Stakeholder participation in case studies

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• Applying European market leadership to river basin networks and spreading of innovation on water ICT models, tools and data

• WATER-4a-2014
Goals

• Analyse outcomes of previous European funded projects
• Standardization and interoperability
• Marketplace as a service
• Virtual marketplace
• Use case studies
Maritsa transboundary river (Bulgaria, Turkey and Greece) with 6 main tributaries which discharge to it abroad.

East Aegean River Basin (EARB) is located in Ecoregion 7 – Eastern Balkan according to Annex XI of WFD.

Area of EARB – 35 230 km², which is 32% of the country area
80 towns – 68% of EARB population and
1696 villages – 32% of EARB population

EARB population 2 197 728 inhabitants on February 2, 2011 – 29.8% of country population
## Sub-basins in EARB

<table>
<thead>
<tr>
<th>Indices</th>
<th>Maritsa sub-basin</th>
<th>Tundja sub-basin (incl. Fishera river)</th>
<th>Arda sub-basin (incl. Aterinska river)</th>
<th>Byala sub-basin (incl. Luda river)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>East Aegean River Basin</strong></td>
<td>Part of Maritsa transboundary river with Greece and Turkey which discharges to Aegean Sea</td>
<td>Transboundary rivers with Turkey and discharge to Maritsa river at Turkish territory</td>
<td>Transboundary rivers with Greece which discharges to Maritsa river at Turkish territory</td>
<td>Transboundary rivers with Greece which discharges to Maritsa river at Greek territory</td>
</tr>
<tr>
<td><strong>Territory, km²</strong></td>
<td>21 292 km²</td>
<td>8029 km², 321 km</td>
<td>5273 km², 350 km</td>
<td>636 km², 241 km</td>
</tr>
<tr>
<td><strong>Length to boarder, km</strong></td>
<td>321 km</td>
<td>350 km</td>
<td>241 km</td>
<td>72.3 km</td>
</tr>
<tr>
<td><strong>Towns and villages in Bulgaria</strong></td>
<td>782</td>
<td>262</td>
<td>685</td>
<td>43</td>
</tr>
</tbody>
</table>
Problems in Maritsa river basin according to RBMP

• Water abstraction and run-off change
• Nitrates and phosphates pollution of groundwater
• N and P pollution and eutrophication of surface water
• Chemical pollution
• Physical modification of river beds
• Invasive species (not local types)
• Floods

Floods in Bulgaria

Floods in Ederne city, Turkey
Annual water use by sectors in 2013

- Agriculture
- Industry (electricity production, manufacturing)
- Services
- Households

Bulgaria, East Aegean River Basin, Maritsa sub-basin, Tundja sub-basin, Arda sub-basin, Byala sub-basin
Pilot case studies

- Develop pilot use case studies
- Test the efficiency and benchmark the marketplace
- Conduct demonstrations in trans-boundary river basins
Pilot case studies

- **Involved:** GWP CEE, CREF, TU Delft, RandBee, ANTEA GROUP and Orion Innovations (UK) Ltd
- **March - November 2016**
Virtual marketplace experiment and feedback

• Stakeholder identification
• Testing virtual marketplace
• Stakeholder workshop to facilitate matchmaking - river basin authorities vs supply chain partners
• Map out and prioritise key needs
E-learning course

• E-Learning products will be tested for different users in the Maritsa River Basin

• International brokering workshop in Sofia, Bulgaria in September 2016
User feedback collection of the marketplace usage

- Online stakeholders consultations
- Results developed into GWP ToolBox case study
- Shortlist of most relevant tools, their screening and validation with the client
Thank you for your attention

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