

Arno River Basin Authority Control Dashboard

In partnership with the OECD Studies on Water: Stakeholder Engagement for Inclusive Water Governance

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Organisation: Arno River Basin Authority

Country: Italy

Level of government: Local government

Sector: Environmental protection

Type: Communication

Launched in: 2015

Overall development time: 1 year(s)

Link to the innovation's website

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Description

In Italy, in the framework of the EU Water Framework Directive (WFD) and the Arno River Basin Authority developed an executive information system called “Control Dashboard” to gather all relevant data regarding river basin management planning in a single depository and bridge an information gap hindering effective management decisions.

The “Control Dashboard” is a web-based, open, user-fed and exportable information system that aims at answering to public participation requirements under the WFD; the targeted audience is both the general public and interested institutional parties. The information system not only contributes to information exchange among different stakeholders and public authorities responsible for the directive’s implementation (i.e. regions, water utilities, etc.), it also improves co-ordination among the competent authorities responsible for complying with the WFD in the Apennines River Basin District.

Regular meetings take place to discuss the status of the information system and needed actions. The implementation of the “Control Dashboard” has contributed to cost savings (i.e. by shortening administrative procedures) and to improving acceptability and ownership whereby a large number of stakeholders are involved and provide quality data to the system.

Why the innovation was developed

- The main driver was the consideration that the base for effective management is good scientific knowledge. In fact, a major source of uncertainty is lack of knowledge. Given the level of uncertainty that water managers face and that many actions are selected without knowledge of the consequences, it was necessary to create a strategic, targeted and integrated system the results of which can be used to inform and adjust management decisions. This has ensured the availability of a tool to share information, take informed decisions and maximize capacity among all relevant actors.
 - The system answers to the capacity building need outlined in the Guidance Document n. 8 “Planning Process” produced under the Common Implementation Strategy according to which there is a necessity to build capacity among economic sectors, officials planners and administrators. The system was set out in order to face new and old planning threats that could undermine and ultimately bring to a weak, ineffective plan and could cause failure in the second cycle of implementation of the Water Framework Directive.
 - Gather and homogenise scattered data provided by different public bodies and private parties.
 - Overcome planning and implementation challenges with the involvement of different public bodies across administrative levels.
 - Foster stakeholder engagement at different levels and planning stages.
 - Present the data in standard reporting formats.
 - Identify and present cause-effect mechanisms between drivers, pressures and water bodies’ environmental status in a clear and transparent way to stakeholders to support active and inclusive decision making.
 - Take account of water balances and quantitative aspects in water bodies’ management decisions in accordance with the “Blueprint to Safeguard Europe’s Waters” policy options.
 - Evaluate the efficiency and effectiveness of planned measures to involve stakeholders in the measures’ prioritisation process.
 - Include the outputs of innovative pilot experiences in the decision-making process. In this regard, the “Pawa” project developed water accounts through recognised standards and activated an inclusive decision-making process as regards the selection of the most appropriate measures to face water scarcity and drought conditions
 - .Present the mechanisms that allow alternative objectives to be set and exemptions to be applied in a transparent way; and develop a strategic vision with links between the river basin management plan and others (e.g. flood risk management plans).
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- Government
 - Agricultural actors
 - Civil society
 - Service providers
 - Water institutions
 - Science, academia and research centres

Results

Efficiency

- Cost-saving: The system is user-fed, and therefore cost-saving. It also shortens administrative procedures.
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Service quality

Responsiveness:

- Acceptability / Ownership of stakeholders involved: Immediate feedback on the quality of data supplied by data providers and stakeholders in that data can be immediately visualized in their context.
- Capacity-development: There was a high degree of involvement of data providers.

Development

Design

The Arno River Basin Authority set up the system, and relevant stakeholders were informally involved in the assessment of the necessity to develop such a system with their feedback positive.

Implementation

Tools used:

- The system is based on the mechanisms outlined on the Guidance Document n. 9 “Public Participation in relation to the Water Framework Directive.” The control dashboard is based on the DPSIR decision making framework.
- The system was beneficial because it was user fed, thus easing information sharing among the different stakeholders.
- It is open source, therefore it can be not only shared but also exported and duplicated if needed.
- It is supported by standard parameters that were already chosen in the framework of the Common Implementation Strategy and are therefore approved by the EC.
- It is built around a single reference unit, the water body to achieve compliance with the requirements not only of the Water Framework Directive but also of the Flood Directive.
- It gathers all information relevant to the Directives’ implementation on a single water body sheet to support decision making and stakeholders’ engagement.
- It includes hydrological parameters: WEI +, Eflows, Water balance data that are pivotal to define the water body environmental status and to assess whether the objective will be achieved or not.
- It takes into account the water bodies hierarchical pattern i.e the relationship the connections between upstream and downstream water bodies and between surface water bodies and groundwater bodies.
- The system gives the possibility to appraise the relevance of pressures and drivers that affect a given water body and of the pressures on all upstream water bodies.
- The visualization of the pressures and drivers on a gradation scale is essential to present transparent information to the stakeholders regarding the influence of pressures on the water body status and support decision making and measures’ selection, and connection between pressures and measures.

Resources used:

- Since the participatory process and the involvement of stakeholders under the Water Framework Directive and the Flood Directive is a legal requirement it has to be carried out by the competent public bodies and is supported by public finances.
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Challenges and solutions

- There were possible delays in data supply during the implementation phase.

Lessons Learned

Lessons Learned

- The use standard data in accordance with Inspire Directive and Wise is not a barrier, but an opportunity to manage databases in an efficient way thus easing data exchange and exportability consequently engaging stakeholders in the process.
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Conditions for success

- Stakeholders have been engaged in the process from the very start, and in different phases during the system's development and have therefore participated in the decision making process both regarding technical and strategic choices. Another factor for success was the choice to use an open source tool.
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Other information

The system is operative but it is too early to fully appraise achievement of the objectives. The experience can be easily replicated because it is open source and the tools are based on shared standard parameters.

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