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## WaterDiss2.0

Dissemination and uptake of FP water research results

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Recommendations – Interim Report

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# EXECUTIVE SUMMARY

This document reports early recommendations and suggestions that can be concluded from the project findings to date. This work is framed under *Work Package (WP) 4- Assessment of Impacts*.

This first interim report provides the reader with information on what the expected final contributions at the end of WaterDiss2.0 project are and to whom they are targeted. It also reports on preliminary recommendations for dissemination of research outputs, agreed by project partners. Most of them are based on conclusions from experiences of the project's daily activities and the trialling process of the Individual Dissemination Strategy (IDS) tool.

During the first 18 project months, WaterDiss2.0 gained observational evidence to provide preliminary recommendations. To perform this report, some questions were raised among partners regarding the nature of recommendations, which this document attempts to answer:

*On what can we provide recommendations? To whom will they be addressed: scientist, policy, EC, SPI-group? Is there enough evidence to start building this set of guidelines? Which processes of the SPI concept can we improve?*

In offering some preliminary recommendations at this stage of project, it is important to consider that further activities and trialling will be performed during the next project period and that the WaterDiss2.0 team will have to overcome new challenges as they continue to interact with our target groups.

The evidence gathered from the project activities to date is reported in this document in the form of recommendations. They are clustered in three types of evidence and cover all implemented project activities:

- The analysis of dissemination and uptake of FP projects outputs
- The design and preparation of the IDS
- The success of WaterDiss2.0 dissemination practices

# I. INTRODUCTION

The FP7 project WaterDiss2.0 aims to improve the uptake of water-related FP6 and FP7 project results in order to better support the implementation of EU water policy. This is achieved by different tasks and tools, i.e. analyzing existing dissemination activities, supporting the dissemination strategy of results from FP projects in the water field, using social networking tools and via WaterDiss2.0 dissemination activities tailored to specific audiences or stakeholders groups.

This document reports early recommendations and suggestions that can be concluded from the findings of the project to date. This work is framed under the *WP4- Assessment of Impacts*.

The objective of WP4 is to assess the impact of WaterDiss2.0 activities and to test the project's added value. In doing so, this work package checks whether the project is maintaining and enhancing the effectiveness of the Science-Policy Interface and if it is contributing to a better marketing of research results as well as creating innovation, through a continuous learning process amongst all the partners and stakeholders.

An initial project assessment (Task 4.2) has been conducted in accordance with the project's timeline. The assessment brought together the process and the results achieved during the first 18 months of the project. The evaluation in Task 4.2 monitors results based on indicators, by collecting and presenting data, and forecasts future trends and needs on next project actions.

The objective of this assessment (Task 4.4) is to produce recommendations and guidelines for future dissemination of research outputs, stemming from a need for better and more effective uptake of water research results. As such, WP4 integrates findings from the above mentioned Task and translates them into guidelines to be taken up from different target groups.

Firstly, this document reports the contribution of WaterDiss2.0 to the effectiveness of the SPI, by providing a literature review. Secondly, it draws on overall conclusions on WaterDiss2.0 activities and the support that is WaterDiss2.0 started providing to its targets by, as explained above, integrating the results from the assessments of projects impacts.

This first interim report provides the reader with information on what the expected final contributions at the end of WaterDiss2.0 project are and to whom they are targeted. It also reports on preliminary recommendations for dissemination of research outputs, agreed by project partners. Most of them are based on conclusions from experiences of the project's daily activities and the trialling process of the IDS tool.

At the end of the project, a second version of this report will be provided, aiming at producing a document framing final guidelines on dissemination and uptake of project research results.

## 2. WATERDISS2.0 IN THE SCIENCE POLICY INTERFACE

The WaterDiss2.0 project is dealing with the Science-Policy interface (hereafter the SPI), and in particular, with the effectiveness of transfer of research results from science to policy and practice in terms of timing. This section aims at gaining a better understanding of the interface between Science and Policy in the WaterDiss2.0 context by looking first at the SPI concept in the water sector and how it has been analysed in previous related studies.

### 2.1. The SPI concept

*Van den Hove 2007* defines the SPI as a social process which encompasses relations between scientist and other actors in the policy process, and which allows for exchanges, co-evolution and joint construction of knowledge aiming at enriching decision making.

An example of a project working in the field of SPI in the water sector is the *IWRM-net* project, (*Amorsi N. et al, 2009*) which aims to improve the quality of policy decisions through the provision of scientific evidence as well as the uptake of scientific outputs by policymakers and implementers. Yet working on “science-policy interface” may often simply mean working on improving the uptake of scientific outputs by policy.

Maximizing connections between research and policy will require mechanisms to improve how knowledge is flowing among them. However, today the flow of information cannot be seen as a linear process but as complex, interactive, multidirectional exchange of information (*Caplan 1997, Figueroa et al 2002, van Kerkhoff and Lebel 2006*). The SPI is thus a complex dynamic system where many interactions at different levels of knowledge take place. In the *IWRM-book* some particularities are described for the specific case of Water SPI (considered in the context of the implementation of WFD), which are summarized as following:

- There is a convergence on differences in dynamics, expectations and language. The scientific community normally offers new knowledge and evidence, but also creates new questions demanding more research. Policy is governed by a constrained timeline, in this case the timeframe of the water directives. There are also differences in the language and understanding of conceptualities.
- The complexity of integrated water management in general and the implementation of the Water Framework Directive are a challenge for communication. In water sector, there is a large variety of scientific disciplines, geographical sizes and contexts and thus, different societal dynamics (institutional, cultural settings, diverse stakeholder integration).

- The lack of an overview of existing knowledge, and the fact that this knowledge is not always appropriate to be taken up by policy.
- The difficulties in aligning research with applications which cover the needs of policy.
- Due to the focus on implementation of the WFD, there is an urgent challenge of programming research that meets the policy needs.
- At the SPI level there is one fundamental problem related with the confluence of different drivers. Policy makers are driven by societal needs and strategies, whereas research is normally motivated by curiosity.
- Several mechanisms are in place to improve the water SPI and thus, the implementation of WFD.

Figure 1 shows the process of intersection between science and policy and the main connections with regards to knowledge flow in a simplified version

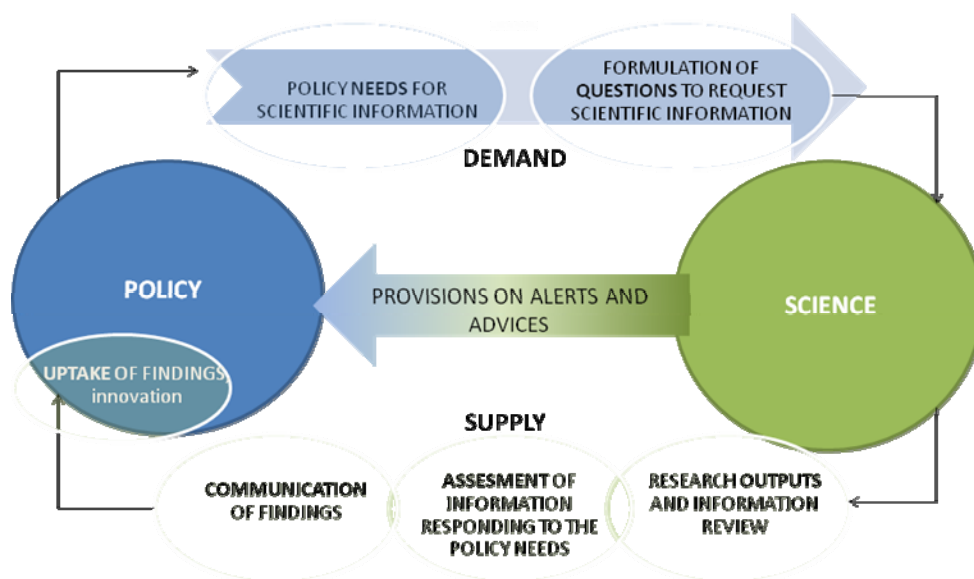


Figure 1. Overall conceptual framework for science-policy interactions (adaptation from IPBES, 2009)

How science interacts with policy and policy with science is a matter of demand and supply of knowledge. The *PSI-CONNECT FP7 project* underlines in its *Report on conceptual framework for science-policy barriers bridges 2010* that policies are developed to affect decisions at operational level, that in turn will affect conditions of the “real world”. On the other hand information feedback from the real world is framed into policy problems and needs of more knowledge. These policy needs are translated to the science as questions requesting scientific answers. From the science side, new knowledge is developed and produces scientific results and evidence. It is important to consider the information flow from science to policy development, when providing advices and alerts directly.

Facilitating knowledge transfer is particularly challenging given that the water sector is broad, fragmented and diverse, as indicated in the *Report of the Priority for Action from the 6<sup>th</sup> World Water Forum SERP10*. Thus, an effective dialogue between the research, industry and policy makers is crucial.

## 2.2. The position of WaterDiss2.0 in the SPI concept

On the graph of the SPI process (Figure 2); one can specify the area of activity of WaterDiss2.0. This is where science, which produces outputs, communicates these outputs to policy. WaterDiss2.0 supports scientists and knowledge drivers to speed up this process and act as knowledge brokers, basing activities and recommendations on the previously acquired knowledge concerning the communication flow from policy to science.

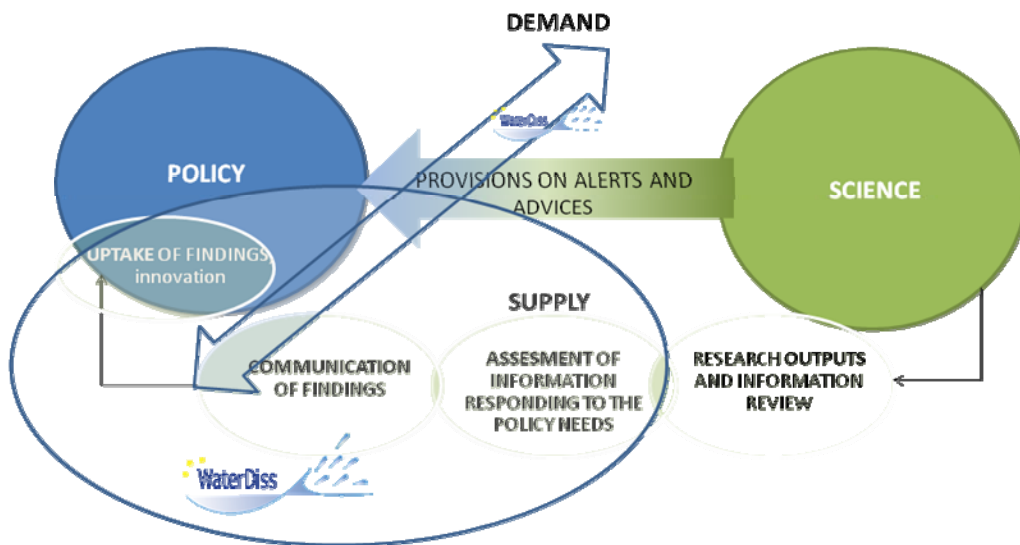


Figure 2. Waterdiss in the SPI

WaterDiss2.0 is indeed dealing at the level of research projects (especially those in the Framework Programme from the EC) supporting them in some steps of the above figure:

- Assessment of information generated from the project in order to respond to the policy needs.
- Communication of those findings to Policy. Support to the existing dissemination activities.
- Facilitating the uptake of the selected output
- By doing the above mentioned activities WaterDiss2.0 will also ensure and improve the communication with the 'Demand'-side, as we will identify their current needs and try to suit them with the new solutions offered by the research projects.

McNie 2007 states that there is now an emerging awareness that new tools for effective and timely communication of research findings are critically needed. Thus, the main aim of WaterDiss2.0 is to prove their contribution to SPI by consolidating an intermediate step just after research in close relation with stakeholders.

## 3. THE PROCESS OF DESIGNING GUIDELINES AND RECOMMENDATIONS

This section refers to the contextualization of recommendations that WaterDiss2.0 can produce in the water sector, by first identifying who are the potential audiences in this project, and secondly by agreeing what are the expected contributions for each of the audiences while integrating results lessons learned from previous analysis in WaterDiss2.0.

In the attempt to match previous similar works, *Shanley 2009* indicates recently developed guidelines for dissemination of research results and published advice for improving the impact of research through communication for development. Such guidelines are provided amongst others by the Overseas Development Institute (Hovland 2003, 2005), International Development Research Centre (Gauthier 2007), the FAO (2003) and the International Union for Conservation of Nature (Goldstein 2006), as well as organizations set up specifically to foster communication for development, such as the Communication for Social Change Consortium (*references included in Shanley 2009*).

Going beyond above mentioned initiatives, there is still a need in providing feedback and experiences to validate those guidelines and propose new ones, which is one of the goals that WaterDiss2.0 is pursuing, with specific attention to EU funded FP6 and FP7 research.

During this period, we have gained observational evidence that allow us to start providing first recommendations. At the last Executive Board meeting held in May 2012 in Paris, some questions were raised by the project partners such as:

*What can we provide recommendations on? To whom will they be addressed: scientist, policy, EC, SPI-group? Is there enough evidence to start building this set of guidelines? What processes of the SPI concept can we improve?*

Following sections are aimed at answering the above questions and, subsequently, at framing the WaterDiss2.0 Guidelines.

### 3.1. WaterDiss2.0 target groups: to whom are we addressing the recommendations?

The results and activities of WaterDiss2.0 can influence the following groups:

- The “**knowledge makers**”, (namely the scientists). This group involves researchers in consortium of FP projects (possibly also other research funding programmes). This group comprises relevant actors in the field of research, who is producing new outputs and innovation for the improvement of the water sector.



WaterDiss2.0 aims at assisting some of these knowledge makers by developing IDS.

- The “**knowledge users**”, (namely the policy-makers and practitioners). This target group comprises actors who will use the above mentioned new knowledge from research activities. This group involves:
  - a. Policy makers at local, regional, national and international level.
  - b. Practitioners in the water field (industry)
  - c. Other stakeholders in the water field, such as suppliers of technology, consultancy services, etc.

Even though the WaterDiss2.0 methodology is more oriented at the knowledge makers, its activities directly influence all target groups. An example of the outreach to target groups is the dissemination activities. Evidence from WaterDiss2.0 activities suggests, that the project has an impact on the target group through:

- The provision of new knowledge in terms of research outputs from the list of projects we are analysing.
  - A better characterization of targets thanks to the matrix of tools and actors.
  - An in-depth understanding of the projects WaterDiss2.0 is responsible for and the development of Individual Dissemination Strategies, which help to guide projects towards uptake of their research results.
- The European Commission and other **funding bodies**. This group refers to the developers of strategic research agendas and providers of funding. The final results of WaterDiss2.0 aim at providing guidelines on core elements to better draft dissemination strategies for future research project answering the funding calls, which might also help the proposal evaluation process.
  - **The Knowledge brokers<sup>1</sup>, including SPI groups (Water SPI cluster<sup>2</sup>, CIS-SPI group<sup>3</sup>)**

WaterDiss2.0 keeps in permanent contact with this group. The results from WaterDiss2.0 activities include the following achievements: exchange of new experiences and evidences and the provision of new knowledge (Outputs list, contacts, etc.) and methodologies and tools, as well as a strategy template, which act as guidelines for all stakeholders for the design of a dissemination strategy.

## 3.2. Topics for recommendations: on what can we give recommendations?

- How to create and implement better **dissemination strategies** in research projects.

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<sup>1</sup> Brokering is defined as going beyond knowledge transfer, signifying people who act as catalysts and ‘search out knowledge, synthesize research and scan for best practices and examples from outside their organisations’ (CHSRF 2003).

<sup>2</sup> <http://www.spi-water.eu/spi-water.cgi>

<sup>3</sup> <http://www.iwrm-net.eu/node/14626>

One of the tools WaterDiss2.0 is developing is the IDS, which gives guidelines and protocols on how to plan and implement dissemination strategies, adapted to the specific needs of each research project.

Recommendations on this will be set at the 3 stages of a research life:

- a. When writing the proposals
  - b. When planning the dissemination strategies
  - c. When implementing the activities
- It is outside the scope of WaterDiss2.0 to produce tools on how to better identify **market needs**. However, the project aims to analyse the needs of the **potential users groups** and provides knowledge for both, the researchers and the practitioners and policy-makers on their different needs and attitudes and how to overcome these. WaterDiss2.0 tries to reduce the distance between the two ends of the multi-directional knowledge transfer process, by promoting research outputs, collecting feedback, presenting knowledge in an innovative way and providing all stakeholders with a platform for communication, etc. In that sense we might be able to provide recommendations on how to better reach the groups, which channels match better, etc.
  - WaterDiss2.0 will propose a **core model-article** that can be added in the research contracts from approved proposals of funding programmes, aiming at minimizing obstacles and raising the awareness of the research teams.
  - As WaterDiss2.0 activities are framed in the SPI activity area, contributions for this group are the following: new knowledge, new methodologies and a strategically developed approach, which has been tested with real cases. This enables WaterDiss2.0 to validate the assumptions and theories made at the beginning of the project.

The table below shows the match between our target groups and our expected outputs and results.

To whom	On what
Knowledge makers	Dissemination strategies
Knowledge users	How to better reach them, how to better provide them new knowledge and involve them in research actions.

Funding bodies (EC)	Guidelines to be added to research contracts (Core model-article format)
Knowledge brokers (including SPI experts)	New methodologies for dissemination, new results on recent experiences.

Table 1. Relation between our target groups and our expected outputs and results

## 4. PRELIMINARY LIST OF RECOMMENDATIONS

This section delineates a range of preliminary recommendations for the success of dissemination activities of research outputs and their further uptake. The insights gathered through the project activities generated evidence and observations by WaterDiss2.0 project partners. Moreover they provide useful guidance that project tools are usable across a broader spectrum of our scope.

The evidence gathered by the project activities are presented here in the form of recommendations, and are clustered in three types of evidence covering all implemented project activities:

### 4.1. Following the analysis of dissemination and uptake of FP projects outputs

The process of analyzing FP6/FP7 projects has been conducted in WP1 and has produced an in depth analysis of the dissemination practices carried out by projects so far. It is important to recall the challenges the WaterDiss2.0 team encountered in this task. The main difficulties were:

- To establish collaborative working relationships with project coordinators.
- To learn about the process of dissemination and uptake of recently finished projects and draw the first approach on barriers and facilitators.

Having learned from these challenges, WaterDiss2.0 could draw the following preliminary recommendations:

#### THE PROCESS OF CONTACTING AND GET COLLABORATION WITH PROJECT COORDINATORS

- ✓ In the process of creating the Individual Dissemination Strategy (IDS), it is crucial for its success to establish **trust** between the project coordinators and the WaterDiss2.0 partners to ensure that we receive a maximum of answers.
- ✓ It is crucial for the success of the IDS to communicate to project coordinators a **clear message** on the *knowledge broker services: what can we do for them? What are our tools? What is our goal?*
- ✓ To ensure project coordinators' **availability and capacity** to devote time to support the further disseminations and uptake actions. Important is contacting them in early stages of the research project. Getting in touch with FP project coordinators for knowledge brokerage of research result is a big barrier, since they lack the capacity to devote time to this activity.
- ✓ Project coordinators are better involved in the dissemination activities when they are

well guided.

#### THE PROCESS OF IDENTIFICATION OF BARRIERS AND FACILITATORS FOR UPTAKE<sup>4</sup>

- ✓ It is important to **take into account the barriers and facilitators** when drafting an IDS. Knowledge brokers can support project coordinators with these facilitators and barriers for uptake to identify the potential risks for the prospective outputs of the project.

## 4.2. Design and preparation of the IDS

This section provides some insights for recommendations from one of the project's central task. After the collection of information on FP6/FP7 research projects outputs, WaterDiss2.0 aims at analysing the potential future of the outputs and designing an Individual Dissemination Strategy (IDS)<sup>5</sup> for each project and chosen output.

#### The step of selecting the project outputs for further uptake

- ✓ Not all research outputs are ready for uptake therefore not all shall be further disseminated. The identification of research outputs and the selection for further dissemination needs to be based on some **criteria**, those are the following:
  - Need/importance of an output in the political agenda or for specific target audience.
  - Status (readiness to use) of output.
  - Affinity of research project coordinator / team towards promoting a specific output.
  - Transferability of the output.

(Note: For the outputs that are not ready to use, WaterDiss2.0 helps project coordinators to identify this issue and can recommend the search for a follow-up project or the formulation of a new research need, directed at scientists).

#### The step of characterising the target audience for a research output

- ✓ Characteristics of the target audience such as their level of innovativeness are a large determinant of the level of uptake an output can achieve. Thus, **early characterization** of target groups is important in order to explore and integrate their knowledge needs, i.e. during the drafting research project process (proposal stage).
- ✓ Being very **specific** in the target group identification, and enhancing personal relationships with target audiences during project lifetime. Going beyond their

<sup>4</sup> More detailed information on this result in Deliverable 1.2 of WaterDiss2.0 project

<sup>5</sup> More information on the process of designing an IDS at

invitation to consortium meetings.

- ✓ The success of **involving** target audiences in the project consortium has proven extremely successful. Thus, choosing the right representatives who are able to uptake the results will define the success of the transfer of the research results.

#### Further steps Planning dissemination goals, timing, ...

- ✓ **Creativity** is an important ingredient but also having in mind the best dissemination practices.
- ✓ Planning **human and economic resources** according to the dissemination planning. However keeping a certain level of flexibility as this process involves the social context and is very dynamic and might change the project's needs.

### 4.3. Following the success of WaterDiss2.0 dissemination practices

The purpose of the communication is to maximise the value and uptake of the science/technology through the application of results whenever and wherever appropriate, in order to secure social, environmental and economic return for the EU. WaterDiss2.0, with its activities intends to implement knowledge exchange (KE), public engagement (PE) and communication and dissemination of the research results by developing dissemination tools and organising events.

At this project stage, this activity is in early development, and most of the observations and results the WaterDiss2.0 team have gathered are preliminary. Therefore most of the below recommendations belongs to the stage of planning and organising dissemination practices.

#### Planning dissemination actions and using dissemination tools

- ✓ Actors involved in connecting science and policy should have communication and facilitation skills. **Communication experts** can support the identification of final users, how and when to launch the dissemination strategy, how to better use Web 2.0 tools, etc.
- ✓ **Using Web 2.0 tools** requires more time for a wider implementation. However some actions can maximize their use: communication experts shall assist web2.0 users on a regular basis. Implementation and development of communication tools means investment in terms of resources for facilitation and technical assistance.
- ✓ **The dissemination messages** should be adapted according to the output/content to be disseminated and to your audience. Anticipate your messages before events take place.
- ✓ When **preparing a dissemination event**:
  - Ask target audiences before the event what their expectations towards the event are and identify their needs (awareness, learning, discussion...).

- Remind yourself and others, that events are not the unique way to communicate –to reach target audiences it is important to identify and use the existing dissemination channels and the ones the target users are using.

## 5. LITERATURE

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