a=d](http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/thematic_documents/hydropower/development_directivepdf/EN_1.0_&a=d)

<sup>27</sup> Whether or not a National Renewable Energy Action Plan (NREAP) requires a Strategic Environmental Assessment (SEA) depends on the specific content of the plan. It follows from the RES Directive that the aim of the NREAP is to pave the way as how the Member States are planning to achieve their national mandatory targets. In cases where the NREAP does not "set the framework for future development consent of projects" within the meaning of Art. 3 (2) a) of Directive 2001/42/EC, a SEA is not required. However, when implementing the NREAP, through, as appropriate, more specific plans setting the framework for future development consent of projects, SEAs will have to be carried out.

production systems and increases the value of regional assets in a sustainable way as each region creates long-term energy sources without depending on others.

- **Action - “To develop a comprehensive action plan for the sustainable development of the hydropower generation potential of the Danube River and its tributaries (e.g. Sava, Tisza and Mura Rivers)<sup>28</sup>”**. The plan would pave the way for the coordinated and sustainable development of new power stations in the future and retrofitting the existing ones in the way that would minimise the environmental impact and the impact on the transportation function of the rivers (navigation). The options for using hydropower to respond to fluctuations in the electricity demand should be explored – using dams to maintain high water level in preparation for the demand peak.
- **Action - “To develop and set up pre planning mechanism for the allocation of suitable areas for new hydro power projects<sup>29</sup>”**. This pre planning mechanism and its criteria would pave the way for new hydropower plants by identifying the best sites balancing economic benefits and water protection. It should also take into account climate change impacts (e.g. lower or higher water levels). This should be based on a dialogue between the different competent authorities, stakeholders and NGOs. In the suitable areas, the permits process could be streamlined.
- **Action - “To promote energy efficiency and use of renewable energy in buildings and heating systems including by renovating district heating and combined heat and power facilities as required by Energy Performance of the Buildings Directive and Renewable Energy Directive”**. This could be done through networks of best practices (e.g. sharing experience in successful use of the ERDF funds to support sustainable energy investments in housing) and cooperation with International Financial Institutions on facilitating the sustainable energy investments in housing. In that context, innovative financing instruments such as European Fund for Southeast Europe (EFSE)<sup>30</sup> as well as the recently launched Green for Growth Fund South East Europe (GGF) should be promoted and used widely.
  - ⇒ **Example of project - “To design and implement a research and development programme (including SMEs) for innovative, sustainable insulation material and other measures to improve energy performance in buildings”**. This should be done making cooperative best use of existing know-how in the region. Eco-innovation could stimulate economic development with positive impacts on local employment, a wide range of industries and services, as well as the environment.
  - ⇒ **Example of project - “To explore the scope for sustainable hydropower development in the part of the Sava basin shared by Slovenia and Croatia”**. The project will contribute to the achievement of the renewable energy objectives of the EU Energy and Climate Package, while respecting the water and nature legislation and taking into account other ancillary objectives. (Lead: Slovenia and Croatia)
- **Action - “To encourage the Energy Community members/ observers in adopting and implementing the Renewable Energy Directive”**. Negotiations are underway to include RES

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<sup>28</sup> The plan would build on the achievements of the International Commission for the Protection of the Danube River (ICPDR) and its Danube River Basin Management Plan (in line with the Water Framework Directive).

<sup>29</sup> This pre planning mechanism would be fully in line with the 2010 Statement of Water Directors and the 2010 Danube Declaration adopted at the ministerial meeting in Vienna: <http://www.icpdr.org/icpdr-files/15216>

<sup>30</sup> Including its windows for the Neighbourhood region covering Ukraine and the Republic of Moldova: the European Neighbourhood Fund (ENBF) co-financed by the EU with a contribution of EUR 10 million provided by the Neighbourhood Investment Facility.



directive in the ‘acquis communautaire’ to be implemented by Energy Community members within the framework of the Energy Community.

➤ **Action - “To facilitate networking and cooperation between national authorities in order to promote awareness and increase the use of renewable energies** (biomass, solar, hydropower and wind) especially by research and exchange of experiences/ good practices/ dissemination of information on related activities undertaken at national level.

⇒ *Example of project - “To build on the ‘Sustainable Energy Development Regional Initiative’ (SEDRI) project to promote energy efficiency”. The SEDRI project is a joint project of the Central Europe Initiative (CEI) and the Regional Cooperation Council (RCC). It aims to improve the legislative, institutional and regulatory frameworks for the development of the sustainable regional energy sector; to construct small-scale sustainable energy facilities in South-East and Eastern European countries; to foster a framework for regional cooperation in the field of sustainable energy development, including awareness raising, education, research and scientific cooperation. (Lead: Central Europe Initiative (CEI) and the Regional Cooperation Council (RCC))*

➤ **Action - “To provide local authorities, businesses and citizens in the Danube Region consultative support with issues relating to mitigation of climate change and energy efficiency”**. This could be done by setting up central competence and advisory centres (contributing to climate protection concepts, energy management, know-how transfer, training and public relations work).

⇒ *Example of project - “To set-up a cooperation mechanism of cities and villages in the region with the view to commit to greenhouse gas emissions reduction, exchange best practices and test pilot projects on energy efficiency and renewable energy”. Cities and villages have specific energy needs due to the high energy requirement per square meter. The aim is to reduce the air pollution at local level and ultimately at the global level. Improvements could be e.g. district heating system based on waste incineration plants and high efficient cogeneration plants, development of district cooling technology as well as the implementation of innovative geothermal projects. In this regard consideration could be given to a wider participation in the existing Covenant of Mayors Initiative<sup>31</sup>, in the further development of the network of Climate Alliance<sup>32</sup> and in the development of a network of cities working on renewable technologies. Developing the provision and innovative use of renewable energy sources in rural areas should be considered as well. (Lead: City of Vienna (to be confirmed))*

⇒ *Example of project - “To build on the ‘Renewable Energy Cooperation of Rural Areas’ (RECORA) project”. This initiative of seven partners from five countries (Austria, Germany, the Republic Czech, Hungary and Greece) has been supported by the EU programme INTERREG IIIC<sup>33</sup>. The main focus lies on the economic utilisation of renewable energy resources and on the preparation of projects. New jobs have been created, alternative use of existing agricultural products have been processed, analyses of*

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<sup>31</sup> The Covenant of Mayors gives a lead to Europe’s pioneering cities to mitigate climate change through the implementation of intelligent local sustainable energy policies that create stable local jobs and increase citizens’ quality of life. Such collaboration could also contribute to defining the “new Urban Policy for Europe”.

<sup>32</sup> The objective of the ‘Climate Alliance’ (1500 cities and municipalities from 7 Danube countries) is first of all the reduction of greenhouse emissions. For achieving this goal local climate strategies are developed and implemented, especially in the energy and transport sectors.

<sup>33</sup> INTERREG IIIC is an EU-funded programme that helps countries and regions from different countries to form partnerships and to work together on common projects (cross-border, transnational and interregional projects).

*waste components (wood, grass, bio waste etc.) with regard to their usability in the energy production process have been developed and exchanged.*

### 3) TO PROMOTE CULTURE AND TOURISM, PEOPLE TO PEOPLE CONTACTS

#### Presentation of the issue

The Danube region is characterised by a broad heritage of dense and diverse histories, cultures, ethnicities, religions, markets, societies and states.

In line with international conventions in the field of culture (with special reference to the UNESCO Conventions) culture can promote values of inclusiveness, openness, and acceptance of the other based on mutual respect. In the region, the adoption of the Ljubljana Declaration is a key milestone in preserving cultural heritage. It acknowledges the value of the social and economic potential of heritage and its key role in the area, and the countries' commitment to preserving its cultural heritage. It can facilitate reconciliation between communities. It can reinforce socio-economic development by strengthening of regional cooperation and intercultural dialogue while ensuring sustainability and joint action.

Related at least in part to culture and heritage, tourism is making an increasingly significant contribution to growth in the region. Sustainability should overall be an important criterion in developing tourism in the region. Project-oriented cooperation should act as a catalyst for exchange and close collaboration between neighbours in the region, especially on cultural and heritage matters.

The areas of developing tourism, tourism infrastructure and improving tourism services, cultural heritage and intercultural dialogue are typically inter-related topics. They benefit particularly from the integrated approach the strategy brings.

#### Danube Region specifics

As the most international river basin in the world, the Danube features numerous touristic and heritage highlights. These include world class cities along the Danube River as well as attractive landscapes (e.g. the Delta as a UNESCO World Heritage Site). They range from the developed tourism destination of the Austrian Wachau to emerging destinations such as the Iron Gate, the Carpathians and the Delta. Measures should secure the long-term competitiveness and sustainability of the tourism sector- reinforced through cooperation- as well as regional benefit from new developments and investment.

In terms of history and culture, people throughout the Danube region have a shared heritage. As appropriate, the strategy should use these ties as levers to promote further cultural and civil society cooperation. The regional and local level has an important role to play in this context.

The implementation of this priority can also facilitate the tourism development potential in the whole Danube region through the development of joint touristic products and promotional policy.

#### Actions

##### **Cultural heritage**

➤ **Action - “To build on cultural diversity as strength of the Danube Region”.** This can be done

by:

- Protecting the Danube region's cultural values: cooperation in the protection of values and heritage, joint scientific research, exchange of experiences, courses, conferences, events, traineeships; preservation of military memorial sites;
- Increasing human contacts, promoting inter-cultural dialogue, inter-religious dialogues, language exchanges etc.
- Improving conditions for youth exchanges;
- Organising joint (cultural) events, festivals, scholarship programmes;
- Establishing a network of 'creative forces' which includes actors in the artistic field. This network can build on the experience of the various festivals in the Danube Region;
- Promoting cultural exchange and exchange in the arts. Cultural activities (e.g. films, documentaries, entertainment games/shows referring to the Danube Region) can contribute significantly to awareness-raising for the Danube Region;
- Supporting contemporary art in the region;
- Supporting modern entertainment enterprise, including contemporary TV, movie, music and interactive games;
- Establishing a data-base gathering data on cultural assets and cultural activities.

⇒ *Example of project - “**To strengthen the Danube regional potential through cultural cooperation**”: organising joint cultural events, programmes, festivals, reviving cultural history traditions, bringing cultural history events to heritage sites; international cooperation; conferences, exchange programmes, joint camps, thematic cooperation at original historical sites of the Danube.*<sup>34</sup>

⇒ *Example of project - “**To ensure the restoration and maintenance of the sites of historical and cultural importance, conservation and protection of both tangible and non-tangible cultural heritage and providing the access to common cultural heritage**”.*

⇒ *Example of project - “**To conclude the IRPP/ SAAH project in the context of the Ljubljana Process**”, jointly implemented by the Council of Europe and the European Commission. This project underlines an integrated approach to cultural heritage management. It represents an incentive to build bridges among various ethnic communities throughout the whole region, contributing to promotion of reconciliation, cultural diversity and intercultural dialogue.*

⇒ *Example of project - “**To develop the Balkan Incentive Fund for Culture**”. This sets up an information platform that would contain data on multicultural culture programmes and initiatives in the region, and enables exchange of experiences and good practices.*

➤ *Action - “**To enhance cooperation and contacts between people of different origins, to encourage creativity, and provide a driving force for cultural innovation and economic development, based on heritage, traditions and tourism**”. This can benefit from a good balance of tradition and modernisation. A diverse intercultural approach also helps to enhance the attractiveness of a region for the local population and tourists. This can include: cooperation for promotion and publicity; international exhibitions and events; exchange in the fields of literature, music and art; cooperation in research and innovation on heritage, cultural and touristic themes; and cooperation in field of the preservation of historical monuments.*

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<sup>34</sup> E.g. Cooperation within the International Association of Music Schools and the DANUBIANA visual arts project. The latter aims to introduce particularly talented young artists from the region every second year.

- ⇒ *Example of project - “To strengthen centres for tolerance and reconciliation<sup>35</sup>”.*
- ⇒ *Example of project - “To further support actions for specific demographic groups, e.g. Danube-Workers”. This facilitates joint activities of older adults from the neighbouring states along the river Danube and seeks to develop links to other groups working on similar themes.*

## Tourism

- **Action - “To develop the Danube region as a European brand”** – the strategy for the Danube region should utilise positive perceptions of the region. The regional and local events celebrating Danube Day on 29 June are demonstrations of this potential. For many of these events an overall framework as well as a focus for mobilising resources in the tourism sector is needed.
  - ⇒ *Example of project - “To develop a Quality label for Danube Tourism” - In order to support the competitiveness and sustainability of Danube tourism (destinations, accommodations, tour operators, services like cruises, excursions, etc.) define criteria for high quality tourism. For destinations the new Sustainable Tourism Criteria of DG Enterprise and Industry could be used. Accommodations could use the EU eco-label (‘flower’). Special communication instruments, e.g. a web-based booking platform, image campaigns, etc. should especially highlight quality tourism products.*
- **Action - “To establish the Danube Region as important European tourist destination”** by developing an environmentally-friendly tourism strategy for the whole of the region (including cities and communities, cultural heritage, nature and economy)<sup>36</sup>. In particular, it could be interesting to develop a Danube Region label (building on the "brand" being developed more generally) which could open up the international tourist markets (e.g. in the USA, Asia). This could also include managing tourist destinations jointly through joint marketing, joint events and internationally recognised quality certification (especially in ecological terms). It can promote international tourist projects such as cycle and hiking trails from the Black Forest to the Black Sea. Using modern means of communication such as the Internet can help to make the Danube better known as a tourist destination and to develop it for a new clientele of tourists. The Carpathians should also be promoted as a destination with tourist infrastructure and services to be further developed.
  - ⇒ *Example of project - “To create transnational tourist packages e.g. for combined rail-cycle-boat trips along the Danube”.*
  - ⇒ *Example of project - “To improve sustainable mobility through traffic and interconnectivity of train, bus and shipping in the Danube countries” (Project “Danube Traffic”) through the achievement of a political consensus for the adaption of timetables and an adequate fare policy taking into account the needs of bikers (transport of bikes) and hiking tourists. The aim is a traffic and client-friendly Danube Region, allowing for a strategic touristic positioning of the Danube Region featuring soft mobility.*

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<sup>35</sup> E.g. the Vukovar Centre for Peace and Tolerance as an institution to foster peace and tolerance in a multi- ethnic Europe. It seeks to develop peace processes and transition from open conflicts to consolidation.

<sup>36</sup> An example of best practice is the cooperation of the Working Group Danube Austria (ARGE Donau Österreich consisting of tourist organisations of Upper Austria, Lower Austria and Vienna) in the marketing of the Austrian Danube Region.

- ⇒ *Example of project - “To monitor tourism in emerging destinations/ sensitive areas, especially the Danube Delta” - Develop monitoring methodologies to collect data about tourism statistics, activities, motives etc. and visitor management systems especially in the ecological hot-spots such as the Danube Delta.*
- ⇒ *Example of project - “To hold and organise an annual Danube Culture and Tourism Day” in different places of the Danube basin aimed at promoting the Danube as an attractive tourism destination and discussing various topics with experts”*
- *Action - “To promote short-stay weekend tourism and recreation, as well as longer stays”.*
- *Action - “To further develop the navigation and port system for Danube river cruise ships and private yachts”* by securing an uninterrupted and secure navigation with certain standards for ports and other navigation-related infrastructure. This action should be cross-linked with actions under the pillar connectivity. It should also include better berthing facilities, better on-shore welcome and recreational facilities. Environmentally friendly waste management systems are needed. The integration of the Danube and the Black Sea into a "synergised" cruise ship destination would also establish a link to the EU Black Sea Synergy.
- *Action - “To further develop and intensify Activity Tourism”.* Establish travel chains along the Danube with attractive stations and tourist itinerary offers for several days (by train, car, ship, bike and hike).
- *Action - “To further enhance interconnection and cooperation in education and scientific and research activities for tourism”* (modernisation of the curricula of occupational and university education for professions in tourism; development of cooperation in the exchange of lecturers, students, pupils and staff in the programs for the education and training in tourism; creating, organising and implementing the programme of lifelong learning for jobs in tourism / tourist industry).
- *Action - “To improve planning and infrastructure for tourism”.* This should include accommodation and hospitality facilities, port tourism infrastructure, walkways and paths, info-centres, cycling routes and their networking in the Danube area including their linkage to the network of routes along the rivers Sava and Drava. It should also emphasise protected areas and locations of natural and cultural heritage as well as theme parks, wine roads, view towers, grounds and equipment for sports and recreation.
  - ⇒ *Example of project - “To improve cruise tourism on the Danube” (Harmonisation and coordination of time schedules of buses, trains and ships for tourism; Danube and Black Sea – destination for cruise ships.*
  - ⇒ *Example of project - “To realise the Danube walking path, proposed by the Danube Tourism Commission”.*
- *Action - “To support the improvement of the quality of tourism products”* and the supply chain by the development of regional sustainable tourism strategies and the definition of quality criteria, and by the development of eco-labels and certification schemes. This can also include development of tourism associations and campaigns.
- *Action - “To promote sustainable tourism”* for example by promoting train / bus / cycle / ships options and combining this with tourism attractions which encourage visits to natural and

cultural sites.

⇒ *Example of project - “To support green ways and cycle tourism” - Cycling tourism is a form of sustainable tourism and often a contribution to cross-border development of European regions. This project aims at using the growing importance of cycle tourism – e.g. along the Danube cycle trail or other long distance cycle trails within the region, such as the planned Iron Curtain Trail. There are already a number of successful regional and international cycle routes in the region, including e.g. the Prague-Vienna Greenway or the Amber Trail from Budapest through Slovakia to Krakow in Poland, as well as national and sub-national routes, such as the Wine Trails of Southern Moravia and the Austrian Weinviertel.*

➤ **Action - “To promote wellness tourism in the Region”.**

⇒ *Example of project - “To support health and wellness facilities, including spas, improvement and marketing”.*

➤ **Action - “To collect existing data on cultural activities and establishing a comprehensive data base giving an overview of cultural activities in the Danube Region”.**

➤ **Action - “To promote cultural exchange and exchange in the arts”.** Cultural activities (e.g. films, documentaries, entertainment games/shows referring to the Danube Region) can contribute significantly to awareness-raising for the Danube Region.

⇒ *Example of project - “To implement the Cultural route Danube”: Protection, restoration and utilisation of cultural heritage in many Danube countries partly lacks awareness, financial means and administrative/legal framework. Reconstruction, protection, development and promotion of physical and non-physical heritage is needed with a view to developing tourism. Joint cultural projects need to be supported (reconstruction of palaces and castles and the traditional building heritage, ship cruises, reviving old trades, making souvenirs, reviving the traditional and creating new manifestations and feasts, activities to promote the spirit of togetherness of the population in the Danube area. A modern cultural map of the area could be prepared.*

⇒ *Example of project - “To implement the Cultural Danube Card”. To build on the existing material and expand it where appropriate and necessary (ARGE Donauländer).*

⇒ *Example of project - “To implement a Danube Media Network”. This concerns media-centres, radio and TV stations, professionals, governmental institutions, some NGO-s, etc.*

⇒ *Example of project - “To further develop the Danube Theatre Festival”.*

⇒ *Example of project - “To promote the Danube Limes<sup>37</sup> as an UNESCO world heritage. Proposed by the Danube Commission (already existing project financed under ETC Central Europe programme)”.*

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<sup>37</sup> This programme, realised through the cooperation of the heritage preservation organizations of Hungary and four other countries (Germany, Austria, Slovakia and Poland), as well as other partners, has made it its goal to prepare a World Heritage nomination for one of the important and certainly remarkable parts of the border of the Roman Empire.

**B) PROTECTING THE ENVIRONMENT IN THE DANUBE REGION**



## **PROTECTING THE ENVIRONMENT IN THE DANUBE REGION**

The environment is an under-pinning element of all human activities. As such it is taken into account in many sectors covered by this Strategy, either voluntarily or, when that is not the case, through legislative requirements (e.g. Environmental Impact Assessment Directive, Birds or Habitats Directives, etc). Nevertheless, a specific pillar dedicated to the environment in the Danube Strategy is essential for this ecologically rich and often fragile Region, to ensure that progress on environmental actions and projects can be closely monitored.

The actions proposed will make a direct contribution to the Europe 2020 Strategy. They address specifically the goals of tackling climate change challenges, of developing sustainable use of resources (which include water, nature and land for instance) and of securing quality of life. Additionally, they will contribute to achieving the EU 2020 target and 2050 vision for biodiversity and to implementing the EU post-2010 biodiversity strategy once adopted.

The pillar focuses on three Priority Areas: (1) To restore and maintain the quality of waters; (2) To manage environmental risks and (3) To preserve biodiversity, landscapes and the quality of air and soil.

These priority areas have to be considered with other policy fields. The Strategy encourages an integrated approach. For example, whilst improving transport infrastructure has a positive impact on the business environment, on the attractiveness of cities and regions or on the mobility of citizens, it can also have negative impacts on landscapes, biodiversity, quality of air, soil and water. In the energy sector, it is desirable to increase the production of energy from renewable sources, but this cannot be done at the expense of biodiversity. All these matters need to be looked at together, with a view to the most sustainable solution.

### **Examples of financing covering the Region**

*Expenditures budgeted by the Structural Funds<sup>38</sup> in 2007-2013<sup>39</sup>*

<b>Environment</b>	<b>EUR 19.5 b</b>
Biodiversity	EUR 1.1 b
Waste water treatment	EUR 5.7 b
Drinking water	EUR 3 b
Solid waste	EUR 2.6 b
Risks	EUR 1.9 b
Other	EUR 5.2 b

### *Other sources of financing*

Other EU programmes contribute to this pillar, in particular: the 7<sup>th</sup> Research Framework Programme, the LIFE programme, the Instrument for Pre-Accession Assistance (IPA) National, Cross-border Cooperation and Multi-beneficiary country programmes, several programmes of the European Neighbourhood and Partnership Instrument (ENPI) (such as the Regional programmes or the Cross-border Cooperation Programmes), the European Agriculture Fund for Rural

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<sup>38</sup> European Regional Development Fund (ERDF) including cross-border cooperation, Cohesion Fund and European Social Fund for the Member States. The Instrument for Pre-Accession Assistance and the European Neighbourhood and Partnership Instrument (ENPI) are not included.

<sup>39</sup> The use of Structural Funds depends on the specific operational programmes, developed and agreed upon at the beginning of the 2007-2013 programming period in close collaboration between the European Commission and the respective Member States/ Regions. These should offer opportunities for funding for specific actions/ projects, depending on the priorities and measurements/ actions identified in the respective operational programmes.

Development (EAFRD), the European Fisheries Fund (EFF) and the EU Civil Protection Financial Instrument. National, regional and local policies are also financing important projects. In addition, significant financing is already provided to a large number of projects via lending and/ or co-financing from various International and Bilateral Finance Institutions such as the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD), the World Bank, the Council of Europe Development Bank (CEB) or other lenders.

More recently, for the countries of the Western Balkans, additional efforts have been made to better coordinate and blend instruments for grants and loans via the Western Balkans Investment Framework<sup>40</sup> (WBIF). A similar instrument to the WBIF, the Neighbourhood Investment Facility operates for the Republic of Moldova and Ukraine.

The candidate and potential candidate countries are also assisted in their environmental by the Regional Environmental Network for Accession (RENA) which assists them in the exchange of information and experience related to preparation for the environmental aspects of accession, including the field of strategic investments and planning.

As an illustration, in the water sector there has been significant investment. The EIB for instance, already provides substantial support to a large number of projects which contribute to the overall water quality improvement of the Danube River Basin. In Austria, Bulgaria, the Czech Republic, Hungary, Romania, Montenegro, Bosnia Herzegovina, Croatia, Serbia on-going projects in the fields of waster water treatment, sanitation or drinking water are supported financially and technically by the EIB. In cooperation with the European Commission, the EBRD and KfW, the EIB is also involved in managing the Joint Assistance to Support Projects in European Regions (JASPERS) initiative which currently supports the preparation of 36 major water sector projects in EU Member States of the Danube River Basin.

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<sup>40</sup> The Western Balkan Investment Framework (WBIF) is a blending instrument for grants and loans for candidate countries and potential candidates.

#### 4) TO RESTORE AND MAINTAIN THE QUALITY OF WATERS

##### Presentation of the issue

The availability and quality of freshwater resources is vital. We need drinking water, water for irrigation, industry, power generation, transport and tourism. Ecosystems need good quality to function properly and maintain or restore biodiversity.

The Danube Region has at its heart the second longest river in Europe and the most international river basin in the world. The Danube River stretches over 2,800 km across Europe and flows into the Black Sea, after crossing 10 countries and settling into a vast delta which constitutes the richest biodiversity area in Europe.

The Danube Basin covers an area of over 800,000 km<sup>2</sup>, stretches over 19 countries, 14<sup>41</sup> of which are contracting parties to the Danube River Protection Convention (DRPC) signed in Sofia in 1994. Besides the Danube itself, the Basin includes other major European rivers such as the Sava, Tisza, Drava and Prut as well as smaller ones such as the Inn, Morava, Váh, Velika Morava and Siret. The drainage area of the Danube is also influenced by two major mountain chains: the Alps and the Carpathians.

Water management is therefore a central issue to the Danube Region, especially since water does not recognise borders and its management requires strong coordination and cooperation across countries and across sectors. This is a key practical aspect, illustrating the territorial cohesion objective now enshrined in the Lisbon Treaty.

Such coordination is already facilitated through the International Commission for the Protection of the Danube River (ICPDR) which is the Steering Body of the DRPC, established in 1998 and supported by a Secretariat to implement the Convention, and, more recently, to implement the transboundary aspects of the EU Water Framework Directive (WFD). Major tributaries have also started to work on enhanced cooperation, with the establishment of e.g. the International Sava River Basin Commission (ISRBC) which aims at establishing sustainable water management and navigation for the Sava. Tisza river basin cooperation is coordinated by the Tisza Group of the ICPDR.

In addition, water management across the EU must respond to a number of legislative acts which lead to concrete actions and investments in the Member States. All these are aimed at improving the quality of the waters, also of special importance in the Danube Region. In particular, the implementation of the WFD, the Urban Waste Water Treatment (UWWT) Directive or the Nitrates Directive should in themselves guarantee a substantial water quality improvement.

##### Danube Region specifics

Recent extensive analytical work carried out principally in the framework of ICPDR<sup>42</sup> has provided a reliable and sound picture of water quality and management issues across the Danube

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<sup>41</sup> Countries with basin territories greater than 2,000 km<sup>2</sup> are formally considered as part of the Danube Basin according to the provisions of the Danube River Protection Convention

<sup>42</sup> See Joint Danube Surveys information : <http://www.icpdr.org/icpdr-pages/jds2.htm> and Transnational Monitoring Network : <http://www.icpdr.org/icpdr-pages/tmn.htm>

Basin. This is set out in the Danube River Basin Management Plan (DRMP), adopted by all contracting parties in December 2009<sup>43</sup>. It is clear from this Management Plan that significant challenges exist throughout the river basin. Impetus for further research and identification of remedial and preventive actions is provided by EU legislative acts such as the WFD, the Birds and Habitats Directives, the Floods Directive, etc.

The action underlined will address in particular key issues related to water quality in the Danube Basin and its main sub-basins (tributaries). However, water issues need to be addressed in an integrated way which means that equally critical are issues such as floods and water scarcity (which are addressed in the chapter dedicated to environmental risks) or solid waste management (which is addressed in the chapter dedicated to biodiversity and landscapes).

Of particular importance for the Region is the quality of the water which is discharged into the Black Sea. Although data for other rivers flowing into the sea are scarce, it can be reasonably assumed that an important part of the pollutants come from the Danube, accounting for a large part of the river-borne phosphate loads entering the sea. Therefore, positive action to reduce Danube pollution will have a direct beneficial effect on the Black Sea and its marine environment. From a legal point of view, as the Black Sea is a sensitive area under the Urban Waste Water Directive, all urban waste water treatment plants for EU agglomerations of more than 10,000 p.e. upstream have to ensure more advanced (tertiary) treatment.

The Danube River Management Plan and its underpinning research, monitoring and analysis have identified four main challenges in relation to the quality of water (both surface and groundwater, both chemical and ecological status) across the Danube Basin:

1. Organic pollution: caused by the emission of partially treated or untreated wastewater from agglomerations, industry and agriculture. Organic pollution causes imbalances in the oxygen levels of surface waters and has a direct negative impact on the aquatic ecosystem
2. Nutrient pollution: caused by the emission of phosphates and nitrogen from agriculture (both land cultivation – mineral fertilisers and animal husbandry – livestock manure) and untreated discharge of wastewater from the industry and urban areas. Nutrient pollution mainly causes eutrophication and therefore provokes accelerated growth of algae and other undesirable plants which affect other organisms and ultimately decreases the quality of water. The Nitrates Directive should be fully implemented in the region.
3. Hazardous substances pollution: caused mainly by industrial effluents, discharges from mining operations and accidental pollution. Hazardous substances pollution can cause severe damage to the ecosystems (aquatic and terrestrial) and directly affect the health of the human population.
4. Hydromorphological alterations to rivers and lakes: the interruption of river and habitat continuity, the disconnection of adjacent wetlands/floodplains and hydrological alterations have a significant impact on water quality. River continuity is also crucial to ensure that flagship endangered species like the sturgeon can maintain self-sustainable populations. Furthermore, impact on the ecological status of the water and its sediment balance for instance must be considered.

## **Actions**

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<sup>43</sup> See : [http://www.icpdr.org/icpdr-pages/danube\\_rbm\\_plan\\_ready.htm](http://www.icpdr.org/icpdr-pages/danube_rbm_plan_ready.htm)

- **Action - “To implement fully the Danube River Basin Management Plan”** - in the field of water management, cooperation between Danube countries is already well advanced mainly through the inter-governmental work which takes place under the umbrella of ICPDR and ISRBC. This Action Plan fully supports all the measures which have been agreed by the countries in the framework of their endorsement of the Danube River Basin Management Plan (DRBMP) and its accompanying Joint Programme of Measures. Therefore the Danube Declaration adopted by the Ministers of Environment on 16 February 2010 entitled "Danube Basin: Shared waters – Joint responsibilities"<sup>44</sup> is an integral part of this EUSDR Action Plan and is seen as the key information source for the identification, prioritisation and financial support of agreed measures in the countries of the Danube Region.
  
- **Action - “To greatly strengthen cooperation at sub-basin level”**. The Danube has a number of important, international tributaries. For those, it is particularly important to develop specific river basin management plans (Tisza, Sava and Prut rivers). Where institutions are already established (e.g. the Sava Commission, Tisza Group), cooperation and exchange of information should be strengthened. Where this is not sufficiently the case (e.g. Prut), the process should be initiated or promoted. This also applies to necessary work in the Danube Delta where joint management agreements are necessary.
  - ⇒ *Example of project - “To complete and adopt Danube Tributaries' River Basin Management Plans” – this project is currently on-going for the rivers Tisza and Sava. For the Tisza, Romania, Slovakia, Hungary, Ukraine and Serbia are currently cooperating on the basis of the Memorandum of Understanding signed in 2004 and coordinated by the Tisza Group established in the framework of the ICPDR. The first draft of the Integrated Tisza River Basin Management Plan is under public consultation and should be finalised by the end of 2010. As regards the Sava, Bosnia Herzegovina, Croatia, Serbia and Slovenia have signed a Framework Agreement on the Sava River Basin and established the International Sava River Basin Commission (ISRBC). A full River Basin Management Plan is under preparation, with financial support from the European Commission, and should be completed by the end of 2011 (Lead : relevant river management body; Deadline : end 2011)*
  
  - ⇒ *Example of project - “To complete and adopt a Management Plan for the Danube Delta” – the delta is one of the sub-basins identified within the wider Danube area. Much still needs to be done to develop joint data collection, joint research and joint initiatives in terms of delta water management. Despite complex socio-economic and political issues affecting the area, the three countries concerned (Romania, Moldova and Ukraine) have started cooperating more closely, with the support of the ICPDR. A full management plan should be prepared and agreed, possibly with the support of a project to be funded by the ENPI CBC Programme Romania-Ukraine-Moldova. (Lead: Romania, Ukraine and Moldova)*
  
- **Action - “To continue to invest in and support the information collection systems already developed by ICPDR”**, activities such as the Transnational Monitoring Network, the Danube Joint Surveys or the GIS (Geographic Information System) databases provide essential information necessary to identify key problems and take action in order to meet the objectives of the Water Framework Directive. Such tools need to comply to the measures, rights and obligations of the INSPIRE directive<sup>45</sup>, be further supported by the countries involved and developed to meet new challenges and questions such as those connected to climate change

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<sup>44</sup> See: <http://www.icpdr.org/icpdr-pages/mm2010.htm>

<sup>45</sup> Directive 2007/2/EC - Infrastructure for Spatial Information in the European Community

scenarios or the migration of fish. There should be improvement in the standardisation of sampling and analysing methods and clear commitments to meet sampling and analysing targets.

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

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

➤ *Action - “To continue boosting major investments in building and upgrading urban wastewater treatment facilities across the Danube Basin, including measures to build capacity at the regional and local level for the design of such infrastructure”*. Requirements under EU environmental legislation need to be fully met and EU funding possibilities need to be used effectively in order to ensure full primary, secondary and tertiary treatment as foreseen in EU legislation. In addition, the Danube countries which are not members of the EU are also being urged to speed up their investments in WWTP, as they pledged to do when adopting the DRBMP at the end of 2009. This need is particularly acute in large agglomerations such as the city of Belgrade. A full list of the facilities needed is available from ICPDR<sup>46</sup>.

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

➤ *Action - “To establish buffer strips along the rivers to retain nutrients and to promote alternative collection and treatment of waste in small rural settlements”*. This is an important action which should be seen as complementing the effects of completing the network of WWTP. Other, less costly and heavy, methods of reducing polluting discharges into rivers (alternative sanitation) should be explored wherever possible. For examples of projects, please consult the "Environmental Risks" priority.

➤ *Action - “To foster and develop an active process of dialogue and cooperation between authorities responsible for agriculture and environment to ensure that measures are taken to address agricultural pollution”*. It is vital that key stakeholders from environment and agriculture (ministries but also farmers' associations and civil society) cooperate in order to jointly re-enforce concrete measures in reducing pollution from fertilisers and manure, using instruments such as Best Agricultural Practices and Green Farming. This work should expand

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<sup>46</sup> See: [http://www.icpdr.org/participate/sites/icpdr.org/participate/files/DRBMPmaps\\_all.pdf](http://www.icpdr.org/participate/sites/icpdr.org/participate/files/DRBMPmaps_all.pdf)



to comply with the Nitrates Directive and lead to the full implementation in the region of a holistic/overarching plan to reduce nutrients discharge. In Member States, it can be supported by the 1<sup>st</sup> and 2<sup>nd</sup> pillars of the Common Agricultural Policy where such interventions already exist.

- **Action - “To legislate at the appropriate level to limit the presence of phosphates in detergents”**. This key action is seen as a very cost effective pollution control initiative which can quickly and effectively reduce the nutrient pollution in the Danube region.
- **Action - “To treat hazardous substances and contaminated sludge with the newest and best available technology and to develop and promote remediation measures for hazardous producing or abandoned industrial sites and waste deposits”**- Important to invest in research and innovation to reduce risks connected with the production of hazardous substances and their disposal, which can have disastrous consequences on the quality of ground and surface waters.
- **Action - “To assure the proper control and progressive substitution of substances that are considered problematic for Danube Region”**, and which are identified under REACH<sup>47</sup> as substances of very high concern, through the preparation of Annex XV dossiers for identification of those substances and their with a view to their eventual inclusion in Annex XIV of REACH.
- **Action - “To reduce existing water continuity interruption for fish migration in the Danube river basin”**. ICPDR has identified 900 spots where water flows are discontinued to the point of preventing fish migration. In the current DRBMP it is agreed that 108 migration aids will be built, which is a good start but which needs to be expanded in the coming years. It is also vital to implement fully the jointly agreed Sturgeon Action Plan<sup>48</sup> and to invest into further research on fish migration routes and behaviour.
  - ⇒ **Example of project - “To make the feasibility study for restoring continuity at the Iron Gates”**. The sturgeon and other fish population are decreasing because of the existence of big dams that prevent the fish migrating and thus reproducing. One of the biggest obstacles is the Iron Gate hydroelectric dam between Romania and Serbia. A feasibility study on the possibilities of fish migration through the dam should be carried out. (Lead: Romania and Serbia; Deadline: end 2012)
  - ⇒ **Example of project - “To carry out an assessment for restoration of the sediment balance in the Danube”**. Trans-boundary solutions need to be found for the problem of riverbed incision and the lack of sediment. Hydropower dams and dredging activities on the Danube cause serious problems in the balance of the sediment of the river system, which drives the deepening of the riverbed on free flowing river sections. Co-ordination within the framework of the Strategy will help ensure identification and implementation of best solutions. This is also an important project in relation to flood prevention.
  - ⇒ **Example of project - “To examine biodiversity and environmental status of sediment, water and biota in the Sava River Basin”** - The project should focus mainly on integration of EU environmental directives in Sava river countries. A system for efficient exchange of data will be established and know-how transfer between project partners and other relevant institutions in the Sava River Basin will be provided. The ecological status of the Sava River Basin will be evaluated on the basis of data collected. Outcomes of the project will serve as the basis for application of the EU directives and sustainable water

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<sup>47</sup> Regulation 1907/2006

<sup>48</sup> See : <http://www.iad.gs/docs/reports/SAP.pdf>

*management activities which are crucial for the Sava River Basin Management Plan, as well as the management of natural assets and protected areas. (Lead: ISRBC, Deadline: 2014 )*

- **Action - “To promote measures to limit water abstraction”**- As there is competition for water for various purposes (drinking water, irrigation, industry, energy) and in view of possible reduced levels of water available in the future, actions should be developed to establish a water abstraction management concept with special attention to water demand management, e.g. the promotion of efficient irrigation techniques in agriculture, the reduction of water usage in industry and the fostering of a water-saving culture, as per the European Commission's Communication on Water Scarcity and Droughts in the EU<sup>49</sup>.
- **Action - “To strengthen general awareness and facilitate exchange of good practice in integrated water management issues in the Danube Basin among decision-makers at all levels and among the population of the Region”** - It is very important that the population at large, and in particular young people, are aware of the challenges facing the region in terms of water quality and management. Existing initiatives such as Danube Day or the Danube Box should be built upon and expanded.
- **Action - “To promote measures aimed at reducing knowledge deficits, developing and transferring tools, methods and guidelines concerning the safeguarding of drinking water supply”**. Drinking water supply is a challenging issue in the region, and there are great disparities between the existing infrastructures, with some networks suffering from above-average leakage rates and below-average quality assurance levels. This could be improved by fostering intense cooperation between drinking water suppliers. Ways in which to implement the cost recovery principle and general water pricing issues should be discussed and experience exchanged.
- **Action - “To further strengthen Integrated Coastal Zone Management (ICZM) and Maritime Spatial Planning (MSP) practices on the Western shores of the Black Sea”**- Human activities tend to develop together in coastal and marine areas, coming into conflict with each other and with protection needs of habitats and landscapes. ICZM and MSP, as planning instruments to allocate the spatial and temporal distribution of human activities in coastal and marine areas should be encouraged and exchange of experience should be put in place, building also on the pilot projects developed under the PlanCoast project. Considering that many issues transcend national borders, ICZM and MSP can yield their full benefits only if all coastal regions introduce such systems, use compatible and comparable systems and learn from each other's experience. Such activities will be carried out taking into account the Marine Strategy Framework Directive, the EU ICZM Recommendation and the ICZM activities of the Bucharest Convention for the protection of the Black Sea Environment.

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<sup>49</sup> COM(2007) 414 final



## 5) TO MANAGE ENVIRONMENTAL RISKS

### Presentation of the issue

Climate change poses major challenges to all parts of the European Union and will require specific responses as outlined in the European Commission's White Paper of April 2009. Extreme weather phenomena are likely to occur more frequently across Europe and therefore also in the Danube Region. Since water plays a crucial role in the region (as the territory coincides with the hydrological basin of the second largest river in Europe), we can anticipate that these phenomena will lead to increased water level variations which will have direct consequences on the citizens and businesses of the region.

The frequency and severity of floods on the one hand, but also of drought, forest fires, storms, erosion, icing and water scarcity on the other hand, are likely to present major challenges in the coming years. Excessive heat and lack of water also pose substantial problems, both in everyday human terms, but also with impact on agriculture, industrial and leisure activities.

Additionally, the Danube Basin Region is characterised by the presence of a high number of industrial risks sites which present a constant danger to the environment and citizens. Past examples of severe pollution have shown that accidents do happen, and that knowledge of the risk potential, preparedness as well as rapid response mechanisms are essential to prevent, be prepared or reduce damage.

At European level, the European Civil Protection Mechanism was established in 2001 to support the mobilisation of emergency assistance in the event of major disasters, by Council Decisions 2001/792/EC Euratom<sup>50</sup> and 2007/779/EC, Euratom<sup>51</sup>. The Mechanism can be activated in response to any type of natural or man-made disaster, such as earthquakes, floods, forest fires, technological or radiological accidents, accidental marine pollution or terrorist attacks. Currently 31 countries participate, being: the 27 Member States plus Iceland, Liechtenstein, Norway and Croatia. The Mechanism is open to candidate countries and also cooperates with other regional organisations and third countries.

In the area of civil protection the European Commission and Participating States are taking an integrated approach to disaster management including prevention, preparedness and response. In the area of prevention, the agreed priorities include: the development of knowledge based disaster prevention policies (spreading best practices, developing common guidelines on risk assessment and mapping); and linking the actors and policies throughout the disaster management cycle (developing lessons learnt, reinforcing early warning tools).

### Danube Region specifics

At present, only limited work has been done to examine the various possible climate change scenarios and even less to develop meaningful and effective responses at basin level. The Danube Strategy will provide a timely opportunity to put in place the required elements on which to build a Danube Adaptation Strategy in the nearest possible future. It will be essential that there is a full

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<sup>50</sup> See : [http://eur-lex.europa.eu/pri/en/oj/dat/2001/l\\_297/l\\_29720011115en00070011.pdf](http://eur-lex.europa.eu/pri/en/oj/dat/2001/l_297/l_29720011115en00070011.pdf)

<sup>51</sup> See : [http://ec.europa.eu/environment/civil/prote/legal\\_texts.htm](http://ec.europa.eu/environment/civil/prote/legal_texts.htm)

cross-cutting, integrated approach to climate change, as it can impact on a large number of sectors (drinking water, agriculture, navigation, tourism, etc).

In the meantime, all the countries of the Danube Region expressed their common intention to strengthen cooperation in preventing, preparing for and responding to natural and man-made disasters such as massive floods or industrial accidents. These events have a negative impact on natural landscapes and biodiversity, but also result in loss of life and damage to economic activities and social infrastructures. Flood prevention is of particular importance.

The EU Floods Directive provides a legal framework for a coordinated approach to assessing and managing flood risks. This means that Flood Protection Action Plans need to be formulated at sub-basin level, ultimately to lead to the adoption of a single Danube-wide Flood Management Plan. The Ministerial Declaration adopted by the Danube countries in the framework of their cooperation on water management states that "flood prevention and protection are not short term tasks but permanent tasks of the highest priority". The Declaration commits the signatories to "develop one single international Flood Risk Management Plan or a set of Flood Risk Management Plans based on the ICPDR Action Programme for Sustainable Flood Protection". This work is currently ongoing. Flood Action Plans are already adopted for the 17 sub-basins<sup>52</sup> and will be followed by Flood Risk Management Plans which should be finalised for 2015 in accordance with the Floods Directive.

Many regions throughout the Danube Region are particularly subject to high flood risks, as was illustrated by the disastrous events in 2006. This flood disaster affected the upper (Germany, Austria), middle (Slovakia, Hungary, Serbia, Croatia) and lower reaches (Romania, Bulgaria, Moldova) of the Danube, as well as some of its tributaries (Czech Republic). The floods cost ten lives, made 30,000 people temporarily homeless and caused damages amounting to € 500 million. Alongside extraordinarily high precipitation, the disaster was also due to the loss of flood retention areas such as floodplains and wetlands. Further flooding has been widespread more recently, particularly in Slovakia, Hungary, Czech Republic, Romania, Republic of Moldova, Ukraine, Slovenia and Croatia in 2010.

The balance between water demand and availability has reached a critical level in many areas of Europe (water scarcity). In addition, more areas are adversely affected by changes in the hydrological cycle and precipitation patterns (increasing aridity and frequency of droughts). Climate change will almost certainly exacerbate these adverse impacts in the future, with more frequent and severe droughts expected across Europe and the neighbouring countries.

Over the past thirty years, droughts have dramatically increased in number and intensity in the EU. It is estimated that the number of areas and people affected by droughts went up by almost 20% between 1976 and 2006 and that at least 11% of the European population and 17% of its territory have been affected by water scarcity to date. The total monetary cost of droughts over the past thirty years has been estimated to € 100 billion. However, the cost estimates are based on self-reported damages and costs cover only direct costs, excluding ecological and social cost.

As the industrial accident spills (arsenic, cyanide, alkaline sludge) of 2000 in Baia Mare and Baia Borsa and of 2010 in Ajka show, severe pollution incidents are a concern. In particular, various mining activities which take place in the Carpathians present serious danger. Leakages from old industrial installations or contaminated sites are also occurring. Working on preventing these

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<sup>52</sup> The 17 sub-basins are : Upper Danube – Inn - Austrian Danube - Morava, Vah, Hron and Ipel – Pannonian Central Danube – Drava and Mura – Sava – Tisza – Pannonian Southern Danube – Banat – Velika Morava – Bulgarian tributaries – South-Central Romanian tributaries – Lower Danube corridor – Prut and Siret – Danube Delta Liman

events and on dealing with them rapidly and efficiently, is a necessity throughout the Danube Region. An inventory of high-risk and contaminated sites already exists. This inventory needs to be extended and continuously updated and could contribute to the development of a risk mapping and assessment process in the region in conjunction with the enhancement of the early warning monitoring infrastructure identifying and documenting threats. The ICPDR monitors this process<sup>53</sup>.

The European Civil Protection Mechanism has been activated several times in emergencies in the Danube region, including the recent floods in Hungary (May-June 2010), H1N1 severe respiratory infection in Bulgaria and Ukraine (2009), potential tailings dam collapse in the Kalush region (Ukraine, 2010), gas shortage crisis in Moldova (2009), floods in Ukraine (2008), floods in Romania and Republic of Moldova (2008, 2010), and the industrial accident at Ajka in Hungary (October 2010).

### **Actions**

➤ **Action - “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.

⇒ **Example of project - “To complete and make full use of the outputs of the DANUBE FLOODRISK project currently underway (European Territorial Cooperation Programme South-East Europe)”**- Many Danube authorities, at national, regional and local levels, as well as civil society, have highlighted the importance of this existing project and have urged the relevant decision-makers to make full use of the future project outputs. As a result of cross-country cooperation, a set of unified hazard and flood risk maps will be produced for the Danube floodplains, which will provide the basis for adequate risk management and planning activities. This can only happen through increased harmonisation of data. The methodology will be tested via three pilot projects for the implementation of concrete measures at local level, based on the maps produced. (Lead: Ministry of Environment, Romania; Deadline: April 2012).

⇒ **Example of project - “To promote transnational conservation of the remaining floodplains along the entire length of the Danube by completing existing initiatives and promoting new ones, including along tributaries”** – there are already in various parts of the Danube Basin excellent examples of floodplain conservation or restoration, which should be either completed or expanded. Examples include the section between Neuburg and Ingolstadt or the Blue Ribbon of Biodiversity promoted by Bund Naturschutz in Bavaria or the Green Corridor in the Lower Danube. (Lead: Bavaria and Bulgaria)

➤ **Action - “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”)**”. Protection against flood requires taking specific measures which can vary across the Region according to a series of geographical or hydromorphological elements. Building reinforced dykes and banks is not always the most sustainable way to protect an area from potential floods. Wetlands and floodplains (giving the rivers space) also contribute significantly to protecting and preserving biodiversity and eco-systems, they have a

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<sup>53</sup> See : [http://www.icpdr.org/icpdr-pages/accidental\\_pollution.htm](http://www.icpdr.org/icpdr-pages/accidental_pollution.htm)

positive impact on water filtering and prevent erosion. In addition, they offer great potential for green tourism. This approach should be explored more systematically within the 17 Danube sub-basins.

⇒ *Example of project - “To support the Morava-Thaya Basin initiatives”- The Danube-Morava-Dyje wetlands are the only trilateral Ramsar site worldwide. An important cooperation project is underway to ensure the protection of the ‘Donau March-Thaya-Auen’ wetland leading to the lowering of flood risks in the flooding areas and to the improvement of water courses channels in urban areas. It also include the development of a platform that would prepare a trilateral management plan and a strategy for promoting environmentally benign, soft, quality tourism, including leisure navigation. Some elements of the project are already supported by the Austria-Slovakia cross border cooperation programme (Lead: Austria, Czech Republic and Slovakia)*

➤ **Action - “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) and to further promote joint responses to natural disasters and to flood events in particular, including early warning systems” -** A number of initiatives already exist in the field of cross-border or transnational emergency prevention and response, in addition to the European Civil Protection Mechanism. The EFAS system is an early warning system for floods, and one of the "basin-wide" measures in the current ICPDR's Flood Action Plan. It will be operational soon. However, there is a need to upgrade warning systems and coordinate civil protection from local to transnational/European levels across the area.

⇒ *Example of project - “To deploy a set of sensors and actuators all along the river and network them through the broadband infrastructure, allowing for events surveillance and risk prevention”. Wireless identifiable devices and the utilization of Internet of Things Technologies in green related applications and environmental conservation are one of the most promising application scenarios for networked and broadband-based modern communication networks in the future, and there will be an increased usage of wireless identifiable devices in environmentally friendly programmes worldwide. This can be built on the experiences of the SENSEI, WISEBED, IoT-A, SmartSantander projects and the IERC – Internet of Things European Research Cluster. The Cluster is also connected to similar approaches and projects to Asian countries like China and Japan, where due to huge national catastrophes and zones with a potential earthquake risk a strong implementation practises exists. At the same time two European Internet of Things support actions are also concerned to inform and involve local authorities and business about the potential of a set of sensors and actuators network. While small test environments exist and results were achieved in similar mobile devices networks, support is needed for a wide range deployment and the development of the corresponding computer systems. (Deadline: 2013)*

➤ **Action - “To strengthen operational cooperation among the emergency response authorities in the Danube countries and to improve the interoperability of the available assets”-** For risks that are common to an important number of countries in the region (i.e. floods), it is important to strengthen cross-border cooperation and to ensure that civil protection authorities have a good understanding of each other's systems, available assets and potential gaps, working procedures, and that teams can also function smoothly in case of major emergencies involving bilateral, European, or international response. The development and use of common guidelines/procedures for risk mapping and assessment, early warning message and emergency response

should also be considered. It is also important to address development of capacity for surveillance and response to Public Health Emergencies of International concern as well as to health threats of cross-border relevance. This issue is one of the requirements under the provisions of the new International Regulations (IHR)<sup>54</sup>.

⇒ *Example of project - “To develop strategies for resilience of local communities to natural disasters through the existing MONITOR II project currently underway (European Territorial Cooperation Programme South-East Europe)”- Management of natural hazards constitutes a common challenge in the SEES. Until now, neither hazard mapping nor contingency planning has been transnationally coordinated and defined in a sufficient manner. These gaps will be tackled in MONITOR II with the development of a common methodology and a "Continuous Situation Awareness" system, allowing for periodic update of hazard maps and contingency plans and thus making them usable in real-time for disaster situations. Stakeholders include the public, politicians, emergency services and experts. (Lead: Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management; Deadline: May 2012).*

➤ *Action - “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.*

➤ *Action - “To develop rapid response procedures and plans in case of industrial accidental river pollution”- this should include the strengthening of the existing early warning system Danube AEWS, the availability of intervention-specific equipment such as spill-sorb, floating dams, etc, the harmonisation of contingency planning and the promotion of joint exercises. All this should be based on the information already collected by ICPDR<sup>55</sup> which should be further expanded to establish the effectiveness of existing measures and take action where those prove to be insufficient. The work on this action shall be closely linked to the work under the EU Civil Protection Mechanism (i.e. in terms of mobilisation of rapid intervention equipment and assets, harmonised contingency planning and response procedures, joint exercises and training)<sup>56</sup>.*

⇒ *Example of project - “To implement a comprehensive transboundary risk management project in the Danube Delta” - Joint responsibility for protecting people, the environment and the climate before, during and after industrial incidents in the Danube Delta is a vital concern. Technology and information transfer into Eastern and South-Eastern European countries should help to substantially reduce the risk of incidents and contribute to transboundary emergency preparedness. The German-lead project with Romania, Moldova and Ukraine is geared towards establishing transnational incident management, improving industrial risk potential prevention, developing harmonised safety standards for industrial plants and minimising impacts in case of an incident through joint crisis management. To meet these goals, measures are being taken to prepare the introduction of safety technologies in these countries, in particular with a view to the experience gained in this field in Germany. (Lead: Germany and Romania; Deadline: 2013).*

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<sup>54</sup> See: <http://www.who.int/ihr/en/>

<sup>55</sup> See : [http://www.icpdr.org/icpdr-pages/accidental\\_pollution.htm](http://www.icpdr.org/icpdr-pages/accidental_pollution.htm)

<sup>56</sup> See : "Towards a stronger European disaster response : the role of civil protection and humanitarian assistance" – COM(2010) 600, 26.10.2010.

- ⇒ *Example of project - “To strengthen operational cooperation between the emergency response authorities in the Danube countries and to improve the interoperability of the available assets in order to reduce damages, protect citizens and ensure an appropriate response to emergencies” –To achieve these goals, the project shall include the identification of risks of common interest and characterization of their national specificities, inventory/ mapping of assets available at national level and identification of potential gaps, general and specific training, development of common interoperable working procedures (including for early warning messages and response operations), exercises (accompanied by lessons learnt meetings).*
- **Action - “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.
- ⇒ *Example of project - “To foster transnational cooperation via ICPDR in order to develop a Climate Change Adaptation Strategy for the Danube Region”, including drafting and implementation of Political commitment has been expressed via ICPDR for a full climate change adaptation strategy for the Region, to be prepared under the leadership of ICPDR. This strategy should be based on a step-by-step approach and encompass an overview of relevant research and data collection, a vulnerability assessment, and ensure that measures related to navigation, agriculture, energy are climate proof. (Lead: ICPDR; Deadline: 2012).*
- ⇒ *Example of project - “To draft and implement a Water and Climate Adaptation Plan for the Sava River Basin” - According to the last findings on climate change, the Sava River Basin is predicted to experience higher temperatures and more severe precipitation events and droughts. These changes will impact water resources management, water supply, hydropower, agriculture, navigation and flood control. Climate impacts will have significant consequences on investments in water systems associated with water services and managing water. To fill the knowledge gap on the impact of climate change on water sector and to inform decision making sector (e.g. governments and other national authorities) how to increase the climate resilience of the critical water management infrastructure investments and integrated water resource management, the World Bank has initiated the project Water and Climate Adaptation Plan for the Sava River Basin (WATCAP). (Lead: ISRBC; Deadline: July 2011).*
- **Action - “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.

- ⇒ *Example of project - “**To evaluate impacts of climate change on the availability and safety of public drinking water supply through the existing CC-WaterS project currently underway (European Territorial Cooperation Programme South-East Europe)**” - Transnational action is needed to prepare SEE 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 Climate Change influences. In CC-WaterS, SEE governmental bodies, water suppliers and research institutions work together and implement jointly developed solutions. The complementary knowledge of the partners, enhanced by further applicable results of past projects, will provide a strong background. (Lead: Vienna City Waterworks, Austria; Deadline: April 2012).*
- ⇒ *Example of project - “**To prepare and implement a Water Pollution Contingency Management Plan for the Sava River Basin**” - The project is aimed at efficient provision of measures in the case of accidental spills of substances which might affect the use of water for different purposes (drinking water, breeding waters, irrigation, industry, navigation etc.), as well as the quality of rivers and aquatic eco-system, especially the areas of special importance. For the purpose of efficient and effective management, the modelling and information exchange platform will be developed by which all responsible authorities and institutions will be alerted on the eventual spill of harmful substances, follow the development of the situation and co-ordinate a concerted response to it. Watercourses as transport media for accidental pollution, with intensive transboundary dimension, are directing the project to include all the countries in the Sava River Basin. The project is seeking financing from the European Territorial Cooperation programme "South-East Europe". (Lead: ISRBC; Deadline: 2014).*

## 6) TO PRESERVE BIODIVERSITY, LANDSCAPES AND THE QUALITY OF AIR AND SOILS

### Presentation of the issue

The Danube Region is one interrelated and interdependent ecosystem, incorporating a rich and unique flora and fauna<sup>57</sup>. It is diverse, including not only the immediate river Danube, its tributaries, lowlands and the remarkable delta, but also the major part of the Carpathian Mountains, the Balkans and part of the Alps.

Nature and ecosystems in the Danube area provide invaluable environmental goods and services (food, fibre and fresh water, regulation of climate and quantity of water in a territory, soil protection, nutrient recycling, waste assimilation). Moreover, diverse landscapes with intact wetlands and forests can buffer the effects of climate change. They can also absorb some of the pollution and waste. This is indispensable for the socioeconomic development and human wellbeing. It is thus a key task for society to care for environmental health. Given value and potential fragility of the Danube Region, protection and restoration of its natural assets, as well as building of green infrastructure, is a high priority.

The pollution from contaminated sites or waste disposal in this region has major impact on water quality. In addition, erosion from arable lands is the main source of the agricultural diffuse pollution in the Danube river basin. There are several principles to be observed in the preservation of biodiversity and landscapes.

To be effective, the environmental measures should be planned in connection with the potential development e.g. of tourism, construction, energy, transportation and agricultural sectors. Human migration, cultural differences, urban / rural development and regional security should also be taken into consideration. The improvement of current infrastructure efficiency (energy, household consumption, transport) should be examined before new infrastructure is built. Landscape (spatial) planning is key to developing good local strategies for rural/urban development.

Compliance with EU environmental legislation is crucial and will clearly improve the environment in the EU countries of the Danube<sup>58</sup>. The EU *acquis*, to the extent possible or at least along similar principles, should provide the environmental framework in the candidate and potential candidate countries, as well as in other third countries participating in the Strategy.

### Danube Region specifics

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<sup>57</sup> The Danube region is home to over 2,000 plant species and over 5,000 animal species. It hosts over half of the European populations of bears, wolves and lynx as well as important bird sanctuaries for species like Dalmatian pelican. The delta of the Danube River is one of the world's largest wetlands featuring rare fauna and flora, as well as thirty different types of ecosystems. This rich natural heritage resulted in the creation of 2,860 Natura 2000 sites in the Danube River Basin (including 230 sites along the Danube itself). In addition, among the eight Member States participating in the strategy, two of them (Slovenia, Bulgaria) have the highest terrestrial rate of Natura 2000 sites coverage in the whole EU.

<sup>58</sup> In particular, the Water Framework Directive, the Waste Water Directive, the Habitats and Birds Directives, the Waste Framework Directive and the Environmental Impact Assessment Directive are key factors in preserving the ecosystems. Moreover, the Marine Framework Directive is important for the Danube Delta and the coastal areas of the Black Sea.



The natural heritage of the Danube region is of European importance. The region contains a large share of Europe's remaining great wilderness areas, as well as rich cultural landscapes. The Danube and its tributaries are vital to the wildlife ecosystems and indeed provide ecological connections that are essential for overall European environmental health.

This unique natural asset is under growing pressure. The biodiversity and variety of ecosystems of the region are being gradually reduced - species and living spaces, wetlands and floodplain areas disappear. In addition, deforestation, land and air pollution grow. Rural areas suffer from depopulation and land abandonment.

Much of this is due to the rapid industry, urban, transport and agriculture development and sprawl during recent years: natural resources are over exploited. The environment infrastructure necessary is not yet well developed. Land pollution is worsened by non-compliant municipal landfills and numerous contaminated sites. The public awareness about the ecological needs in the eastern part of the region is not sufficient, as well as the knowledge and use of best available practices.

### **Actions**

Many of the actions to preserve the biodiversity and landscapes of the Danube river basin are already included in the Joint Programme of Measures of the Danube River Basin Management Plan, prepared by ICPDR (see the chapter on water quality for details). This Strategy fully supports the implementation of these measures, as well as the implementation of other Danube region-related, European and international legally binding environmental initiatives.<sup>59</sup> The actions listed below should be perceived as complementary to the already existing ones.

In addition, when it comes to preserving biodiversity or maintaining and improving the quality of soils and landscapes, coordination should be ensured between actions foreseen at national level. Full use should be made of the existing networking, coordination and cooperation instruments, notably those available under the European Agricultural Fund for Rural Development such as the National Rural Networks and the European Network for Rural Development.

### **Preservation of biodiversity and landscapes'**

- **Action - "To contribute to the 2050 EU vision and 2020 EU target for biodiversity"**. In 2010, EU Heads of State and Government at the Spring European Council adopted a long-term vision and a headline target for European biodiversity beyond 2010. The European Commission is currently developing a strategy outlining the way to achieving the 2020 biodiversity target. Actions under the Danube Strategy will fully contribute to the implementation of the post-2010 EU biodiversity strategy to halt biodiversity loss and ecosystems services' degradation and to restore them in so far as feasible.
- **Action - "To manage Natura 2000 sites and other protected areas effectively"**- Natura 2000 sites designated under the Birds and Habitats directives, as well as other protected sites should in principle have their own management plans or some other kind of contractual framework. But in practice, they often work in isolation and not efficiently enough. The effective management helped by transnational cooperation (networking) is necessary. The action should include exchange of experience and capacity building for protected areas/Natura 2000 sites administrations; community involvement; visitor management and tourism development; coordinated management planning, implementation and evaluation. It is also indispensable to increase public awareness about Natura 2000 sites and protected areas, with the help of e.g. the

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<sup>59</sup> To be mentioned: Ramsar Convention, Alpine Convention, Carpathian Convention or Convention on long-range transboundary air pollution.

National Ecological and Rural Networks or the European Network for Rural Development. The action could be implemented e.g. through the existing Danube Network of Protected Areas and the Carpathian Networks of Protected Areas. ALPARC<sup>60</sup> can serve as successful examples.

⇒ *Example of project - “To implement the Danube River Network of Protected Areas (DANUBEPARKS)”. This project, supported by the South East Europe transnational cooperation programme, aims at cooperation, coordination, consultation and strengthening of the links between and competences of the national administrations of protected areas of Danube countries. The links and synergies between DANUBEPARKS project and the Bavarian projects such as "Green Danube" should be established and exploited. (Lead: Auen Park, Austria. Deadline: 2012)*

⇒ *Example of project - “To establish fully the Mura-Drava-Danube Biosphere Reserve” – Once established, this could be Europe’s largest trans-boundary riverine protected wetland area, and a strong candidate for UNESCO-recognized site. Promoters of the project should focus on finding support for the reserve among five riverine countries<sup>61</sup> (AT, HR, HU, SRB and SI) for management of the protected area, capacity building, public awareness raising and promotion as well as support for related local development activities, including promotion of tourism and local products.*

⇒ *Example of project - “To provide expertise related to the Danube Delta and similar protected areas”. This initiative would be targeted at staff and experts from the Danube Delta and similar protected areas, in order to develop knowledge, models and simulation processes related to the Danube Delta phenomena, as well as the Black Sea interface phenomena. It would include training activities and support doctoral and post-doctoral studies.*

➤ **Action - “To protect and restore most valuable ecosystems and endangered animal species”.** Enhanced protection of the remaining natural ecosystems, such as the Danube Delta or the Carpathians, wetlands restoration, afforestation of non-arable land, protection of marginal forests, bioremediation of highly impacted areas, supported by environmental research, are desirable. This is also crucial for endangered animal species protection, such as the Danube sturgeon<sup>62</sup>, brown bears, wolves, lynx and wild horses living in the Danube Delta. Research, inventory, and monitoring of species and habitats of European and national importance is an important part of this action. Conflicts with humans and illegal trade in wild animals should also be addressed.

⇒ *Example of project - “To restore the natural environment, wildlife and vegetation along the Danube” - The project should build upon the experiences gained from the upper-Danube related projects, such as "Swabian Danube River Valley" or "The Danube's sun-favoured sides". (Lead: Bavaria)*

⇒ *Example of project - “To identify and protect old growth forests of the Danube basin” - The Danube region contains Europe’s largest remaining areas of virgin and old growth forest outside of Russia. Although they provide a host of ecosystem goods and services, many of them have uncertain status and are being felled. Activities of the project would include identification and evaluation of current status of old growth forests in the region;*

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<sup>60</sup> Platform for protected areas in the Alpine Region.

<sup>61</sup> So far only Croatia and Hungary have signed a joint declaration to establish the reserve.

<sup>62</sup> Biodiversity issues directly linked to the aquatic ecosystems are treated in more detail in the Priority area 3

*development of measures for preserving them and education and awareness raising as well as capacity building.*

⇒ *Example of project - “**To promote the conservation of the genetic pool and gene bank co-operation along the Danube**” - The project consists in identifying and studying crop, fruit and vegetable species and varieties typical to the Danube floodplain areas in ex situ gene banks and collections as well as in their original (in situ) habitats. Furthermore, the collection, conservation/maintenance and revival of traditional agricultural methods related to these species and varieties are needed. In order to achieve these objectives, trans-boundary cooperation is needed among the gene banks dealing with the conservation and maintenance of plant genetic resources for food and agricultural purposes.*

➤ **Action – “To explore together the appropriateness of reviewing the Convention Concerning Fishing in the Waters of the Danube”.** A Convention on fishing in the waters of the Danube river was signed in 1958 and has been in force since then. However neither recent geopolitical changes in the area nor policy developments related to the protection of the environment or to sustainable fishing have been reflected in the Convention. The parties to the Convention should examine this.

➤ **Action - “To develop green infrastructure in order to connect different bio-geographic regions and habitats”.** The habitats (including Natura 2000 sites) can better keep and enhance their value, if they are interconnected and this is the way to ensure that ecosystem services are being kept provided. The action could include scientific research to find new ways for connecting habitats, consultations with relevant communities and stakeholders, careful and integrated spatial planning to develop and apply practices and technologies for economic investments and infrastructural development benefiting biodiversity. Construction of e.g. eco-bridges, eco-ducts and ecological "stepping stones" should be part of a planning of infrastructure building.

⇒ *Example of project - “**To complete the Lower Danube Green Corridor**” - This is the Europe’s most ambitious wetland protection and restoration project, supported by Romania, Bulgaria, Moldova and Ukraine. Activities include enhancing the protected area management; preparation and implementation of wetland restoration, consultations with local stakeholders and measures to reconnect floodplains to the river system; support for related local development activities, including development of tourism and local products.*

⇒ *Example of project - “**To develop the Alpine-Carpathian Corridor**” - This project aims to reconstruct and improve the function and permeability of the traditional wildlife corridor within the urban agglomeration Vienna-Bratislava for red deer, lynx, wolves or bears by means of “traverse support” and green bridges. A cross border project in cooperation between Austria and Slovakia is already in the implementation phase (Lead: Upper Austria)*

➤ **Action - “To reduce the spread of invasive alien species (IAS)”.** The action would assess the impact of IAS on the ecosystems in the Danube region, identify environmentally friendly ways to control their development, promote research to identify ecologically sound ways to keep their population under control or eliminate them and raise public awareness about the danger of IAS.

➤ **Action - “To decrease the input of pesticides into the environment of the Danube Region”-** To reduce the contamination of the Danube Region with pesticides, the countries of the Danube

Region should use efficiently the possibilities of the Pesticide Framework Directive (PFD)<sup>63</sup> establishing a framework for Community action to achieve the sustainable use of pesticides. PFD outlines aims and effective ways to reduce both the total amount of used pesticides and the toxicity of pesticides. The action should especially be focused on the development of ambitious programs and concepts for a reduction of pesticides in general or in specific areas as well as on the initiation of hot spot management or restrictions for the application of pesticides, e.g. by establishing buffer strips or compensating areas.

- **Action - “To remove safely obsolete pesticides and other obsolete chemicals in the area of Danube Region”** and implementing the World Health Organisation (WHO)’s Resolution on Improvement of health through sound management of obsolete pesticides and other obsolete chemicals, adopted at the 63rd World Health Assembly (WHA) which took place in May 2010 in Geneva.
- **Action - “To prepare and implement transnational spatial planning and development policies for functional geographical areas (river basins, mountain ranges etc.)”**. The conservation of ecosystems and natural assets, along with the assertion of a sustainable growth perspective contribute to the enhancement of the quality of life and employment opportunities for local population. The aim is the development of coordinated spatial planning policies focusing on the protection and at the same time sustainable development of the functional geographical areas, based on its strengths and potential.
  - ⇒ *Example of project - “To implement the VASICA - Visions and Strategies in the Carpathian area”, including the BIOREGIO Carpathians project. VASICA is the first transnational spatial development document for the entire Carpathian Space. Its main objective is to support the Carpathian Space as an area of economic, social and environmental progress and sustainability. BIOREGIO Carpathians will promote the regional development and improve the ecological connectivity in the Carpathian region. (Lead: Carpathian Convention UNEP Office)*

### **Preservation and improvement of the quality of soils**

- **Action - “To ensure appropriate treatment of solid waste”**. Integrated waste management systems should be established and implemented on national, regional and local level. The development of waste management centres for municipal and non-hazardous waste is needed, as well as rehabilitation and closure of incompliant landfills and highly polluted and contaminated sites and wild dumps. The action should also include awareness-raising about the needs of reducing and recycling waste.
- **Action - “To create standardised and compatible information on land cover on transnational basis”**. Within the Global Monitoring for Environment and Security (GMES) framework<sup>64</sup>, one of the main services that will be available is a land monitoring service. However rather limited information on land resources is available for the Danube Region. Actions should thus focus on the possibilities to collect harmonised land cover information from national sources and to create standardized and compatible information on land cover on transnational basis.
- **Action - “To raise awareness about soil protection”**. This action could be achieved in cooperation with the European Land and Soil Alliance (ELSA), including more than 100

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<sup>63</sup> Directive 2009/128/EC

<sup>64</sup> Global Monitoring for Environment and Security (GMES) is a joint initiative of the [European Commission](#) and [European Space Agency](#), which aims at achieving an autonomous and operational Earth observation capacity.

members from 7 Member States<sup>65</sup>. Further partnerships in the Danube Region should be initiated on communal level and in the educational domains<sup>66</sup>.

⇒ *Example of project - “To implement the strategy for soil protection” - Responsible, multifunctional use of land and soil and interlinkages to the regional development, as well as new governance tools and the "learning region" concept would be developed. The project should link to the work already undertaken by the Academia Danubiana<sup>67</sup> in this field.*

### **Improvement of air quality**

➤ **Action - “To decrease air pollutants”**- All Danube region countries have signed the Convention on long-range transboundary air pollution. In compliance with this Convention, there is a need to report about the level of air pollutants in the region. The action should concentrate on data collection and reduction measures.

⇒ *Example of project - “To use GIS databases to establish critical loads of air pollutants for the Danube region ecosystems” - This project is being developed by the Romanian Ministry of Environment and Forests. It will determine the critical loads, caused by the deposits of air pollutant emissions with acidification, eutrophication and ground-level ozone formation effects.*

### **Education of people on the value of natural assets, ecosystems and the services they provide**

➤ **Action - “To raise awareness of the general public, by acknowledging and promoting the potentials of natural assets as drivers of sustainable regional development”**. It would increase the perception of preserved nature as a valuable asset. Promotion of green, soft and eco-tourism is envisaged as a part of this action.

⇒ *Example of project - “To connect people with the Danube”- The objective of the project is to increase people's awareness about the Danube benefits and their concern and support for the river values. The project would include a communication campaigns, with elements such as a Danube Ship Tour, Danube Exhibition Tour, Danube Film, Danube Day event, visiting of protected areas on the Danube etc. (Lead: ICPDR; Deadline: 2014)*

➤ **Action - “To educate children and young people”**. Since there is a growing pressure on biodiversity and natural resources become scarcer, there is a particular need to educate the young generation. This should cover the services provided by ecosystems, value of natural assets and benefits for conservation of biodiversity. Part of the action could be devoted to the introduction of environmental education into the educational curricula of the Danube countries.

⇒ *Example of action - “To build a network of Danube ‘forest’ schools” - Forest schools are proving an educational success e.g. for Hungarian children and could be further expanded. The project would designate the Danube sections possessing particular environmental and cultural worth, and develop various levels of training/programme for primary and secondary schools, ecotourism, folk traditions etc. A series of programmes using the*

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<sup>65</sup> UK, NL, DE, CH, IT, AT, SK, some municipalities of the CZ

<sup>66</sup> The cooperation could be enhanced via the already existing working group “Ecology with a focus on soil protection” operating within the ARGE Donauländer.

<sup>67</sup> Academia Danubiana is an institution that focuses on a scientific and educational network of universities and other institutions of the Danube Region.

*network elements, as well as a pilot project would be developed, followed by best practice presentation.*<sup>68</sup> (Lead: Hungary; Deadline: 2014)

- **Action - “To build capacities of local authorities in the environment-related matters”.** Local authorities are primarily responsible for the implementation of environment related matters, such as waste or protected areas management. Often, they lack knowledge and capacities to develop projects in the environmental area. Under this action, the local authorities would be provided with training, an expert group helping regions and cities resolving problems would be established, and networks for exchange of good practices.

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<sup>68</sup> Synergies should be found with the project "The Danube treasure chest: children and young people experience the world's most international river", developed by Naturschutz Bayern e.V

## **C) BUILDING PROSPERITY IN THE DANUBE REGION**

## **BUILDING PROSPERITY IN THE DANUBE REGION**

This pillar focuses on innovation, information society, competitiveness of enterprises, education, labour market and marginalised communities. The overall objective is to improve the prosperity of the Danube Region. This can be done by improved cooperation in order to reduce the pronounced divide across the Region in many of the fields covered by these actions. This cooperation can cover legislative improvements, exchange of experiences and implementation of joint projects.

It will focus on three Priority Areas: (1) To develop the knowledge society through research, education and information technologies; (2) To support the competitiveness of enterprises; and (3) To invest in people and skills (education and training, labour market and marginalised communities).

This pillar strongly supports the Europe 2020 Strategy:

1. It contributes to smart growth as it reinforces all the three topics of this objective: innovation by improving the framework conditions to transform ideas into marketable products or services; education by improving the human capital of the Region; and the digital society by improving the access to internet and the availability of e-content.
2. It contributes to sustainable growth as innovation and new technologies will contribute to fighting climate change, to increasing the energy efficiency and to reducing the pollution from transport. In addition the priority area on the competitiveness of enterprises will improve the business environment, especially for SMEs.
3. It contributes to inclusive growth as it reinforces the human capital through education and training. This will be complemented by better functioning of the macro-regional labour market. It also emphasises the fight against poverty, especially against the marginalised communities.

These priority areas have to be considered with other policy fields. The Strategy encourages an integrated approach. For example, improving the competitiveness of enterprises has a positive impact on the economy and the labour market, but must be balanced in relation to the attractiveness of cities and regions, the quality of life of citizens and the environment. All these impacts cannot be taken in isolation, but have to be addressed in a holistic way, to reach the most sustainable solution.



## **Examples of financing covering the Region**

*Expenditures budgeted by the Structural Funds<sup>69</sup> in 2007-2013<sup>70</sup>*

### **Research, innovation, entrepreneurship EUR 13.9 b**

Innovation in enterprises	EUR 5.1 b
RTD infrastructures	EUR 2.6 b
Technology transfer	EUR 1.4 b
RTD activities in research centres	EUR 0.9 b
Other	EUR 3.9 b

### **Information Society EUR 3.6 b**

Services and applications	EUR 1.8 b
Technologies and infrastructures	EUR 1.4 b
Other	EUR 0.4 b

### **Human capital EUR 13.0 b**

Adaptability of workers	EUR 3.0 b
Access to employment	EUR 3.4 b
Education and education systems	EUR 3.5 b
Life-long learning	EUR 1.6 b
Other	EUR 1.5 b

### **Inclusion EUR 7.6 b**

Social inclusion	EUR 1.6 b
Health infrastructure	EUR 2.2 b
Education infrastructure	EUR 1.8 b
Other	EUR 2.0 b

### **Other sources of financing**

Other EU programmes contribute to this pillar, in particular: the 7<sup>th</sup> Research Framework Programme, the Instrument for Pre-Accession Assistance (IPA) National, Cross-border Cooperation and Multi-beneficiary country programmes, several programmes of the European Neighbourhood and Partnership Instrument (ENPI) (such as the Regional programmes or the Cross-border Cooperation Programmes), the European Agriculture Fund for Rural Development (EAFRD), the European Fisheries Fund (EFF) and the Competitiveness and Innovation Programme. National, regional and local policies also finance important projects. In addition, significant financing is already provided to a large number of projects via lending and/ or co-financing from various International and Bilateral Finance Institutions such as the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD), the World Bank, the Council of Europe Development Bank (CEB) or other lenders.

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<sup>69</sup> European Regional Development Fund (ERDF) including cross-border cooperation, Cohesion Fund and European Social Fund for the Member States. The Instrument for Pre-Accession Assistance and the European Neighbourhood and Partnership Instrument (ENPI) are not included.

<sup>70</sup> However, the use of Structural Funds depends on the specific operational programmes, developed and agreed upon at the beginning of the 2007-2013 programming period in close collaboration between the European Commission and the respective Member States/ Regions. These should offer opportunities for funding for specific actions/ projects, depending on the priorities and measurements/ actions identified in the respective operational programmes.

More recently, for the countries of the Western Balkans, additional efforts have been made to better coordinate and blend instruments for grants and loans via the Western Balkans Investment Framework<sup>71</sup> (WBIF). A similar instrument to the WBIF, the Neighbourhood Investment Facility operates for the Republic of Moldova and Ukraine.

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<sup>71</sup> The Western Balkan Investment Framework (WBIF) is a blending instrument for grants and loans for candidate countries and potential candidates.

## 7) TO DEVELOP THE KNOWLEDGE SOCIETY THROUGH RESEARCH, EDUCATION AND INFORMATION TECHNOLOGIES

### Presentation of the issue

A society's ability to create and exploit knowledge is a key factor for progress and growth. A society based on knowledge needs competitive research and education infrastructure, innovation supporting and facilitating institutions, and high performing information and communication technologies. These framework conditions differ remarkably throughout the Danube Region but remain, overall, below the level of EU27. Here, the European Social Fund (ESF) could be more widely used to support actions and projects.

The European Innovation Progress Report classifies some countries in the Region as "innovation leaders", but others only as "catching up innovators". In terms of tertiary education quality and competitive standing within the globalised educational environment, a similar divide can be observed. Studies on researchers' mobility (students, graduates and higher education staff) show south-east European countries at a disadvantage compared to other EU countries, especially in international research mobility, as well as in the ability to attract bilateral R&D cooperation. However, even though diverse, the Region is also linked through long standing and intensive trade links and shared historical and political developments, which provide a good basis for cooperation.

The application of information and communication technology may particularly advance growth in the Danube Region. There is an opportunity to modernise quickly, using cutting edge technology and by-passing intermediate steps. The private and public sectors could progress rapidly, to provide services more effectively and efficiently, for example through e-government, e-business, e-education and e-health, or through intelligent co-modal use of transport infrastructure supported by technologies such as river information service systems or e-freight. There could be much improved information and knowledge exchange between business, academia, administration and citizens. Acknowledging this, the Europe 2020 strategy therefore stresses the importance of making full use of information and communication technologies<sup>72</sup> to ensure that innovative ideas can be turned into new products and services that create growth, quality jobs and help address European and global societal challenges. Healthy and Active Ageing has been selected by the European Commission as the first challenge to be tackled through the European Innovation Partnership, introduced by the Innovation Union communication on 6 October 2010<sup>73</sup>. However, this must be set against the reality that indicators on information and communication technologies, such as internet access by households or broadband penetration show low values for parts of the Danube Region, underlining the need for investment and cooperation in this field.<sup>74</sup>

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<sup>72</sup> Participation of citizens and enterprises in the information society depends on easy availability to of Information and Communication Technologies. People need access to computers, to good internet connections and to e-content / e-services. In the frame of EU2020, the EU has set the following targets: (1) Everybody should have access to broadband by 2013; (2) Everybody should have access to high speed internet by 2020 (> 30Mbps); and (3) > 50% of European households have subscribed to internet connections > 100 Mbps by 2020.

<sup>73</sup> [http://ec.europa.eu/research/innovation-union/pdf/innovation-union-communication\\_en.pdf#view=fit&pagemode=none](http://ec.europa.eu/research/innovation-union/pdf/innovation-union-communication_en.pdf#view=fit&pagemode=none)

<sup>74</sup> In 2009 internet access by households in the European Union (measured as a percentage of the total population) was 65% but much lower in the Danube Region (e.g. 30% in Bulgaria and Romania). Regarding broadband, whilst fixed broadband penetration was 23 % in the EU (number of fixed broadband lines per 100 inhabitants,

## Danube region specifics

Given the polarisation within the Danube Region concerning innovation and ICT indicators, diffusion mechanisms as well as targeted support for research infrastructure should be promoted. To stimulate excellence in research and development, cooperation between knowledge providers, companies and the public sector should be enhanced and incentives for stronger cooperation developed. A better coordination of national and regional funds is needed to stimulate research and development in the Region and to benefit fully from the European Research Area. Existing bilateral agreements should be used and improved through multilateral coordination. Such cooperation could either be driven by geographic proximity or by fields of excellence. Cooperation should build on already existing structures, such as the Danube Rectors conference<sup>75</sup> and should draw on experiences developed for sub-regions, such as the SEE-ERA net plus<sup>76</sup> research programme.

### Actions

*The actions proposed here are in line with several pillars of the Digital Agenda for Europe, especially pillars n°4 on 'Fast and ultra fast Internet access', n°5 on 'Research and Innovation', n°6 'Digital literacy, skills and inclusion' and n°7 on 'Information and Communication Technologies - enabled benefits for the EU society'.*

➤ **Action - “To cooperate in implementing the flagship initiative “Innovation Union”<sup>77</sup> of the Europe 2020 Strategy” in the Danube Region countries”** and ultimately, monitor the process in reaching the targets of Europe 2020 with regard to R&D, innovation, entrepreneurship and education.

⇒ *Example of project - “To establish a peer-review mechanism of regional smart specialisation strategies”<sup>78</sup>, in order to enhance regional co-operation and to avoid overlaps and dispersion of policy efforts and financial resources. Experts of Danube Region research and development/ educational institutions and policy-makers from Danube Region administrations could take part to the review. The issue of the “critical mass”, one of the core points of smart specialisation, could be assessed, where appropriate, at the Danube Region level. (Lead: proposed by Joint Research Centre).*

➤ **Action - “To coordinate better national, regional and EU funds to stimulate excellence in research and development, in research areas specific for the Danube Region”**. Innovation policies, instruments and funding programmes should foster excellence and smart specialisation, i.e. focus on key challenges of the Danube Region and develop key research strengths in areas important for the long term competitive development of the Region. Best use should be made of existing national, regional and EU programmes, such as Structural Funds

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including both households and enterprises), it was much lower in the countries of the Danube Region (e.g. for Bulgaria and Slovakia it was 11% and for Romania 12%).

<sup>75</sup> The Danube Rectors Conference (comprises 51 member institutions from 13 countries, which however lacks common resources, both financially and institutionally).

<sup>76</sup> SEE-ERA-Net plus is a networking project aimed at integrating EU member states and Southeast European countries in the European Research Area by linking research activities within existing national, bilateral and regional RTD programmes. (<http://plus.see-era.net/start.html>)

<sup>77</sup> The "Innovation Union" – turning ideas into jobs, green growth and social progress (<http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1288&format=HTML&aged=0&language=EN&guiLanguage=en>)

<sup>78</sup> Communication from the European Commission on Regional Policy contributing to smart growth in Europe 2020 ([http://ec.europa.eu/regional\\_policy/sources/docoffic/official/communic/smart\\_growth/comm2010\\_553\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docoffic/official/communic/smart_growth/comm2010_553_en.pdf))

programmes, Rural Development Funds, the 7<sup>th</sup> R&D Framework Programme, the Competitiveness and Innovation Programme and the Strategic Energy Technology Plan. Coordination is needed with initiatives in candidate countries and potential candidates.

⇒ *Example of project - “To create a Danube research area through coordination of funds”.* The project will draw its funds from existing national and regional research funds to create a Danube Research Area. Already existing initiatives, such as SEE-ERA-net plus will serve as good examples. The project commonly identifies research areas<sup>79</sup> of particular relevance for the Danube Region and develops calls for projects. The project will furthermore identify regional centres of excellence. Particular emphasis will be given to raising the institutional capacity and research capacity of potential research partners in Member States and Non Member States. The work will build upon and make best use of already existing initiatives and institutions.<sup>80</sup> (Lead: proposed by DG Research, Hungary).

➤ **Action - “To strengthen the capacities of research infrastructure”.** The aim is to upgrade regional innovation systems throughout the Region, to reinforce the capacity of research infrastructure and to link better existing science foundations in order to improve innovation conditions. Where competitive research infrastructure is lacking, new infrastructure should be established. Existing EU and national programmes and initiatives in the Region should be used as a basis.

⇒ *Example of project - “To establish joint international research centres for advanced studies”.* Centres will attract world class scientists and provide research infrastructures in areas where this is missing. A pilot project is proposed by Romania on a research centre focusing on research topics related to the Danube river. (Lead: Romania).

➤ **Action - “To strengthen cooperation among universities and research facilities and to upgrade research and education outcomes by focusing on unique selling points”.** Universities and research institutes in the Danube Region should engage in stronger cooperation in various fields, such as analysing existing education and research programmes in the Region and developing joint programmes of common interest, mobility schemes for students and researchers, common research projects, exchange of best practices (e.g. in implementing the Bologna process), or developing innovative education programmes for target groups new to universities (e.g. life long learning programmes for older citizens). Future cooperation should build on existing programmes, such as the EU programmes Erasmus and Erasmus Mundus, Leonardo da Vinci or the Jean Monnet Programme and make best use of existing structures like the Danube Rector's Conference.<sup>81</sup>

⇒ *Example of project - “To promote the exchange of students and scientists in the Danube Region”.* The project BAYHOST<sup>82</sup> promotes, identifies and coordinates the exchange of

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<sup>79</sup> Areas with key research interest in the Danube Region could include, among others, sustainable transport solutions, risk prevention and risk management, water, climate change, forestry or eco-efficient and renewable energy, green technologies or ICT.

<sup>80</sup> Existing FP7 activities such as ERA-WIDE, WBC steering platform, Marie Curie Fellowships, IRSES or Euraxess Service Centres. Activities should also build upon capacity building programmes like "Regions of Knowledge & Research Potential" and their related cluster networks, e.g. the "Food Cluster Initiative" . Initiatives under the Instrument for Pre-Accession Assistance to strengthen research capacities in candidate countries and potential candidates should be used where appropriate.

<sup>81</sup> Example of existing institutions and initiatives: the Danube Rectors Conference, linking universities in the Danube Region ([www.d-r-c.org](http://www.d-r-c.org)), the Rectors Conference of the Alps-Adriatic Universities, the Regional Network for Central and South-East Europe of the Association of European Life Science Universities (ICA – CASEE), or the Salzburg Group.

<sup>82</sup> BAYHOST stands for Bavarian Academic Centre for Central, Eastern and South-Eastern Europe.

students and scientists in Central, Eastern and South-Eastern Europe through scholarship programmes and projects. Furthermore, the BAYHOST Danube Forum is dedicated to the exchange between the career services in the countries of the Danube Region, exchanging best practices and success stories. (Lead: Bavaria)

⇒ Example of project - **“To emphasise Danube Region specifics in the curricula of university programmes”**. A pilot project is being proposed by the Andrassy University Budapest.<sup>83</sup> A specific added value may lie in the development of study joint programmes with other universities of the Region, on topics of particular Danube Region relevance. EU programmes such as TEMPUS or Jean Monnet should be used. (Lead: Andrassy University Budapest)

➤ **Action - “To develop and implement strategies to improve the provision and uptake of Information and Communication Technologies in the Danube Region”**. Special emphasis should be given to improve the coverage and penetration of broadband in rural areas. Certain parts of society are in particular need for targeted ICT policies, such as groups with a low uptake, those excluded from access or others with particular training needs. Considering that more than 30% of Europeans do not use the internet at all or not regularly, Europe 2020 and the European Digital Agenda identify digital literacy as a key priority.<sup>84</sup>

⇒ Example of project - **“To build upon the existing projects to promote the Information Society in lagging or in rural areas”<sup>85</sup>**. This could be done by encouraging stakeholders of the Danube Region to join existing EU projects<sup>86</sup>.

⇒ Example of project - **“To build upon the existing projects to promote the Information Society for SMEs”<sup>87</sup>**. This could be done by encouraging stakeholders of the Danube Region to join or build upon existing EU projects<sup>88</sup>.

⇒ Example of project - **“To provide ICT based training for the general public, especially for prioritized target groups such as low-income, elderly or disabled”**. The e-Hungary Public Internet Access Points, setting the frame for several projects, could serve as an example. Among others, the programme e-Consultants, provides educational ICT training and thus fosters the digital competences of the general public. (Lead: Hungary)

➤ **Action - “To draw up internet strategies”**. These strategies would address issues such as the availability of internet access, the freedom of expression on the web, and the protection of critical infrastructures.

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<sup>83</sup> The German speaking Andrassy University in Budapest features a Danube Institute ([www.andrassyuni.hu](http://www.andrassyuni.hu)).

<sup>84</sup> In particular excluded groups to be targeted include the low-income, low-education, elderly, disabled, marginalised youngsters, migrants and other groups, such as the Roma.

<sup>85</sup> The CADSES programme (INTERREG IIIB) has financed two important projects in this fields: TELEACCESS (creation of telecenters to support access to the Information Society in rural areas) and EMBRACE (network of SMEs providing tools to their members such as e-commerce facilities).

<sup>86</sup> In particular, the Competitiveness and Innovation Programme foresees the possibility to have partners joining an existing project.

<sup>87</sup> The CADSES programme (INTERREG IIIB) has financed two important projects in this fields: EMBRACE (network of SMEs providing tools to their members such as e-commerce facilities) and ELISA (e-learning platform for SMEs). Also, the CIP-ICT Policy Support Programme is supporting the RFID-ROI-SME project which aims at raising awareness of European SMEs on the potential of RFID to foster their integration into global competition while enhancing their productivity.

<sup>88</sup> In particular, the Competitiveness and Innovation Programme, PROGRESS and LLL foresee the possibility to have partners joining an existing project.

- **Action - “To use e-content and e-services to improve the efficiency and effectiveness of public and private services”.** Information and Communication Technologies in general, and more specifically e-government, e-education, e-culture, e-health, e-business and e-inclusion, addressing active and healthy aging as well as independent living, can make public services faster, more effective, more efficient and more accessible thus saving resources on the side of the provider and user. Emphasis needs to be put on the availability of technical infrastructure such as broadband and technical equipment, on capacity building and on the exchange of best practices regarding the design and implementation of e-content, e.g. through Information and Communication Technologies Competence Centres’ at national and regional level. Best use should be made of EU Funds (Structural Funds or the EU Recovery package<sup>89</sup>, European Agricultural Fund for Rural Development). In particular, satellite communications could be used in dispersed remote regions thanks to the ‘Galileo Advanced Innovation Services (GAINS)’<sup>90</sup> project. There should also be better synergies between the building of energy, transport and telecom networks, in order to reduce the cost of broadband installation.
- ⇒ *Example of project - “To increase the use of electronic signatures/ e-identification for e-commerce and e-administration” in cooperation with authorities in the Danube Region, in line with the November 2008 Action Plan on e-signatures and e-authentication<sup>91</sup>. This also aims to ensure that electronic signature and authentication applications are interoperable across borders, following the Large Scale Pilot project STORK where many of the regions Member states are partners<sup>92</sup>. It should enable a cost-effective and a more expedient conduct in the provision of public services across the region. Experiences of the project S.A.F.E could be useful, especially with regard to the implementation phase.<sup>93</sup> (Lead: proposed by Slovenia)*
- ⇒ *Example of project - “To promote the availability of e-Government services across the region”. This can act as a catalyst for the development of the whole region via e.g. projects designed to promote and facilitate cross-border e-Procurement such as the PEPPOL (Pan-European Public Procurement On-Line) project.<sup>94</sup> An overall vision for this project can be obtained through the Ministerial Declaration on e-Government<sup>95</sup> and the forthcoming EU e-Government Action Plan. (Lead: proposed by Slovenia, Baden Württemberg)*
- ⇒ *Example of project - “To promote the availability of e-Health services across the Region”. The Danube Region should aim at replicating and scaling up the preliminary results of the Large Scale Pilot project epsos<sup>96</sup> aiming at developing, testing and validating interoperability of patient summaries and e-prescription across national*

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<sup>89</sup> The EU Recovery package has earmarked around EUR 360 m for the development of broadband communications in rural areas (for EU-27). This package is aimed to boost broadband coverage to 100% throughout the Union by 2010 or 2013 at the latest.

<sup>90</sup> ‘Galileo Advanced Innovation Services (GAINS)’ is a project (co-financed by the 7<sup>th</sup> EU Research Framework Programme) that aims to implement an “innovation highway” as a seamless process of coordinated Galileo downstream application innovation services, in the three main phases: idea recognition, product and services development, and new ventures creation.

<sup>91</sup> COM(2008) 798, 28.11.2008

<sup>92</sup> [www.eid-stork.eu](http://www.eid-stork.eu)

<sup>93</sup> S.A.F.E. - Secure Access to Federated E-Justice/E-Government

<sup>94</sup> [www.peppol.eu](http://www.peppol.eu)

<sup>95</sup> November 2009, <http://www.egov2009.se/wp-content/uploads/Ministerial-Declaration-on-eGovernment.pdf>

<sup>96</sup> [www.epsos.eu](http://www.epsos.eu)



*borders, as well as of the Netc@rds project <sup>97</sup> aiming at facilitating access to and reimbursement of unplanned healthcare services received abroad. This would contribute to ensuring patient safety, increase efficiency of healthcare and support the economy. This action would be particularly relevant due to the high touristic nature of the Danube Region and the high mobility of citizens in the area (Lead: to proposed by DG Information Society)*

➤ **Action - “To stimulate the emergence of innovative ideas for products and services and their wide validation in the field of the Information Society, using the concept of Living Labs”.** Through Living Labs, businesses, universities and public administration are jointly developing new products by involving customers/users from very early stages, including design. Openness to new research and market developments in a public and people oriented approach could be targeted initially at parts of the Region with similar needs or characteristics, and later employed more widely as appropriate.

⇒ *Example of project - “To promote innovation and business' success in new markets”. The project aims to foster and support the development of a more widespread innovation culture in and for new markets, including the initiatives to stimulate the creation of new markets, the diffusion of new technologies, enhancement of intellectual property protection and standards and impact assessments of new legislative or regulatory proposals on innovation.*

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<sup>97</sup> [www.netcards-project.com](http://www.netcards-project.com)



## 8) TO SUPPORT THE COMPETITIVENESS OF ENTERPRISES, INCLUDING CLUSTER DEVELOPMENT

### Presentation of the issue

Some of the top-performing regions in Europe can be found in this macro-region, but others considerably lag behind. The leading regions exhibit strong and well established innovation support systems, while in other regions institutions and framework conditions are lacking, are only newly established or reformed. Agriculture, rural and traditional enterprises have a strong base and presence standing to benefit from technological and organisational modernisation. To draw the full benefits from the Region's growth potential and to support the competitiveness of sectors, framework conditions need to be improved and made more coherent. There are many possibilities to achieve this.

Long term, transnational cooperation networks between innovation and business supporting institutions need to be developed for the different sectors, also utilising the opportunities within the framework of the European Research Area (ERA). The development of clusters and centres of excellence should be fostered and cluster cooperation across borders and across sectors should be facilitated. Links to education and research policy should be established. Existing cluster mapping studies conducted in the Region and through European initiatives should be exploited and built on.<sup>98</sup> To improve the conditions for enterprises, especially SMEs, the institutional capacities of business support agencies and industry associations should be strengthened throughout the Region.

The Danube Region also has great potential to advance towards the completion of the Single Market. Due to the most recent EU enlargement processes, implementation gaps, especially related to the service industry, tax competition and migration flows still exist. The existing trade links among companies in the Danube Region however suggest a large potential for future growth and economic integration, if barriers for doing business across borders could be brought down and existing rules could be simplified.<sup>99</sup> Furthermore, transport bottlenecks in the region (hampering regional and even more international mobility and trade) need to be removed.

### Danube region specifics

For the Danube Region, being composed of different countries and innovation milieus of different levels of maturity, it is crucial to strengthen transnational co-operation. This has to happen both at the policy and business level, thus achieving higher regional coherence and sustainable economic growth. Greatest added value will be achieved if priority is given to sectors where the Region has existing strengths.

### Actions

- **Action - “To foster cooperation and exchange of knowledge between SMEs, academia and the public sector in areas of competence in the Danube Region”.** This can be achieved through developing clusters, through the construction of new and the use of existing technology parks and through linking of existing networks. Cooperation should be fostered in areas where there is particular knowledge in the Danube Region. Cooperation and knowledge exchange on

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<sup>98</sup> European Cluster Observatory; CEE-ClusterNetwork for Central and Eastern Europe; European Cluster Policy Group

<sup>99</sup> European Innovation Scoreboard 2009/ Socio Economic Analysis for the EU Strategy for the Danube Region

smart specialisation strategies could steer specialisation choices to make them consistent with the development perspectives of the whole Danube Region<sup>100</sup>. Emphasis should be laid specifically on actions supporting the internationalisation of SMEs and facilitating interdisciplinary cooperation. Existing initiative like the European Cluster Observatory, the European Cluster Excellence Initiative, the Science and Industry Network, the CEE-ClusterNetwork, or the project ACCESS should be used as bases on which to build.

- ⇒ *Example of project - “**To develop a Danube Region programme for clusters and SME-networks**”. The objective is to foster cluster development and transnational cluster collaboration including innovation systems and SME networks in order to strengthen economic growth. As a first step the project should roll out the support instruments of the European Cluster Excellence Initiative<sup>101</sup> into the Danube Region area, notably the training scheme for cluster organisations, the quality indicators and benchmarking scheme on cluster management and the online European Cluster Collaboration Platform<sup>102</sup>. Secondly the project should foster cluster cooperation and joint cluster branding in the Danube Region. To this end, the project can take use of the European Cluster Managers’ Club by setting up a decentralised platform in the Danube Region. (Lead: DG Enterprise and Industry).*
- ⇒ *Example of project - “**To facilitate the transfer of creative knowledge in the Danube Region**”. This can be achieved through the construction of new design centres, including craft design, that aim at supporting local or regional industries in all sectors on the development of new products and services. Furthermore, new forms of innovation support, such as innovation vouchers, could be considered that facilitate knowledge transfer from creative services to traditional businesses.” (Lead: DG Enterprise and Industry).*
- ⇒ *Example of project - “**To promote services innovation in the Danube Region**”. The project has three main objectives: (a) to collect high quality statistical data from Danube Region countries to analyse the current status and potential of innovation in knowledge-intensive services; (b) to identify the scope and objectives for trans-national cooperation between clusters operating in the service sub-sectors such as ICT, creative industries and the cultural sector in general, eco/green-innovation, mobility industries, tourism, transport and energy; (c) to harmonize small-scale national and regional funding for cooperative innovation projects; (d) to improve the framework conditions needed to support cluster cooperation in the domain of services in a sustainable way, as well as to facilitate the internationalisation of high growth service businesses. This work will liaise with relevant existing initiatives, like EU INNO-Net project funded under the PRO INNO Europe initiative for the period 2009-2012. (Lead: DG Enterprise and Industry).*
- ⇒ *Example of project - “**To utilise better the performing, heritage and cultural assets of the Region by developing strengths in the creative, cultural, entertainment and tourism industries**”. Where possible this project should focus on existing initiatives on local and EU level and should foster the cooperation between them. Strong potential in enhanced cooperation can for example be found in the media industries (TV, radio, movies) in festivals, popular music and sports.*

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<sup>100</sup> Smart specialisation strategies are aimed at maximising the impact of Regional Policy programmes for reaching the goals set in the Europe 2020 Strategy, as laid out in the Commission Communication “Regional Policy contributing to smart growth in Europe 2020”.  
([http://ec.europa.eu/regional\\_policy/sources/docoffic/official/communic/smart\\_growth/comm2010\\_553\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docoffic/official/communic/smart_growth/comm2010_553_en.pdf))

<sup>101</sup> See more at [www.cluster-excellence.eu](http://www.cluster-excellence.eu)

<sup>102</sup> See more at [www.cluster-excellence.eu/collaboration](http://www.cluster-excellence.eu/collaboration)

- ⇒ *Example of project - “To establish a Danube Region network for innovative environmental technologies” in order to foster the development of an attractive, competitive and sustainable infrastructure in the Danube region. The network links companies, research facilities, regional and local authorities and aims at implementing innovative environmental technologies in the Danube Region, such as state-of-the-art waste and sewage treatment facilities, innovative (primarily renewable energy and high efficiency) energy systems and air and water purification technologies. Existing cooperation in the Danube region could be integrated as part of the Danube Region network. (Lead: Germany/ Baden Württemberg)*
- ⇒ *Example of project - “To support the implementation of eco-efficient production processes in SMEs”. The project "actclean" supports SME in increasing their environmental performance, reducing costs and increasing sales through consulting, matchmaking and exchange of knowledge. Promoting environmental technologies and management systems by connecting demand and supply will provide SMEs with technological and managerial know-how on one side and it facilitates the marketing of already existing solutions on the other. (Lead: Federal Environment Agency and Federal Ministry for the Environment Germany)*
- **Action - “To improve business support to strengthen the capacities of SMEs for cooperation and trade”.** The cooperation should link relevant business support agencies, cluster organisations, chambers of commerce or industry associations in the Danube Region to develop business support services related to cross border R&D cooperation, trade and internationalisation.<sup>103</sup> A key element of the cooperation should be the strengthening of the institutional capacity of the involved business support agencies through targeted support and the exchange of experiences and best practice. Best use should be made of existing forums and institutions, like the Enterprise Europe Network or already established networks of chambers of commerce, such as the Danube Chambers of Commerce Association. Where possible and appropriate, the special situation of SMEs in candidate countries regarding financing should be considered.
- ⇒ *Example of project - “To hold annual business forums bringing together Danube Region businesses, governments, regional organisations and the academia”. The aim is to enhance cooperation and business opportunities for SMEs in the Danube Region within the private sector, but also with academia and the public sector, to stimulate growth, innovation and competitiveness in the Danube Region. Existing initiatives upon which to build include those of Chambers of Commerce, the Central Europe Initiative, Enterprise Europe Network or the Vienna Economic Forum. Where appropriate, best practices could be exchanged with e.g. the Baltic Development Forum. (Lead: Austrian Chamber of Commerce, IEDC-Bled School of Management)*
- ⇒ *Example of project - “To strengthen Danube Region entrepreneurs and SMEs”. This project develops in a coherent manner the opportunities and challenges for SMEs doing business and research in the Danube Region. It coordinates work of chambers of commerce, industry associations, cluster organisations and government agencies to identify the specific needs of (potential) growth sectors and or sectors of key competence.<sup>104</sup> In particular, it identifies and implements innovative approaches to*

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<sup>103</sup> Such services could relate to information and advice on EU legislation, language training, consultancy services for R&D cooperation, joint business trips in the Region, cooperation/ network meetings.

<sup>104</sup> Such areas of strengths include mechanical engineering, mechatronics, eco-energy, environmental technology, environmentally-friendly mobility, plastics technology, material technology, health, life science, ICT, creative industry, food and biotechnology.

knowledge transfer from universities and research institutes to businesses, especially SMEs.<sup>105</sup> It makes best use of existing initiatives such as the South East European Centre for Entrepreneurial Learning – SEECCEL<sup>106</sup>.

➤ **Action - “To support enterprises through high performing training and qualification schemes”.** The shortage of skilled workers and the high unemployment of unskilled workers in the Region has implications on the competitiveness of enterprises and can be addressed by improving the qualification schemes in the Danube countries thus raising the overall qualification levels and opportunities of the labour force. Through closer cooperation of relevant labour market institutions and chambers of commerce, existing best practices could be exchanged thus supporting the "European Qualifications Framework". Support instruments should be developed for enterprises engaged in increasing the capacity and productivity of their workforce. Full use should be made of existing institutions and bodies in the Region.<sup>107</sup>

⇒ *Example of project - “To develop joint programmes for professional education and vocational training together with enterprises” with the aim to improve the efficiency of training and qualification programmes in the Region. This could bring together the private sector, public administration in the fields of education and labour market, and civil society such as chambers of commerce to develop and coordinate professional and language training programmes, coordinate curricula and exchange of guest lecturers and students. Furthermore the need for new pilot training centres should be analysed. The creation of a centre for professional education in the electro-technical industry in Bratislava is proposed as an example. (Lead: Slovakia; Danube Chambers of Commerce Association).*

➤ **Action - “To prioritise the effective implementation of measures provided for under the Small Business Act for Europe<sup>108</sup>”.** Administrative simplification for starting a business, for obtaining business licenses or for filing for bankruptcy should be improved. Emphasis should also be given to secure access to capital for SMEs by promoting existing and where appropriate introducing new and innovative financing instruments for the Region, particularly for enterprises in the start up phase.<sup>109</sup> Existing EU financial instruments should be used in the most effective way in order to secure finance to SMEs where current market conditions are difficult.<sup>110</sup> Best practice examples of one-stop-shops should be exchanged and implemented. To help SMEs wishing to set up trade in the Western Balkans, existing business support centres in the Region should be used, cooperation between them reinforced, and services extended.

➤ **Action - “To improve the competitiveness of rural areas and in particular of the agricultural sector”** by facilitating rural entrepreneurship, supporting innovation and cooperation in the

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<sup>105</sup> Existing institutions and networks, such as the Southeast Europe Management Forum Bled – Kopaonik should be best used.

<sup>106</sup> With regard to Third Countries, coordination with the European Training Foundation, the initiatives of OECD and Regional Competitiveness Initiative for the Western Balkans should be facilitated.

<sup>107</sup> Coordination should also be sought with the European Training Foundation, which contributes to the development of the education and training systems of the EU partner countries.

<sup>108</sup> Small Business Act for Europe: <http://ec.europa.eu/enterprise/policies/sme/small-business-act/>

<sup>109</sup> Examples could involve cross-border venture capital funds, cross-border guarantee schemes or cross border small grant funds that would make it possible to exploit economies of scale and scope when investing in SMEs or guaranteeing their lending.

<sup>110</sup> Among others, existing EU programmes with the possibility to address SME financing are: Competitiveness and Innovation Programme (CIP), Framework Programmes, Structural Funds, the JASMINE initiative, the European Agricultural Fund for Rural Development and IPA-multi beneficiary programmes. Furthermore, the "Practical Guide" for potential beneficiaries of CIP and Framework Programmes should be promoted: [http://cordis.europa.eu/eu-funding-guide/home\\_en.html](http://cordis.europa.eu/eu-funding-guide/home_en.html)

agricultural industry and supporting the diversification of rural economies, including the exploitation of mobility industries. This can be achieved through training and education programmes, enhanced cooperation in production, distribution and marketing e.g. through clusters, and through jointly developing and implementing best practices in agricultural product quality. Mutual exchange of good practices by competent authorities, food business operators and farmers along the entire food chain should be fostered and close cooperation with the European Food Safety Authority should be sought. In this respect, best use should be made of the training initiative "Better Training for Safer Food" for Member States and third countries.<sup>111</sup> Urban rural links and the potential of IT to facilitate relocation of formerly predominantly urban enterprises, jobs and activities should be fully exploited. Full use should be made of funding available in the European Agricultural Fund for Rural Development via national support programmes and trans-national cooperation (Leader approach).

⇒ *Example of project - “To support the development of fisheries areas with the involvement of Fisheries Local Action Groups (FLAGS)” for promoting diversification of economic activities and creating new employment opportunities in fisheries areas. FLAGS are tripartite partenerial structures (economic actor, local authorities and civil society), covering both rural and small urban communities with a high percentage of economic activities related to fisheries. They are affected by the scarce availability of fishing resources, water pollution or limited economic efficiency of these economic activities. Funding under the European Fisheries Fund is available for the implementation of integrated sustainable local development in fisheries areas aimed at valorisation of the artistic and cultural patrimony, promoting innovation, diversification of economic activities especially (eco)tourism, traditional crafts and bringing value added to fisheries products, at the same time with the protection of natural habitats.*

- **Action - “To eliminate cross border barriers and bottlenecks to people and business - Seamless Europe for a livable Danube Region.”**<sup>112</sup> Specific attention is needed where implementation gaps in the Single Market still exist, such as those related to services, tax competition and migration flows. Activities should build upon well established instruments, such as SOLVIT-centres, which can help citizens and businesses to make use of their EU rights to move and do business across border. Where appropriate, attention should also be given to physical infrastructure to facilitate the free movement of goods and people.
- **Action - “To improve framework conditions for SMEs in areas where competitive infrastructure is missing”.** This could be done through the construction of joined or networked industrial and technological parks, as well as transportation, logistics and exhibition centres. A specific focus should be put on rural and border regions, where competitive infrastructure for SME is often weakly developed or missing.

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<sup>111</sup> Better Training for Safer Food Programme: [http://ec.europa.eu/food/training\\_strategy/index\\_en.htm](http://ec.europa.eu/food/training_strategy/index_en.htm)

<sup>112</sup> Initiatives to incorporate candidate countries and potential candidates into the European Single Market should be able to further contribute to this action. Countries of the Central European Free Trade Agreement (CEFTA), which are addressing these issues between the candidate countries and potential candidates, may consider to contribute to this Action.

## 9) TO INVEST IN PEOPLE AND SKILLS

### Presentation of the issue

By investing in people and making best use of its human capital, the Danube Region can progress and grow in a smart and inclusive way. To arrive at a knowledge based and inclusive growth it requires empowering people through high levels of employment, investing in skills, fighting poverty and modernising labour markets, training and social protection systems.

Making best use of its human capital, the Danube Region can build on several opportunities but also needs to address certain challenges<sup>113</sup>. The Danube Region's population is younger than the average of EU 27, although the overall population has started to decline due to a negative birth balance. Indicators on early school leavers are considerably better in the Danube Region than in EU 27, despite the fact that the share of population with tertiary education is lower. Unemployment is less pronounced in the Danube Region, but less people are in employment and the shares of employment in traditional sectors, such as agriculture, are still high. On the job market, mobility of workers needs attention. This is to give people real opportunities to work near where they live, and to make well informed choices on mobility that benefit all. Better opportunities to live and work close to family and place of origin require better local job opportunities, also important so that the Region does not suffer brain drain and its accompanying loss of return on skills investment. Mobility issues are especially in relation to legal and administrative factors, linked to social security and the recognition of qualifications. In addition indirect obstacles linked to accommodation, language, the employment of partners and spouses and the “psychological” obstacles, in particular the issue of returning to the country of origin and the lack of recognition of mobility, need to be addressed. Work induced migration flows follow an east-west pattern, motivated by considerable income disparities in the Danube Region, thus resulting in brain drain in some parts and excess supply in others. The opening of German and Austrian labour markets to the Czech Republic, Slovakia, Hungary and Slovenia may also reinforce this development. Mobility of researchers and students, and thus knowledge, is lower in most of the Danube Region than in other parts of Europe and needs special attention.<sup>114</sup>

To make use of the full potential of the labour force and to fight poverty, the Danube Region's labour market also needs to be more inclusive. Regarding equal opportunities between men and women, inequalities are more pronounced in upper parts of the Region than in lower parts. The general employment rate for women and men is lower than in EU 27. In addition, a healthy population is a critical factor behind sustainable economic development, and severe disparities in health conditions still prevail in the Region. About one third of EU's population in risk of poverty live here, many of them coming from marginalised groups, and including 80% of Roma in Europe. Apart from poverty, Roma communities especially suffer from social and economic exclusion, spatial segregation and sub-standard living conditions. While their inclusion is many times approached only from the point of discrimination, the socio-economic aspects and environmental consequences of improper living conditions and infrastructure are equally important. Failing to address adequately the Region's ten million Roma has implications for the whole EU.

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<sup>113</sup> Sources: Eurostat, European Innovation Scoreboard 2009, DG Education and Culture, Socio Economic Analysis.

<sup>114</sup> Low levels of inbound mobility of students in large parts of the Region, except for Austria and Germany; High levels of outbound mobility in Bulgaria, Slovakia, Croatia, Germany and Austria. (EUROSTAT and DG Education and Culture)

## Danube Region specifics

This analysis calls for actions across a whole range of fields, with emphasis on more coherence. Policies in the fields of education, labour market, integration, research and innovation should be mutually reinforcing. Prominence should be given to capacity building on all levels, whether individual, organisational, regional, national or macro-regional. It should include developing key competencies and organisational skills, promotion of innovative partnerships, and governance in the regional/ national context. Stronger joint efforts are needed to enhance performance by shared European benchmarks in education and training.

Stronger cooperation of labour market institutions regarding policies, measures and information exchange is needed. To encourage mutual exchanges of employees, researchers, students and practitioners and to reduce one-way migration flows, cooperation between bodies in primary, secondary and tertiary education needs to be strengthened and the mutual recognition of professions and diplomas accelerated. Specific added value lies in the greater participation of the Western Balkan countries and other third countries in the Region in existing programmes and cooperation structures. Existing cooperation between Member States and third countries could serve as a base.

There is also much scope in the Danube Region to work together to fight the social and economic exclusion of marginalised communities, especially Roma. Funding needs to be targeted. Policies need to be developed together based on best international practice. Actions need to be enlightened and effective. On the level of governance, it is often at the level of ordinary interventions in regions and cities that human rights need to be further emphasised. Local, regional and national authorities have a key role to play in their day-to-day application. As noted, particular attention has to be paid to the situation of the Roma communities<sup>115</sup>. Projects that open community boundaries and bring together Roma and people from other communities are particularly important.

## Actions

- **Action - “To enhance performance of education systems through closer cooperation of education institutions, systems and policies”.** Fostering efficiency, innovation and good governance in education and training is crucial in the face of the challenges posed by globalisation, demographic changes, rapid technological developments and increasing pressure on public budgets. This should be done in particular through the exchange of best practices of different education and training systems through transnational cooperation, joint development of programmes and materials, promotion of research on the economics of education, peer learning, and capacity building, i.e. for evidence-based policy and practice and for facilitating the policy learning process, strategy formulation and policy action. Specific added value lies in the inclusion of third countries and best use should be made of already existing programmes and cooperation structures.<sup>116</sup>

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<sup>115</sup> Ten basic principles for Roma inclusion have been established in the conclusions of the EU Council on Employment, Social policy, Health and Consumers affairs of 8 June 2009. Some of them were used as baseline for the amendment of the ERDF regulation on housing. The amendment will allow explicitly though not exclusively to invest in new housing or renovate existing stock in both urban and rural areas if part of an integrated approach – coordinating education, housing, employment, and health policies. It is also important to develop linkages with, and reinforce actions undertaken as part of the Roma Decade (2005-2015).

<sup>116</sup> The main aim is to reinforce the European Area of Education (EAE) thus contributing to the success and sustainability of the EU integration process. Country specific needs and the demands of the EAE according to the EU Work Programme "Education and Training 2020" need to be taken into account and follow up. Work should build upon already existing bilateral cooperation projects and multilateral initiative.



- ⇒ *Example of project - “**To support sustainable education reforms in the Danube Region**”. Cooperation platforms for sustainable education reforms can improve educational outcomes and the quality of education systems in the Danube Region. Well established platforms include CECE<sup>117</sup>, focusing on mutual learning, capacity building and joint projects between EU Member States of the Region, and ERI SEE<sup>118</sup>, focusing in particular on capacity building and know-how transfer between EU Member States and non Member States and acting as an interface to developments in relevant EU, European and international initiatives in education. Both projects take into account the strategic framework for European cooperation in education and training (“ET 2020“).<sup>119</sup> (Lead: Proposed by the Austrian Federal Ministry for Education, Arts and Culture).*
- ⇒ *Example of project - “**To strengthen the networks of schools in the Danube Region**”. The Academy of Central European Schools (ACES)<sup>120</sup> aims to support the establishment of a Central European network of schools in the currently fifteen partner countries. The aim is to foster dialogue and cooperation of young people and to create a sustainable network of shared knowledge, mutual learning and innovation. Best practices should be exchanged with other ongoing international school partnerships, such as the project PASCH<sup>121</sup> (Lead: Proposed by the Austrian Federal Ministry for Education, Arts and Culture).*
- *Action - “**To foster cooperation between key stakeholders of labour market, education and research policies in order to develop learning regions and environments**”. To increase innovative capacities of the labour force in the Danube Region, new forms of partnerships and cooperation among key stakeholders (labour market, education and training, research and employers) need to be further developed. Employers (private, public and voluntary) have an important role to play in identifying the knowledge, skills and competences needed in working life. To increase the employability and entrepreneurial potential of all learners, communication and active cooperation should be further developed between education and training institutions on the one hand and employers on the other.*
- ⇒ *Example of project - “**To reinforce the Danube Region labour market, in the context of the EU labour market**”. While national labour markets in the Danube Region are subject to different framework conditions, economic ties and worker migration have started to dismantle borders between countries and markets. This project aims to build on existing bilateral cooperation projects, enlarging them to the Danube Region. It could emphasise mutual recognition of professions and qualifications, as well as targeted labour market policies (women, youth, long-term unemployed, minorities etc.) thus reinforcing a Danube Region labour market.*
- ⇒ *Example of project - “**To develop joint Danube Region labour market statistic**”. To form the basis for common labour market strategies the project aims at producing sound statistical data on the Danube Region labour market, including data on specific labour market demands, workforce flows, drivers and barriers of transnational labour mobility, differences in working conditions, disposable income and social security systems. Specific added value lies in the inclusion of Non-EU Member States in this cooperation. Existing*

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<sup>117</sup> Central European Cooperation in Education: [www.bmukk.gv.at/europa/bibildung/cece.xml](http://www.bmukk.gv.at/europa/bibildung/cece.xml)

<sup>118</sup> The Education Reform Initiative of South Eastern Europe: [www.erisee.org](http://www.erisee.org)

<sup>119</sup> ET 2020 [http://ec.europa.eu/education/lifelong-learning-policy/doc36\\_en.htm](http://ec.europa.eu/education/lifelong-learning-policy/doc36_en.htm)

<sup>120</sup> <http://www.aces.or.at/start.asp?ID=120245&b=829>

<sup>121</sup> <http://www.pasch-net.de/deindex.htm>



*bilateral cooperation projects should be used to develop cooperation on the macro-regional level.*

- **Action - “To support creativity and entrepreneurship”.** A reorientation towards entrepreneurship and creativity is important as a prerequisite for businesses, in particular for small and medium sized enterprises, and thus for Europe's competitiveness. This could be achieved through the introduction of innovative teaching methods to support creativity and entrepreneurship at all levels of education, through the promotion of intercultural dialogue or through language training, making use of the linguistic and cultural diversity of the Danube Region. Specific attention should be drawn to rural areas and to developing alternative employment opportunities and economic diversification for people occupied in traditional sectors where restructuring is still under way such as agriculture.
- **Action - “To support the mobility of workers, researchers and students through implementing the European Qualification Framework”.** Countries in the Danube Region will coordinate on the development of National Qualification Frameworks. Specific added value lies in supporting non-EU Member States in drawing up their National Qualification Frameworks.<sup>122</sup>
  - ⇒ *Example of project - “To enhance capacities of key stakeholders in education, science and research”.* The project *Mobility programme for Capacity Building in Regional Cooperation in Education, Science and Research*<sup>123</sup> aims at fostering relevant capacities through peer-learning and exchange of expertise and know-how within ministries responsible for education, science and research in managing regional and international activities and programmes in the sectors concerned. As a measure of stakeholder empowerment, the project contributes to the strengthening of sustainable regional partnerships and consists of short-term placements at key institutions and networks in the area of cooperation for building human capital. (Lead: Proposed by the Austrian Federal Ministry for Education, Arts and Culture).
- **Action - “To jointly analyse implementation gaps in life long learning (LLL) policies and exchange best practices in implementation”.** Comprehensive LLL strategies and their implementation have been identified as a priority for the development of knowledge societies. Making these effective and increasing their impact for individual learners remains a critical challenge. Institutional capacity building of LLL bodies is a prerequisite for implementing these policies.
- **Action - “To improve cross-sector policy coordination to address demographic and migration challenges”.** Enhanced efforts should be pursued to develop knowledge on the status quo, on drivers and impacts of migration flows and demographic change, so to develop a basis for enhanced cooperation of different policies at all levels of governance. Cross-sector policy coordination between relevant government departments, education authorities, social services, healthcare services, cultural policy authorities, housing and spatial planning authorities as well as asylum and immigration services at local, regional and national level, as well as dialogue with civil society are essential to ensure an adequate level of support. Spatial consequences of migration-induced social, economical and cultural changes and possible responses in the framework of urban and rural development should be considered. Cooperation with existing organisations, such as the International Organisation for Migration (IOM), with their existing analysis and recommendations, would be particularly useful.

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<sup>122</sup> Coordination should be sought with the European Training Foundation.

<sup>123</sup> [http://www.taskforcehumancapital.info/fileadmin/documents/TF\\_Mobility\\_Programme\\_2010.pdf](http://www.taskforcehumancapital.info/fileadmin/documents/TF_Mobility_Programme_2010.pdf)

- **Action - “To fight poverty and social exclusion of marginalised communities in the Danube Region, especially the Roma communities”.** To make full use of the Danube Region's population specific focus needs to be put at empowering in particular groups in risk of poverty and ensuring them access and opportunities. Children, old people, mentally and physically disabled, immigrants, homeless, representatives of marginalised ethnic groups are the most vulnerable. Roma communities, whose conditions are often especially dire and with no place in 21<sup>st</sup> century Europe, need special attention. Actions to reduce the number of people in risk of poverty need to complement each other, applying an integrated approach<sup>124</sup>.
- ⇒ *Example of project - “To improve the living conditions of Roma communities”.* In the Danube Region, Roma are often living in environments with no drinking water, no sewage systems, no access to energy and no access to telecommunication services. In addition to these third world standards, they face natural risks such as floods, ground instability or proximity to dangerous waste. Projects need to focus on basic infrastructure needs, but also on creating sustainable rural livelihoods, especially for Roma populations, combining poverty alleviation and sustainable resource management. Much better use needs to be made of funding opportunities, especially e.g. Structural Funds.
- ⇒ *Example of project - “To implement the Roma dialogue with non-Roma”* is a long-term commitment to improve the situation of Roma in European society by giving Roma opportunities outside their own communities in social, environmental and cultural projects. The objective should be to broaden knowledge and skills and to support their entrepreneurship skills. It also includes non-Roma involvement in local community projects involving Roma, followed by engagement e.g. in public education. Initiatives could be built on existing mechanisms– the EU Roma platform and the Roma Decade and could be implemented through existing grant schemes and in cooperation with NGOs.
- **Action - “To implement the actions undertaken in the Roma Decade and to establish further actions to be implemented”.** The coordination of efforts between existing initiatives and actors, such as the Roma Decade (2005-2015), EU Roma platform for Roma Inclusion<sup>125</sup>, EU-Roma network and NGOs active in this field in the Danube Region is indispensable for improving the situation for Roma. The participation of non-EU Member States in the EU Platform for Roma inclusion should be encouraged. Activities of the Platform should improve the coordination of the implementation and the use of the resources at EU level, but also among candidate and potential candidates in the Danube Region, which will result in increased impact and effective utilisation of available resources. There is a particular need to capitalise on best practice elsewhere, applying enlightened approaches from the rest of Europe and the world to a chronic and dramatic social and cultural issue. Roma pride and dignity must better prosper.

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<sup>124</sup> In particular such actions could focus on the eradicating of child poverty, improving equity in education programs (from early childhood to postgraduate training), reducing the number of early school leavers<sup>124</sup>, providing access to health care, promoting active inclusion in the labour market, making efforts to provide decent housing for everyone, tackling indebtedness or on providing conducted training programs for local officials on governance of multiethnic communities.

<sup>125</sup> The Roma inclusion Platform was endorsed and launched during the Czech Presidency in October 2008. Its main objective is to call governments and main stakeholders to debate Roma inclusion, on topics such as education, health and housing, meeting on a twice-yearly basis.

**D) STRENGTHENING THE DANUBE REGION**

## **STRENGTHENING THE DANUBE REGION**

The pillar on “strengthening the Danube region” addresses two priority areas: 'Institution Building and Cooperation' and 'Security Issues'.

The actions and projects aim at strengthening the functioning of democratic institutions, public administrations and central, regional and local level organisations, with special focus on cooperation in the region. Special emphasis is also needed on making the Danube region a safer place to live. Better political, civil and administrative structures and better security are key conditions for smart, sustainable and inclusive growth.

An active and well organised civil society needs also to be more widely encouraged. Stronger participation of civil society can improve public services and strengthen public confidence towards them. It also facilitates commonly agreed solutions for problems through a regular dialogue. The inclusion of civil society in implementing the strategy and the association of civil stakeholders is crucial to the success of the Strategy.

In this respect, territorial cohesion stresses the added value of partnership with a strong local dimension. This ensures that policies are designed and implemented with local knowledge, which should help their success.

As examples, this includes reflections on improving ownership and participation in the implementation of the Strategy by parliaments and at regional and local level with an emphasis on cooperation.

Mobility and a more integrated region also bear the danger of downsides in terms of lack of security. In order to address the risks of greater mobility accompanied by rising cross-border trade and growing economic integration, security and cooperation on security measures needs to be in focus.

The pillar therefore also addresses the fight against corruption and organised and serious crime, practical cooperation in the field of political asylum and the prevention of illegal border crossings in the Danube region. Concrete actions involve moving from pure information, and strategic agreements with countries, to operational agreements with a view to clear results.

The pillar contributes to EU2020. Only a safe and well governed region can genuinely become prosperous and attractive within which to live. Coordination of efforts at all levels of government and non-governmental organisations is needed to achieve the goals of the Strategy.

## **Examples of financing covering the Region**

*Expenditures budgeted by the Structural Funds<sup>126</sup> in 2007-2013<sup>127</sup>*

<b>Technical Assistance</b>	<b>EUR 3.4 b</b>
Preparation, implementation	EUR 2.5 b
Studies and communication	EUR 0.9 b

### *Other sources of financing*

Other EU programmes contribute to this pillar, in particular: the Instrument for Pre-Accession Assistance (IPA) National, Cross-border Cooperation and Multi-beneficiary country programmes and several programmes of the European Neighbourhood and Partnership Instrument (ENPI) (such as the Regional Programmes or the Cross-border Cooperation Programmes). National, regional and local policies are also financing important projects. In addition, significant financing is already provided to a large number of projects via lending and/ or co-financing from various International and Bilateral Finance Institutions such as the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD), the World Bank, the Council of Europe Development Bank (CEB) or other lenders.

More recently, for the countries of the Western Balkans, additional efforts have been made to better coordinate and blend instruments for grants and loans via the Western Balkans Investment Framework<sup>128</sup> (WBIF). A similar instrument to the WBIF, the Neighbourhood Investment Facility operates for the Republic of Moldova and Ukraine.

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<sup>126</sup> European Regional Development Fund (ERDF) including cross-border cooperation, Cohesion Fund and European Social Fund for the Member States. The Instrument for Pre-Accession Assistance and the European Neighbourhood and Partnership Instrument (ENPI) are not included.

<sup>127</sup> However, the use of Structural Funds depends on the specific operational programmes, developed and agreed upon at the beginning of the 2007-2013 programming period in close collaboration between the European Commission and the respective Member States/ Regions. These should offer opportunities for funding for specific actions/ projects, depending on the priorities and measurements/ actions identified in the respective operational programmes.

<sup>128</sup> The Western Balkan Investment Framework (WBIF) is a blending instrument for grants and loans for candidate countries and potential candidates.

## 10) TO STEP UP INSTITUTIONAL CAPACITY AND COOPERATION

### Presentation of the issue

The countries in the Danube region are characterised by different backgrounds in relation to rule of law, transparency, democracy, the market economy, and general political stability. The governments show varying degrees of decentralisation. There are different funding structures, policy mandates, political competences, territorial scopes, and different stages in their relation with the EU.

There are also differences of political bargaining power and institutional capacity among the countries, among different levels of public administration and institutions and civil society, as well as between urban and rural areas. The institutional capacities are affected by differences of economic performance.

The importance of cities to the Danube Region must be emphasised. The Danube river itself has more capital cities than any other river. However, not only capital cities are important for the territory, but also a great number of other large and medium sized cities, smaller towns and regions present a relatively polycentric structure. The balanced urban and regional structure offers much potential for sustainable development, if adequate use is made of strengthened regional and local authorities.

Full use of this potential requires efforts improving transnational, national, regional and local governance systems. They should focus on administrative capacity and optimisation of management practices. In the context of the EU Strategy for the Danube Region they should assist in intensifying cooperation.

Common challenges in the Danube region can be best addressed by multilevel cooperative structures. Shared experience and know how leading to real results will be facilitated by genuinely effective multi-level governance. This is a key practical aspect of the territorial cohesion objective now enshrined in the Lisbon Treaty. Cooperation optimises governance by a better use of urban and regional potential and it also contributes to a more balanced development in the region.

Existing initiatives and forms of cooperation are valuable and should serve as a starting point for action before creating new mechanisms<sup>129</sup>. In addition, the European Social Fund (ESF) could be more widely used to support actions and projects.

### Danube Region specifics

The Region has a heritage of deep political transformation, including post-communist transition, national separatism and the foundation of new states.

This makes bridging political divides particularly important as well as improving institutional capacity and management mechanisms at supranational level. A good relation with the neighbouring countries is crucial. Although accession or prospective accession to the EU has improved the situation, new systems take time to be implemented. They require changes in

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<sup>129</sup> E.g. existing governance structures in the framework of the Visegrad Group Cooperation since 1991.

mentalities, building confidence amongst stakeholders and improvement of skills<sup>130</sup>. Many aspects of this can best be done together by transferring knowledge and exchanging experiences.

This is especially true when the challenges require cooperation across borders. As the recent crisis shows, this also extends to financial governance, which needs reinforcing in all countries of the region, as part of EU wide efforts.

In addition civil society in some countries remains relatively weak. Cooperation with authorities, and even communication remain limited. The capacity of civil society to influence region-wide decision making processes, policy-making and implementation needs to be developed further.

One manifestation of these weaknesses is that the capacity for absorbing development funds in an efficient and effective way varies throughout the region. In practical terms, this needs to be strengthened and better coordinated, through know-how transfer and other measures e.g. by providing assistance to strengthen skills in designing and implementing projects with cross border impact.

### **Actions**

➤ **Action - “To combat institutional capacity and public service related problems in the Danube region”** – This action aims at improving the quality of public services and optimising governance mechanisms for international cooperation at all levels of government. National or international partnerships of different national, regional or local authorities play a crucial role in achieving this target. The institutional capacity building role of civil society organisations should also be strengthened. Cutting excessive bureaucracy, improving the quality of legislation and administrative procedures should be a focus. E-government practices and exchange of experience on major infrastructure projects of mutual interest should also be addressed. Measures against corruption need to be reinforced. Activities involved could take the form of trainings and capacity building on good practices and know how covering efficient decision making, transparency requirements, information flow, consultation methods and proactive policy planning. Financial engineering, financial schemes, design and implementation of public finance reforms, project preparation, impact assessments, and implementation arrangements also need common attention. Networking activities should contribute to improve skills, competence and motivation of staff in the public sector. Innovative and sustainable regional and urban development and sustainable agriculture should be encouraged through common learning and good practice including e.g. green urban technologies. Social inclusion can be addressed through new and better approaches being more widely shared. In this relation the interaction with interregional organizations, such as the Danube Countries Working Group, the European Regions Assembly, the International Association for Danube Research, the European Regions Institute are crucial.

⇒ *Example of project - “To increase knowledge of public finance management” – Training and exchange of experience is needed to share knowledge in the design and implementation of public finance reforms. Guidance will be provided for current and future tasks in reforming public financial management, streamlining central banking, and adopting international standards by involving relevant training and research institution (e.g. Centre of Excellence in Finance, Ljubljana, Slovenia).*

⇒ *Example of project - “To build on the experience of the Council of Ministers of Culture of South Eastern Europe” – Recognising that sharing cultural values, exchanging*

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<sup>130</sup> The European project of the newly established Regional School for Public Administration for the Western Balkans in Danilovgrad, Montenegro contributes to this goal. (<http://www.respaweb.eu>)

*experiences and patrimony constitutes a unique instrument for maintaining peace, prosperity and harmony in the Region Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, Romania, Serbia, The Former Yugoslav Republic of Macedonia and Turkey are cooperating also in the framework of the Council of Ministers of Culture of South Eastern Europe (Austria has observer status)<sup>131</sup>. This could be reinforced, especially in respect of its joint action plan, adopted in April 2009.*

⇒ *Example of project - “**To implement the Acta Danubiana - a proposal for international harmonisation of scientific studies of the Danube**” - There is a need for harmonised basic studies. A concerted effort is also required to synthesise the various studies, investigations, designed and built investments of the countries along the Danube, harmonizing data and monitoring.*

⇒ *Example of project - “**To use European Groupings for Territorial Cooperation (EGTC) in the Danube Region**” - EGTCs can support the implementation of the Danube Strategy. They can complement and link up with the existing intergovernmental cooperation initiatives and facilitate the cooperation of local players.*

➤ *Action - “**To improve the trust of citizens and stakeholders in political authorities**” – This action should open up a discussion about the role of civil society in this respect. An open dialogue with different authorities and institutions, and a better acknowledgement of civil society expertise and views in public service is needed. The communication skills of civil society should be reinforced to promote confidence building measures (inc. post-conflict management) in the region. There is a need to strengthen a networking culture (e.g. regional, local or city networks, links with the private sector as well as religious and cultural communities)<sup>132</sup>.*

➤ *Action - “**To establish a Danube Civil Society Forum**” – promoting the idea of a Danube Civil Forum as a pillar of civil society participation in the Strategy. Such projects could offer experience within the field of civil society-state dialogue as well as cross-border and trans-national networking. “**To establish a Danube Civil Society Forum**” – promoting the idea of a Danube Civil Forum as a pillar of civil society participation in the Strategy. Such projects could offer experience within the field of civil society-state dialogue as well as cross-border and trans-national networking. The European Economic and Social Committee (EESC) and its equivalents in partner countries should play a key role, especially regarding business, employment, labour and social issues.*

➤ *Action - “**To ensure sufficient information flow and exchange at all levels**” – Improvement of the capacity of administration to share information and know how needs to be addressed (inc. new mechanisms for sharing scientific know how and knowledge). Strengthening interdisciplinary and inter-institutional working and consultation mechanisms also at international level will help to address cross cutting issues and to take into account cross sectoral linkages. Examples can also cover networks of cities, regions, urban and rural areas. The Council of Danube Cities and Regions<sup>133</sup> can be a strategic partner participating actively in the*

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<sup>131</sup> [www.culturesee.org](http://www.culturesee.org)

<sup>132</sup> “*Education Twinning for European Citizenship, Heading for Excellence in the CENTROPE Region (EdTWIN)*” - is implemented under the lead partnership of Vienna (Vienna Board of Education). This project aims (1) to raise awareness for the cultures and the languages of the neighbours, (2) to build up positive attitudes and (3) to set the relevant measures in order to improve the necessary competence standards for opening doors and widening pathways to CENTROPE, a region of excellence in Central Europe.

<sup>133</sup> Final Declaration of the IVth European Conference of the Danube Cities and Regions in Budapest on 11th June 2009.



development of joint projects. Such networks can promote cooperation in urban revitalisation, support for modern urban technologies, housing projects and organise knowledge transfer etc. European Groupings for Territorial Cooperation (EGTC) may be especially useful in this respect. Cooperation is also needed between planning institutes and the institutions dealing with authority-related tasks, through the development and implementation of cross-border cooperation in settlement and regional planning and licensing procedures<sup>134</sup>.

- ⇒ *Example of project - “**To build on the Danube Environmental Forum**” – one of the largest environmental networks in Europe. This and similar organisations could be supported in order to reach their potential to participate effectively in environmental governance, public education, and other important civil society functions in the region.*
- ⇒ *Example of project - “**To establish a cooperation map**” – of the Danube Region. Such a map could help to measure and map the currently existing, planned or merely suggested cooperation projects of the settlements and regions along the Danube.*
- ⇒ *Example of project - “**To establish common guidelines for improving spatial planning**” – This would be useful to advise the local authorities on best practices for the human settlements in the Danube Region and on the way to prioritise infrastructure and other investments. Integrated spatial planning should ensure that development balances infrastructural and economic aspects on the one hand with environmental and social aspects on the other.*
- ⇒ *Example of project - “**To transfer knowledge and enhance urban technologies and strategies**” – Agglomerations of the Danube region need to exchange and transfer their know-how, and to develop and implement modern technologies and strategies. There is a need for innovative and sustainable solutions for example in the housing sector, in mobility, in coping with economic structural changes, and in upgrading public services. There are environmental-friendly technologies and strategies for cities and municipalities, which should be better shared.*
- *Action - “**To facilitate the administrative cooperation of communities living in border regions**” – Eliminating and overcoming administrative and legal obstacles for cooperation and adjusting regional competences to local needs would strengthen cooperation between institutions and local municipalities both at local, regional and international levels. Direct regional and local cooperation across borders should be promoted. One of the Danube Region’s features is that different national minorities live in the border areas. This also points to a need for easier crossings and better cooperation. Indeed, minorities have repeatedly expressed proposals aimed at improving cross-border relationships. Citizens, entrepreneurs and municipalities of border areas need better information and services. The countries participating in the Danube Region Strategy could agree to revise internal legal standards and other administrative prescriptions that obstruct the development of economic and social cross-border ties. A discussion on and an overview of possible multilateral reconciliation mechanisms could also contribute to improve political cooperation and good neighbourly relations. Certain difficult issues need mutually acceptable solutions for common prosperity.*

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<sup>134</sup> A cooperation exercise in this area is in progress in the countries of the Visegrad Group (Czech Republic, Hungary, Poland, Slovakia) together with Romania and Bulgaria resulting in the coordination of spatial development measures. Ministerial Conclusions of the meeting of Ministers responsible for regional development of the Visegrad Four countries, Bulgaria and Romania held in Budapest (Hungary) on 29 March 2010.

- **Action - “To build Metropolitan Regions in the Danube Region”** – A platform of existing and emerging metropolis regions should be initiated in order to establish a framework for learning and development of common ideas in all areas relevant to metropolitan development. City networks should promote cooperation and exchange of information and experience among e.g. administrative experts, municipal and regional parliaments. There is a scope for knowledge exchange of agglomeration development strategies. This will lead to faster dissemination of good practice and the detection of promising fields of concrete cooperation on public authority level and for business.
- **Action - “To review bottlenecks relating to the low absorption rate of EU funds and to ensure better coordination of funding”** – The use of different funding opportunities in the region should be improved. Support to potential beneficiaries in their preparation, and in order to address better the target groups is needed. The JASPERS<sup>135</sup> initiative is a form of assistance to the Central and Eastern EU Member States in the preparation of major projects which efficient use will gear towards accelerating the absorption of the available funds. Linkages between “internal“ EU funding instruments (Structural Funds programmes including European Territorial Cooperation programmes, etc.) and “external“ EU funding instruments (European Neighbouring Policy Instrument (ENPI), Instrument for Pre-accession Assistance (IPA) should also be improved.
- **Action - “To support the development of local financial products for business and community development”** – To encourage entrepreneurship and development of SMEs, empower local stakeholders and foster communities, while encouraging future-oriented businesses. Rural or lagging behind areas need special attention. Activities include technical assistance, e.g. training in identifying opportunities for “green business“, business development and planning; micro-and soft credit schemes, e.g. in cooperation with commercial lending institutions, or via unbureaucratic small grants. Such product development should not mean creating new funding sources. The efficient and harmonised use of existing financial mechanisms is recommended.
- **Action - “To examine the feasibility of a Danube Investment Framework”** – Using or expanding the experience of the ‘Western Balkans Investment Framework (WBIF)’ without creating parallel structures, this could bring together the Institutions which finance projects submitted by the Priority Area Coordinators, representatives of the European Neighbourhood Partnership Instrument (ENPI), the national funding sources and International Financial Institutions. The projects would be presented by each Priority Area Coordinator. Projects would be examined several times a year, for example during meetings with all parties concerned. The aim is to propose a funding possibility to the project applicants (grant, loan or blend of both).

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<sup>135</sup> JASPERS offices are located in Vienna and Bucharest

## 11) TO WORK TOGETHER TO PROMOTE SECURITY AND TACKLE ORGANISED AND SERIOUS CRIME

### Presentation of the issue

Preconditions for further development of the Danube states in peace, freedom, security, justice and economic prosperity are the further strengthening of the rule of law, the fight against corruption and organised and serious crime, cooperation in the field of asylum and the prevention of irregular border crossings in the Danube region.

Growing economic integration and rising cross-border trade bear the danger of rising organised and serious crime in the region (smuggling, trafficking in human beings, black market). Besides the social damage it causes, organised crime can also hinder business development and limit further economic growth. The recent history and the different stages of EU integration of the Danube Region make this issue a particular problem. Differences in the national legislative frameworks can make cross-border law enforcement lengthy and cumbersome and facilitate organised and serious crime. Therefore, frameworks of international cooperation and existing initiatives should be reinforced.

In most countries of the Danube Region public administrations had to be radically modified after regime change in 1989 and after the dissolution of Yugoslavia. Although accession to the EU (or the prospects for accession) has improved the situation, new forms of cooperation take time to be implemented as they require changes in mentalities, building confidence amongst stakeholders and skills improvements. This is crucial especially in relation to security and crime. Europol as one of the EU agencies offers new possibilities to reinforce actions in this area.

### Danube Region specifics

Many challenges in this respect are shared (or have effects) across the region. Although the cooperation within the region has improved, certain discrepancies and disparities still need to be addressed. This requires both common actions and exchange of experience.

The area is characterised by increased mobility of people within the EU and across its external borders. Therefore, better trans-border cooperation is necessary to guarantee high level of security in the whole region without compromising the protection of human rights. The common efforts to enhance the cooperation at different levels of law enforcement should have a clear impact for the citizens living in the Danube Region

The EU is gradually liberalising its visa policy in the Western Balkans and is making progress in discussions on visa-related issues with its close neighbours. Moldova has started its own dialogue with the EU on visas. These positive developments are widely welcomed in the Region and show that the EU and its close neighbours increasingly share interests in the way the movement of people is managed.

### Actions

- **Action - “To support the Danube states in the administrative cooperation and improvement of qualifications of law enforcement, judicial authorities and other services”.** The existing

programmes promoting cooperation between the Danube countries in this area should continue and expand wherever possible. The common actions against trafficking in human beings are crucial. The development of the criminal organisations and the trends of their activities need to be better monitored. The following forms of criminal activities are common threats for the watercourse and surrounding area of the Danube: smuggling of goods; misuse in circulation of goods by ship crews; commercial crime; smuggling of and trafficking in human beings. These need to be tackled together. The achievement in this area is crucial for the development of the region and its economic potential.

- ⇒ *Example of project - “To improve information flows between Member States and non-Member States in the Danube Region”. Exchange of know-how, best practice and information between countries upstream and downstream the Danube River is essential. Quality training and development of concepts to improve transparency both in administrations and business are elements of this project. This could also include an excellence network of existing public training institutions for training administrative officials from the Danube Region.*
- ⇒ *Example of project - “To set up a Europol Platform for Experts (EPE) on corruption in cooperation with the EU contact-point network against corruption (EACN)<sup>136</sup>, to improve information flows between Member States and non-Member States in the Danube Region”. A pragmatic approach to the fight against corruption. The EPE would provide experts from police force bodies and anti-corruption authorities at national and local level with a platform for the exchange of information and expertise. It would support the development and the promotion of common working standards and best practices as well as information on public procurement, calls for tender etc. Quality training and elaboration of concepts to improve transparency both in administrations and business are important elements of this project. The participation of private partners should also be considered.*
- ⇒ *Example of project - “To enhance the better cooperation between practitioners and members of the academia in the field of criminal law in order to support the Danube states in improvement of qualifications of the law enforcement, judicial authorities and other services”.*
- ⇒ *Example of project - “To implement the Fiscalis programme”.<sup>137</sup> The programme<sup>138</sup> supports the following types of activities in the area of fiscal policy: communication and information exchange system development, including Common Communications Networks/ Common Systems Interface (CCN/ CSI), the VAT Information Exchange System (VIES), excise systems, the Excise Movement and Control System (EMCS). This includes implementation of multicultural control in relation to the taxation of individuals in different participating countries; and organising seminars, workshops, project groups, study visits and training activities.*

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<sup>136</sup> Council Decision 2008/852/JHA of 24 October 2008.

<sup>137</sup> The programme is open to all Member States, candidate countries and potential candidate countries and certain countries participating in the European Neighbourhood Policy, depending on the level of their system's harmonisation with the *acquis communautaire*. The programme is managed by the Directorate-General for Taxation and Customs Union (DG TAXUD) along with the Fiscalis 2013 Committee.

<sup>138</sup> The Memorandum of Understanding for participation in the Fiscalis 2007 programme was signed on 28 August 2006 and was ratified on 1 December 2006. The application of this Memorandum was automatically extended to include the Fiscalis 2013 main actions.

- **Action - “To improve target collection and share key criminal information; to draw a picture of the most significant threats in the countries involved; to produce a Serious and Organised Crime Threat Assessment (OCTA) for the Danube Area”.** There is a clear need for tailored analyses of the existing threats and more effective use of Europol’s cooperation agreements with third countries. Furthermore, a specific Serious and Organised Crime Threat Assessment (OCTA) for the Danube Area should be produced. Intelligence requirements should be developed in consistency with the existing organised crime threat assessments produced by Europol. Single intelligence requirements process should be considered for both EU and Danube Area OCTAs. Europol will identify the main threats of Organised Crime (OC) and Serious Crime (SC) groups and assess the level of corruption and business transparency in the Danube Region. This Threat Assessment will also suggest targeted objectives and recommendations to address the most relevant OC and SC. Based on these recommendations a JHA Regional Strategy including security programmes and action plans, will be developed in order to lead to concrete operational activities. Based on the Europol External Strategy<sup>139</sup> and Council Decision 2009/934/JHA<sup>140</sup>, the exchange of criminal intelligence between Europol and the third countries of the region has to be enhanced.
- ⇒ *Example of project - “To increase the flow of criminal intelligence from countries of the Danube Region towards Europol’s Analytical Work File (AWF)”.* Countries of the Danube Region should be encouraged to make the most of Europol’s capabilities and share relevant criminal intelligence in the framework of the AWFs in line with provisions of the Council Decision adopting the implementing rules for Europol AWFs<sup>141</sup>. The outcome of the analysis will serve as a basis for the Danube Organised Crime Threat Assessment. An increased use of Europol’s AWFs will guarantee that all the strategic initiatives taken in the region translate in a concrete operational outcome for the investigators. Moreover, Europol could organise awareness and training sessions in order to increase the contribution of Danube countries to Europol’s AWFs and to the threat assessment.
- ⇒ *Example of project - “To support the deployment of the European Secure Information Exchange Network Application (SIENA) in non-EU Member states in the Danube Region”.* As of November 2010, all non-EU Member States of the Danube Region with which Europol concluded a strategic cooperation agreement<sup>142</sup> will have the possibility to communicate and exchange information with all EU Member States via Europol/SIENA. Encouraging the generalisation of the use of this common European information system (already used by EU member states) by all non-EU member countries in the region would greatly increase interoperability, cooperation and information flow between law enforcement agencies of the Region.
- **Action - “To strengthen the cooperation of Europol with Southeast European Co-operative Initiative – Regional Centre for Combating Trans-border Crime (hereinafter: SECI/ SELEC)”** as an important player in the security area in the region.

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<sup>139</sup> Europol External Strategy 2010 – 2014.

<sup>140</sup> Council Decision 2009/934/JHA of 30 November 2009 adopting the implementing rules governing Europol’s relations with partners, including the exchange of personal data and classified information; O.J. L 325/6.

<sup>141</sup> Council Decision 2009/936/JHA of 30 November 2009 adopting the implementing rules for Europol analysis work files, O.J. L 325/14.

<sup>142</sup> Croatia, Serbia, Bosnia and Herzegovina, Montenegro, Moldova, Ukraine.

- **Action - “To develop further well-functioning border-management systems<sup>143</sup>”.** There is a need: to reinforce inland waterways shipping border checks and border surveillance involving the crossing through the Danube River of the external borders; to facilitate the exchange of information between the border guard services of the Danube Region; to equip border crossing points with biometric passport readers, CCTV cameras, online interconnections with Interpol databases; to reinforce border surveillance with night-vision equipment, and infra-red sensors; to continue the training of border guards; to improve conditions (tariffs, licensing regulations, timetables and transport routes) for cross-border traffic of passengers and goods, and to introduce uniform quality certification systems and analyse veterinary and public health regulations which prevent free movement of goods and services.
  - ⇒ *Example of project - “To establish unified records, within the River Information Services, which would contain data on legal entities, vessels and persons interesting from the security aspect”, as well as records on movement of vessels, cargo and passengers in order to enable more efficient prevention and suppression of criminal activities, primarily smuggling and trafficking.*
- **Action - “To intensify the prosecution of Internet crime (cybercrime)”**, which is a global, technical, cross-border, and anonymous threat to the information systems, confronting the national law enforcement agencies with ever new challenges. The central problems concern the field of property offences as well as child pornography.
- **Action - “To explore possibilities to extend the current pilot project on exchanges of advanced customs information in the Region”.** The non-EU Customs administrations in the Western Balkans are engaged already in developing two IT applications used for the electronic exchange of pre-arrival information, supported by EU assistance. Also Moldova and Ukraine are involved in an automated exchange of pre-arrival information project (under EUBAM assistance).
  - ⇒ *Example of project - “To set up the eJustice Project S.A.F.E., Secure Access to Federated eJustice/ eGovernment”. S.A.F.E. defines a technical framework for interoperable and safe use of digital identities across administrative borders („Trust-Domains“). The intention of this initiative is upgrading of electronic communication infrastructure in the area of justice with the goal of defining open, interoperable and internationally standardised interfaces that allow secure access to communication services as well as secure and reliable electronic communication. The S.A.F.E. concept aims at the secure registration, authentication and authorization as well as the secure storage of communication participants. The project is of common interest for most e-government services going beyond communication and beyond e-justice.*

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<sup>143</sup> The EU policy related to customs and taxation in the Danube region is determined by the principles that apply to the single market and the customs union (EU Member States), by the Enlargement Strategy (Croatia, Serbia, Montenegro and Bosnia and Herzegovina) and the European Neighbourhood Policy (ENP)/ Eastern Partnership (EaP) for Ukraine and Moldova. The EaP program has been adopted by the Council in May 2009.

For Ukraine and Moldova specific objectives agreed in the Partnership and Cooperation Agreements (PCA) Action Plans are to align customs/ tax legislation with the EU and international standards, improve customs control including risk management, improve cooperation of customs and tax administrations with the economic operators and taxpayers, improve computerization of procedures and integrity standards.

Under the Eastern Partnership the EU policy objectives are the facilitation of the development of legitimate trade and economic relations throughout the region and with the EU, enhance security and safety of the supply chain and combat customs fraud. For taxation area the objectives are to provide active support to partner countries taxation reform, approximation of indirect taxation systems, cooperation in policies to counteract fraud and application of the principles of good governance in the taxation area.

- **Action - “To explore possibilities to extend the current pilot project on exchanges of advanced customs information in the Region”.** The Customs administrations in the Western Balkans are engaged already in developing two IT applications used for the electronic exchange of pre-arrival information, supported by EU assistance. Also Moldova and Ukraine are involved in an automated exchange of pre-arrival information project (under EUBAM assistance).
  - ⇒ *Example of project - “To implement the DREWS project (the Danube River Early Warning System)”, which allows an automated exchange of information on cargo passing between Serbia and Croatia via the Danube and to implement SEEMS/ SEED, which allows exchanging consignment related pre-arrival information between several non EU-countries in the Wesern Balkans.*
  
- **Action - “To address the topic of better managing migration issues in the Danube Region”.** A regional profile could be elaborated for the Danube Region based on the national Extended Migration Profiles of the 14 countries covered by the Strategy for the Danube Region. The regional profile could be complemented with recommendations as well as a regional action plan. Its goal would be to promote discussion and cooperation on migration policies, coherence and coordination between governments, ministries and other stakeholders at local and regional or provincial level (International Organisation for Migration).
  
- **Action - “To continue demining in the mine-suspected areas of the Danube area”** (agriculture, water, canals, embankment, transport routes, flood prone areas, protected areas);
  
- **Action - “To improve food security”** in the Region: By unifying technical standards and norms and consequently reducing technical barriers to trade in agricultural products, food security in the Danube region could be essentially improved. In this context, various countries have a vital interest in closer cooperation with other partners in the Danube region with regard to both the establishment of the food security system and the rural development in the wider sense.
  
- **Action - “To establish standardised operational procedures for joint activities in case of transboundary technical-technological water traffic accidents”.**
  - ⇒ *Example of project - “To set up a waterway emergency centres”, which would host the offices, authorities and training facilities involved in the operative activities relating to navigation (water police, fire department, the National Headquarters of the Customs and Finance Guard, navigation authority, rescue ship, emergency helipad, nautical information centre, training centre).*

## **Role of the European Investment Bank (EIB) in the EU Strategy for the Danube Region**

The Commission and the European Investment Bank (EIB) have a long-standing background of working together. As such, the role of the EIB in the Strategy can be crucial, especially in mobilising and blending sources of finance for bankable projects.

The EIB has much experience of cooperation with most of the Member and non Member Countries in the Danube region across a range of different sectors. EIB's key role in ensuring the availability of long-term financing to key infrastructure is underlined by the already substantial support provided by the Bank in the Danube Region over the course of the last 10 years. Additionally, the JASPERS (Joint Assistance to Support Projects in European Regions) initiative<sup>144</sup> set up in 2006 to help Member States to prepare better project applications proposed for EU Structural Fund grant support. There is also other technical assistance activities in the region, including the Western Balkans Initiative which provides technical assistance based on their experience and detailed insight into sector policies and performance, together with a vast network including Member States, the European Commission and other IFIs (international financial institutions).

Strong EIB presence in the region is also marked by an increased lending volumes; loan signatures increased from EUR 8.6 billion in 2007 to EUR 11.8 billion in 2009, including Structural Programme Loans in Bulgaria, the Czech Republic, Hungary, Romania and Slovakia to co-finance the Operational Programmes. Sectorwise, approximately EUR 5.1 billion was dedicated to sustainable transport and energy connectivity, EUR 4.1 billion to environment and water resources and EUR 1.9 billion to socio-economic and human development. Furthermore, in the beginning of 2010, there were 274 active and 122 completed JASPERS assignments in the region, with Romania, Czech Republic and Bulgaria as main recipients of technical assistance.

The main objective of the Danube Action Plan currently developed under the EU Strategy for the Danube Region is to formulate a targeted policy for the Danube that meets its ecological, transport and socio-economic needs. The Danube Strategy draws extensively on the positive feedback from the EU Strategy for the Baltic Sea Region, which was adopted by the European Council on 26 October 2009 and to which the EIB contributes. In the past the Bank has financed several wastewater treatment plants and co-financed high priority de-pollution projects. The EIB has likewise promoted the upgrading of necessary infrastructure to integrate the various individual regions into a larger Baltic Sea region. Overall, the EIB has lent more than EUR 20bn to activities in the Baltic Sea Region in the years 2007-2009, with lending volumes increasing from EUR 4bn to EUR 10bn annually between 2007 and 2009.

EIB's experience from the Baltic Sea Strategy is also a valuable input to the Danube Strategy. The Bank's contribution to the Danube Strategy will aim at providing value added in all riparian countries. Given the Bank's sector experience and its priority lending objectives, the EIB is well positioned to support developments in all sectors specified in the Danube River Strategy, with the particular emphasis on the following two areas:

- EIB support to improving Navigation on the Danube;

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<sup>144</sup> Shared by the EU Commission, the EIB, KfW and EBRD.



- EIB support to sustainable water management in the Danube River Basin.

As in all areas of EIB activity, transport lending has been driven by EU policy. In particular, in line with the Transport Lending Policy (2007), inland waterways is one of the modes to which priority is given by the EIB as one of the most promising modes in terms of reducing greenhouse gas emissions per transport unit. However, in the Danube region inland water transport (IWT) projects have been relatively limited in number in recent years (see Table 1). In the area of environmental management of the Danube basin, the Bank is proactively involved in a number of investment projects including technical assistance initiatives with a direct impact on restoration of environmental state of the Danube basin, both to speed up investments through better, faster project preparation and to support promoters to deliver their projects on time (see Table below).

The EIB could play a critical role in the implementation of the navigation and restoration of the environmental state components of the Danube River Strategy. In addition to EIB's lending activity in the region, the EIB could also extend its technical assistance to support countries of the region and their intergovernmental organisations in (i) providing support to navigation and strategies for the restoration of environmental state, (ii) institutional capacity, including support to weaker promoters, and (iii) in the preparation to identify and prepare sound projects for EIB financing. Technical Assistance is already provided in the region such as the JASPERS initiative, the Western Balkans Investment Framework (WBIF)<sup>145</sup>, or other dedicated project, sector or financial instrument support. JESSICA (Joint European Support for Sustainable Investment in City Areas) is an initiative launched in 2006 and uses 2007-2013 Structural Fund allocations to establish revolving investment instruments rather than grant subsidies, in favour of urban development projects. The JEREMIE initiative<sup>146</sup> (Joint European Resources for Small and Medium-sized Enterprises), also launched in 2006, offers EU Member States, through their national or regional Managing Authorities, the opportunity to use part of their EU Structural Funds allocations to finance small and medium-sized enterprises (SMEs) by means of equity, loans or guarantees, through a revolving Holding Fund acting as an umbrella fund. EPEC (the European PPP Expertise Centre)<sup>147</sup> was launched in September 2008 and aims to strengthen the organisational capacity of the public sector to engage in Public Private Partnership (PPP) transactions.

The EIB also cooperates with other International Financial Institutions active in the region (European Bank for Reconstruction and Development (EBRD), World Bank, etc.) and EC project preparation facilities to upstream build a pipeline of potential projects.

### Examples of selected flagship EIB and JASPERS projects in the Danube Region

<b>Navigation on the Danube</b>	<b>Restoration of the environmental state of the Danube River Basin</b>
<b>EIB Projects</b>	
Romania: Sulina canal bank protection: improvement of navigation conditions on the Danube Delta (EUR 38 million)	Czech Republic: Flood Damage Reconstruction 2009 Reconstruction of damage caused by floods in Moravia and Southern Bohemia in June 2009 (EUR 265 million)

<sup>145</sup> EIB, in partnership with the European Commission, EBRD and CEB.

<sup>146</sup> Developed by the European Commission and the European Investment Fund (EIF), which is part of the European Investment Bank Group.

<sup>147</sup> Launched by the EIB and the European Commission.

Bulgaria: Danube Port of Lom: reconstruction and modernisation of port infrastructure and equipment (Pan-European Corridor VII) (EUR 17 million)	Czech Republic: Water Sector Framework Loan III Investment mostly for upgrading, improvement, modernisation and expansion of water supply and waste water systems (EUR 112 million)
Bulgaria: Danube bridge: construction of a new combined (road and railway) bridge on the Pan-European Corridor IV between Vidin (Bulgaria) and Calafat (Romania) (EUR 70 million)	Austria: Sicherung Energieversorgung Linz Construction of a waste-to-energy co-generation plant and expansion of a gas-fired combined-cycle power plant in the city of Linz (EUR 110 million)
Slovakia: Košická Bridge Bratislava: construction of a new road bridge across the Danube, together with connecting urban roads (EUR 45 million)	Romania: Cluj/Salaj Cassa Water Project: Investment loan for co-financing the extension and rehabilitation of water and wastewater systems in Cluj and Salaj counties, Romania, supported by Cohesion Funds (EUR 26 million)
<b>JASPERS Projects</b>	
Danube navigation improvement – Romania: Section 1 Common Sector between Romania and Bulgaria; Section 3 Navigable channels (Convoy formation/dismantling); Section 4 Port of Calafat	Hungary: Flood Prevention: Danube reinforcement of embankments
Modernisation and development of Constanta Port – Romania – <i>completed &amp; closed</i>	Slovakia: Water and Wastewater Treatment: WWTP Intensification, sewerage and drinking water supply in Puchov region
Development of Public infrastructure along Danube and in Danube ports – Romania: Development of Public infrastructure in Danube ports; Waste collection system - depolluting vessels on Danube Sulina – Braila; Waste collection system - depolluting vessels on Danube Harsova – Bazias; RORIS II - Danube VTMIS - Canals – <i>completed &amp; closed</i> ; RORIS II - Danube VTMIS – Danube – <i>completed &amp; closed</i>	Slovakia: Water and Wastewater Treatment: Ruzomberok, Liptovska Tepla, Liplovske Sliace Wastewater Collection and Treatment Project
Bank protection works on Sulina Channel – Romania	Romania: Water and Wastewater Treatment: Extension/ modernisation water supply/ sewerage system in Iasi county
Environmental Monitoring on the Danube – Romania	Romania: Flood Prevention: Protection against coastal erosion