EIP Water Boosting opportunities – Innovating water



EIP Water

European Innovation Partnership on Water

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Boosting opportunities Innovating water

Danube smart specialisation (S3) workshop, July 2015

Structure of the presentation

- 1. The need for innovation in the water sector;
 - 1. economic dimension and
 - 2. demanding conditions
- 2. What is an EIP, what is the EIP water?
- 3. RIS3 and S3 aspects and the EIP water?
 - 1. Links
 - 2. Possible contributions

Water sector innovation needs

 European urban water infrastructure asset value ~2 000 billion EUR¹

The water sector represents already now remarkable infrastructure asset values and requires considerable investments

è innovation has significant economic effects

1 EWA manifesto, 2 EIB 2013, 3 Booz Allen Hamilton (2007), WEF (2012)

Danube smart specialisation (S3) workshop, July 2015

Water sector innovation needs

Other factors calling for innovation:

• Policy

Demanding environment for the Water Sector

è business as usual will not work, innovation is needed

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Water sector innovation needs

The European Innovation Partnership on Water was initiated in 2012 to acknowledge the innovation needs of the water sector and to respond to the demanding situation

What is an EIP? – The big picture

- Europe 2020 strategy
 - Seven flagship initiatives
 - 1) Youth mobility, 2) digital agenda, 3) resource efficiency, 4) industrial policy, 5) new skills/jobs and 6) poverty AND
 - 7) Innovation Union

• Within the innovation Union 34 commitments

Among them <u>European Innovation Partnerships</u>

What is an EIP?

- new approach to EU research and innovation
- challenge-driven focusing on
 - societal benefits and
 - <u>economic dimension</u> (jobs and growth) <u>through rapid</u> <u>modernisation</u> of the associated sectors and markets.
- EIPs are highly integrative
 - act across the whole research and innovation chain,
 - bring together <u>all relevant actors</u> at EU, national and regional levels

Links between EIP Water and RIS3 / Danube

- EIPs <u>streamline</u>, <u>simplify and better coordinate</u> <u>existing instruments and initiatives</u> and complement them with <u>new actions where necessary</u> (e.g. Action Groups of the EIP Water).
- EIPs and Action Groups identify barriers and bottlenecks for innovation and develop actions to overcome them
- EIPs promote investments in demonstration and pilots; anticipate and fast-track any necessary regulation and standards

Links between EIP Water and RIS3 / Danube

- Water administrators and managers are mostly regions/countries and EIP water Action Groups often need regions and municipalities as partners to implement their innovations
- The EIP water seeks increased participation of stakeholders from CEE
- There is a huge demand for upgrading urban and rural water infrastructures in CEE; a big potential for implementing innovative solutions
- The ,natural' unit for addressing water management is the catchment scale

Potential synergies and contributions regarding innovation in the water sector

- EIP water is a forum that coordinates harmonises and provides access to the water networks but it is not a funding mechanism. Therefore regional funds could supplement EIP water's activities and vice versa.
- Complementary participants, target groups and approaches: regional focus versus European/global perspective

Potential synergies and contributions regarding innovation in the water sector

- EIP water provides access to the water community
 - Matchmaking tool; match water sector and regions, search for partners, projects, products
 - EIP Water newsletter
 - EIP Water Marketplace (www.EIP-water.eu)
- Support in practical application of Public Procurement of Innovations (PPI) and Pre-Commercial Procurement (PCP)
- Professional support in commercialisation of innovations

Conclusions and summary

So far the link between EIP Water and any aspect of Cohesion Policy and vice versa is weak. È it appears logical and promising to strengthen this link

- è EIP water and S3 activities in the Danube region are often closely related and highly complementary
- È There appears to be a big potential for synergies to strengthen the link between EIP Water participants as innovators and regional authorities as implementers

Conclusions and summary

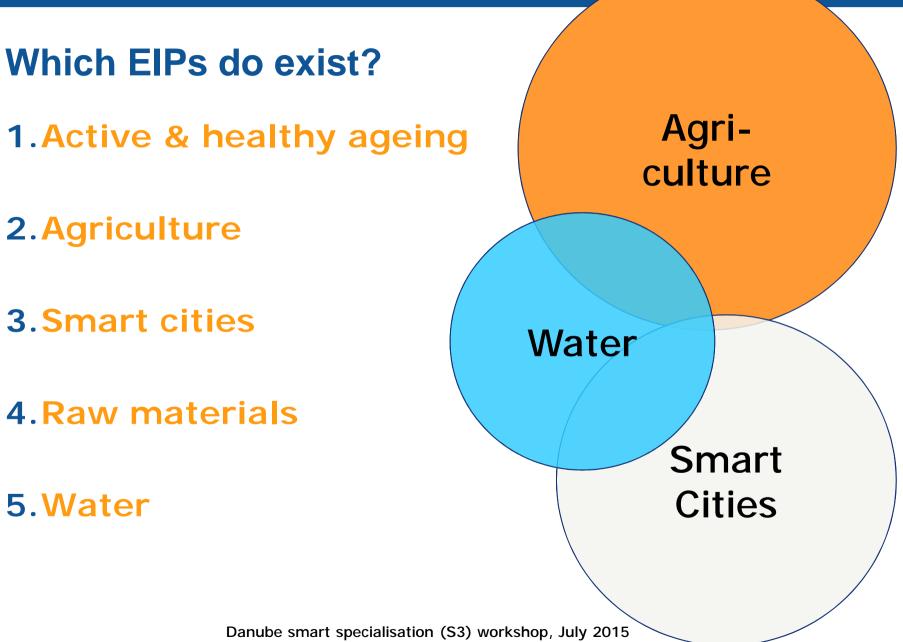
Possible first steps:

- 1. Mapping exercise; screen RIS3 strategies and planned projects for aspects related to water and innovation
- 2. Establish links between EIP water Action Groups and regions; make regions a target group of EIP communication.
- 3. Explore the potential and need to strengthen the role of water in the frame of planned projects / RIS3 strategies



Thank you for your attention!

Further information <u>www.eip-water.eu</u> <u>env-eip-water@ec.europa.eu</u> Secretariat EIP Water



Action Groups

- voluntary multi-stakeholder project teams (~20-80 partners)
- focus on the EIP Water's thematic priority areas
- <u>develop</u>, test, and scale up innovations
- <u>stimulate the uptake of innovations</u> by the market (e.g. regions/municipalities)
- promote their innovations via the <u>EIP Water Marketplace</u>
- don't receive funding from the EIP but receive individually designed, targeted <u>support by the secretariat</u> and other EIP parties

Main motivations

<u>networking</u> (within the sector, between Ags), <u>visibility</u> and <u>access</u> (e.g. to authorities, regions, countries, face time at the conferences etc.) and <u>inspiration</u> for new initiatives

Example I: WaterCoRe - Regional governance of water scarcity and drought issues

- Involves 8 European regions and 7 water authorities and 7 research centres/knowledge providers
- Developed drought management programmes
- Most are already in the implementation phase
- Now focus on adaptive implementation arrangements and on analysis of implementation barriers under changing environmental and economic conditions

è methodology to a high degree transferable to other regions

Example II: CBP – City Blueprints

- Refines and applies a methodology to assess the sustainability of urban water services
- Evolved from precursor projects
- 37 cities have completed the baseline assessment
- Midterm objectives:
 - assess 150 cities in Europe and establish city to city learning/sharing best practices
 - Move from analysis to visioning, strategy development and action plan (implementation)

è increased involvement of municipalities and financing future implementation steps

Example IV: Verdygo – Modular wastewater treatment

- Concept for modular wastewater treatment plants
- Flexible under changing conditions and transferable to regions where no central infrastructures have been developed so far
- Allows for demand driven and stepwise upgrade of existing plants
- Integrative concept, operation maintenance and financing

è require municipalities and regions with poor wastewater treatment infrastructures for demonstration (EE) and application of pre commercial procurement rules

Workshop Invitation

- '... identifying concrete initiatives for trans-national cooperation linked to common smart specialisation priorities and interests in the Danube region.'
- '... main smart specialisation priorities in the Danube region ...'
- '... frame for exploring cooperation opportunities within the selected RIS3 priority areas in the Danube region, ...'
- '... allow presenting and match-making of ongoing and emerging activities in the macro-region and will explore possibilities for better coordination and alignment of the national/regional RIS3 priority areas'

Danube Transnational programme

1.1.1.8 Climate change & risk management

Deriving from the river which is acting as a catalyst of the area, a central element of international cooperation within the Danube Region is the water management. Based on the Water Framework Directive, the Danube River Basin Management Plan (DRBMP) defines the general objectives for the protection and enhancement of river basin and the sustainable and long-term use of water resources. Within this framework, countries are preparing their River Basin Management Plans developing tools of monitoring and measures of improving the water quality and the ecological balance. In order to maximize their effect, there is need for cooperation at international level among the countries involved. Transnational initiatives may support this activity, as well as future development of DRBMP.

Due to its geographical profile, the Danube area is exposed to floods, often of impressive scale and frequency. Statistically, Romania is the most affected country by this phenomenon with the highest number of regions with more than nine major flood events taken place in between 1998 and 2009. Hungary, Slovakia and Serbia may also be considered as countries with important exposure to a high number of major floods, while Slovenia and Montenegro are the safest from this point of view. The actions during this type of extreme conditions need to be coordinated, since in most of the cases their character is international. Transnational actions can serve as an instrument for enhancing the precision of forecasting, the preparedness and capacity for intervention in a coordinated way.

Danube Transnational programme

1.1.1.11 Governance

The Danube Transnational Programme"s area is characterized by a very high administrative fragmentation, the macro-region being composed of 14 states of very different sizes and administrative structures. Besides the different principles which are at the basis of the administrative systems, the countries of the region are on a different level of governance performance, reflecting the different development paths. As a consequence, the countries display various institutional capacities most of them lacking the strategic and operational capacity to respond to challenges, as the usage the investment opportunities provided by the European funds as a major source of development. In this sense, according to the EC "Strategic report on implementation 2007 - 2013" issued in October 2013, a high share of countries of the Danube Region are ranked at the bottom of EU-27 Index of absorption rate of structural funds.

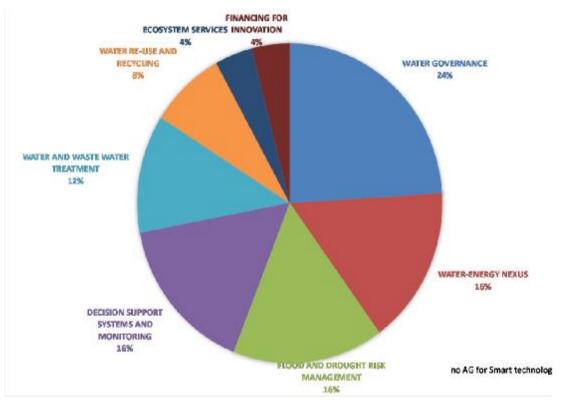
Moreover, the involvement of civil society and other stakeholders in the decision-making processes is still limited in big parts of the programme area, therefore diminishing the impact of the interventions.

With some exceptions (one of the good examples of efficient transnational cooperation in the field of governance is the International Committee for the Protection of the Danube River (ICPDR), there is a lack in the capacity of using the potential of territorial cooperation in improving the governance, even though there are some very relevant policy areas which can be efficiently approached only within a joint, transnational framework. The transnational actions can help improving this capacity, but also to promote the good practices related to delivery of public services and for encouraging exchange of experiences in order to better contribute to the EU objectives.

EEN - SGE Meeting Istanbul, 11 June 2014

EIP priority areas - Themes of Action Groups

- Almost all topics have a more or less strong (potential) link to regional policies
- increased emphasis on implementation and demonstration in full scale
- è increased involvement of administrations and operators required



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Example III: EWW - Energy and Water Works

- Develop, adopt, demonstrate innovative crossover approaches between water and energy sectors
- Management (coastal areas, deltas, dams) by a multipurpose approach, synergies between energy&water
- Lobbying, networking and agenda setting in the fields of R&D programmes and environmental policy

è require cooperation with regions for case study sites, financing, developing coastal energy concepts and political support