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

## **Deliverable D4.4 *Exploitation Plan***

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## 1 Introduction

This report presents the Exploitation Plan for the future sustainability of The WaterInnEU Marketplace beyond the end of the current project, which is due for completion at the end of February 2017. It builds on the experiences and the integrated outputs from preceding Work Packages and project activities, and takes into account the broader commercial environment within which it will operate, and the individual skills and aspirations of the Consortium Partners.

A number of potential options for future exploitation of the project outputs are available, including:

1. As a Consortium, launch a commercial platform, with/without third parties, and with the expectation of generating income from the platform and follow on revenues from the individual companies served.
2. Partner/align directly with another existing public sector platform, with the individual Consortium partners retaining an active involvement in the next stage, but less than in 1.
3. 'Hand off' the platform to an independent third party with no involvement of the Consortium Partners beyond transition support.
4. As a Consortium, seek an appropriate call to bid for further EU funding to take the Marketplace to the next level, or to a different market segment.

This report presents the evidence base to inform the development of the most appropriate and realistic Exploitation Plan for the Consortium.

Section 2 provides an overview of the competitive landscape within which The Marketplace will go to market. Specifically it reviews the competing platforms and organisations targeting similar and adjacent markets (many of which are also funded by the Commission), and summarises key information relating to their propositions.

Section 3 presents the basis for competitive advantage of The Marketplace, and identifies the 'best fit' organisations that could present opportunities for strategic partnership.

Section 4 presents an overview of the relative skills and aspirations of the individual partners in the future exploitation of the project outputs.

Section 5 then describes what further action is required to achieve a competitive solution(s) for the target markets identified, with the identification of practical issues associated with the operationalisation of these plans, including what skills outside the current Consortium are required, and associated cost.

'Best fit' strategic options are defined – together with current status of discussions between parties, together with the key next steps for market transition (Section 6 & 7).

Finally, Section 8 provides summary conclusions and recommendations regarding the future sustainability of The Marketplace.

## 2 Market Analysis

The WaterInnEU project was developed and commissioned with the specific objective of addressing a perceived unmet need for support mechanisms to accelerate the market translation of outputs from previously EU funded R&D projects, with a specific emphasis on tools and

products of relevance to River Basin Managers, and the implementation of the Water Framework Directive.

At the outset of the project, the potential to align our activities with the EIP for Water was identified as important. Initial discussions were held with representatives of the EIP to explore potential future synergies with their online marketplace which was in a relatively early stage of deployment. As described in D 6.2, on-going discussions have been held primarily with regard to the technical compatibility of the two platforms and the potential for a loosely coupled approach between the two platforms for future deployment.

However, over the subsequent 18 months, it has become apparent that there are a relatively large number of additional projects, organisations and companies with similar offerings within the overall competitive landscape in which The Marketplace is operating. Many of these are also funded by the European Commission, some by national programmes and a small number by commercial organisations. Many are operating on a pan European basis.

It is important to understand the relative strengths and weaknesses of each of these if WaterInnEU is to be able to define a clear competitive advantage, and business strategy for future exploitation.

## **2.1 Market Overview**

An overview of the most relevant competing platforms and organisations targeting similar and adjacent markets is summarised in Table 1. It identifies the attributes of 30 platforms (including the EIP for Water) and includes an initial assessment of the potential overlap with, and differentiation from the WaterInnEU Marketplace.

## **2.2 Insights for the Exploitation Plan**

- There are a large number of potentially competing platforms and organisations, the majority of which are related to specific parts of the water sector, or aligned with a specific strategic objective/theme. This results in a fragmented market, and is potentially confusing from the point of view of end users.
- Several of these platforms are interlinked, although the nature and depth of the interfaces are not always apparent, e.g. Water Supply and Sanitation Technology Platform (WssTP), @qua network and International Water Observatory (IWO) are all linked via the WIDEST project.
- Many of the platforms are relatively passive, focused on presenting and providing access to publicly available data and market information via some form of 'shopfront'. The majority aim to fulfil some sort of knowledge transfer function via community fora, workshops and other events (hosting or signposting), working groups and training.
- A smaller number are seeking to provide technical/commercial support services, including matchmaking between innovators and end users, although in several instances the precise nature and quality of these is not readily apparent.
- The business models adopted are variable, and in some cases not transparent. A number are clearly subsidised by public money, some charge a membership fee for signing up to the platform. Others are funded by large commercial end users, e.g. TAG, whilst others appear to operate the platforms as a 'loss leader' ahead of generating downstream commercial fees from services, e.g. Venturi.

- At least eight of these platforms potentially have significant overlap with WaterInnEU, although scope for differentiation/additionality does exist.
- In such a crowded market place, it would appear to be more appropriate to seek to align/partner with one or more existing entities to gain scale and credibility, as opposed to seeking to compete directly.
- This approach would also ensure that, as far as possible, resources are not wasted on duplication.

**Table 1 Overview of Potentially Competing Platforms**

Name	Owner / operator	Funding*	Status**	Geographical reach	Overlap with WaterInnEU	WaterInnEU differentiators
<b>@qua Network<sup>1</sup></b>	<p>The @qua Network aims to promote the uptake of ICT solutions in order to address the fundamental problems of efficiency, faced by public and private services of the water management domain in providing information related to implementation and uses of ICT solutions. The expected impact of the @qua network is the creation of a collaborative framework, at the EU level, for sharing, defining and validating interoperability, standards and architecture for ICT solutions in the water domain.</p> <p><b>Aligned with WIDEST. Network rather than platform, but could be potential partner?</b></p>					
	@qua project	EU	L	Europe	Med <ul style="list-style-type: none"> <li>• Promotion of ICT solutions for water</li> <li>• Increasing interoperability</li> </ul>	<ul style="list-style-type: none"> <li>• Products and services</li> <li>• Focus on RBM</li> <li>• Support services</li> </ul>
<b>AquaKnow<sup>2</sup></b>	<p>AquaKnow is a dynamic platform for sharing knowledge on water sector related issues. It is a space for gathering and providing dynamic tools to manage scientific and technical information. 1. Knowledge management: news, events, library, training, <b>databases and tools</b>. <b>These areas are populated by and directly updated by users and members</b>. 2. Community: networking and online exchange of information (e.g. working groups – created by users).</p> <p><b>Strong emphasis on developing world.</b></p>					
	Joint Research Centre of Ispra	EU	L	Global	High <ul style="list-style-type: none"> <li>• Capacity building</li> <li>• Knowledge sharing</li> <li>• List of tools (appears rather random)</li> <li>• User input</li> </ul>	<ul style="list-style-type: none"> <li>• River basin focus</li> <li>• Services for entrepreneurs and end users</li> <li>• European focus</li> </ul>
<b>CEH Data<sup>3</sup></b>	Aims to make available long-term national environmental datasets under an Open Government Licence.					
	CEH	Pu	L	UK	Low <ul style="list-style-type: none"> <li>• UK-based datasets of use to RBM</li> </ul>	<ul style="list-style-type: none"> <li>• Products and services</li> <li>• Focus on RBM</li> </ul>

<sup>1</sup> <http://www.a-qua.eu/>
<sup>2</sup> <http://aquaknow.net/>
<sup>3</sup> <http://www.ceb.ac.uk/data>



<b>China Europe Water Platform<sup>4</sup></b>	The objective of China Europe Water Platform (CEWP) is to promote policy dialogue, joint research and business development (tech transfer) in the water sector, through analysis, workshops, conferences, study tours and joint projects. River basin and flood management is one of four main focus areas.						
	Ministry of Water Resources (China); Ministry of Environment (Denmark)	Pu, EU	L	Europe and China	Med	<ul style="list-style-type: none"> <li>• Links to information on doing business in China</li> <li>• Links to organisations that can provide support for SMEs</li> </ul>	<ul style="list-style-type: none"> <li>• Products and services</li> <li>• Focus on RBM</li> <li>• Support services</li> </ul>
<b>CUAHSI<sup>5</sup></b>	The CUAHSI Water Data Center (WDC) provides data services to the hydrologic science community. Funded by the National Science Foundation and members. The majority (>100 members) are from US, 9 universities from Europe. Primary function is access to the Water Data Centre. For example, members can search, download, and visualize physical, chemical, and biological data from the HIS Central Catalogue (using Hydroclient). Also offers information on research services, events & training, publications.						
	National Science Foundation	Pu, Pr	L	US	Med	<ul style="list-style-type: none"> <li>• Promotion and use of common standards (including Water ML)</li> <li>• Sharing data sets and data</li> <li>• Exploitation of open source data and models</li> </ul>	<ul style="list-style-type: none"> <li>• Products and services</li> <li>• Focus on RBM</li> <li>• Support services</li> <li>• Business (as well as research) focussed</li> </ul>
<b>DANUBIS<sup>6</sup></b>	An online repository of resources for and about water supply and sanitation utilities in South-East, Eastern, and Central Europe. Water sector organizations can advertise their events and trainings, making the platform a hub for regional knowledge and information. The DANUBIS Data Collection and Management platform is designed as a separate, online data collection and management platform to allow national institutions to easily collect, validate, manage, share and publish utility performance data. Focus is on performance and reporting by utilities.						
	World Bank and IAWD	Pu	L	Eastern Europe	Low	<ul style="list-style-type: none"> <li>• Community and events</li> </ul>	<ul style="list-style-type: none"> <li>• Products and services</li> <li>• Support services</li> </ul>

<sup>4</sup> <http://cewp.org/>
<sup>5</sup> <https://www.cuahsi.org/wdc>
<sup>6</sup> <http://www.danubis.org/>

<b>Datahub<sup>7</sup></b>	Free data management platform from the Open Knowledge Foundation, based on the CKAN data management system. CKAN is a tool for managing and publishing collections of data. It is used by national and local governments, research institutions, etc. Users can browse and find the data they need, and preview it using maps, graphs and tables. The Datahub provides free access to many of CKAN's core features, letting you search for data, register published datasets, create and manage groups of datasets, and get updates from datasets and groups you're interested in. <b>All sectors – very broad.</b>						
	Open Knowledge Foundation	Pu, Pr	L	Global	<b>Low</b>	<ul style="list-style-type: none"> <li>• Sharing data sets and data</li> <li>• Search for data or organisations</li> <li>• Discussion options around each dataset.</li> </ul>	<ul style="list-style-type: none"> <li>• Products and services</li> <li>• Focus on RBM</li> <li>• Support services</li> </ul>
<b>EEA Water Centre<sup>8</sup></b>	The Water Data Centre provides the European entry point for water related data as part of the Water Information System for Europe (WISE). Data available in the form of datasets, interactive maps, indicators and graphs. Primarily aggregated to European level.						
	European Environment Agency	EU	L	Europe	<b>Low</b>	None	
<b>EIONET<sup>9</sup></b>	The European environment information and observation network aims to provide timely and quality-assured data, information and expertise for assessing the state of the environment in Europe and the pressures acting upon it. Eionet is a partnership network of the EEA and its member and cooperating countries. Through Eionet, the EEA coordinates the delivery of timely, nationally validated, high-quality environmental data from individual countries.						
	EEA	EU	L	Europe	<b>Low</b>	None	
<b>EIP Water<sup>10</sup></b>	<p>EIP Water facilitates the development of innovative solutions to address major European and global water challenges. At the same time, the EIP Water supports the creation of market opportunities for these innovations, both inside and outside of Europe. The EIP Water aims to remove barriers by advancing and leveraging existing solutions. This is mainly done via the establishment of Action Groups.</p> <p>Marketplace – ability to search on products, projects, people, organisations. <b>Currently &gt;250 products.</b> Matchmaking function, which enables people to meet each other as well as offer their products. The EIP Water Marketplace enables you to search for colleagues of</p>						

<sup>7</sup> <https://datahub.io/>
<sup>8</sup> <http://www.eea.europa.eu/themes/water/dc>
<sup>9</sup> <http://www.eionet.europa.eu/>
<sup>10</sup> <http://www.eip-water.eu/>

	<p>interest across the entire innovation value chain, as well as offer your products and services. <i>Not clear how you offer products –would need to register. Matchmaking only allows you to find individuals.</i></p> <p>Products and services (i.e. third party consultants) all listed together.</p>						
	H2020	EU	L	Europe	High	<p>Online marketplace which includes:</p> <ul style="list-style-type: none"> <li>• Advanced search for: people, organisations, projects, products.</li> <li>• Use matchmaking facilities to find <i>people</i></li> <li>• Alerts</li> <li>• Community – via user action groups</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on RBM – i.e. more targeted</li> <li>• Support services for businesses and end users</li> <li>• Ability to search by <i>type</i> of product (i.e. software, hardware etc.)</li> <li>• More detail about products (TRL, compatibility etc.)</li> </ul>
<b>EU Open Data Portal<sup>11</sup></b>	<p>The single point of access to a growing range of data from the institutions and other bodies of the European Union (EU). Data are free for you to use and reuse for commercial or non-commercial purposes. The portal provides a metadata catalogue giving access to data from the institutions and other bodies of the EU. To facilitate reuse, these metadata are based on common encoding rules and standardized vocabularies. Provides links to related related open data websites of member states.</p>						
	Publications office of EU	EU	L	Europe	Low	None	
<b>EUROSTAT Open Data Portal<sup>12</sup></b>	<p>Eurostat is the statistical office of the European Union situated in Luxembourg. Its mission is to provide high quality statistics for Europe.</p>						
	EC	EU	L	Europe	Low	None	
<b>Geneva Water Hub<sup>13</sup></b>	<p>The Geneva Water Hub aims to develop the hydro-politics agenda to better understand and prevent water-related tensions between competing uses, between public and private actors, and between political entities and countries. The hydro-diplomacy platform works via:</p> <p>The Networking Platform, to connect and bring together organizations and actors to focus on water, security and peace.</p> <p>The Education and Knowledge component at the intersection of research and political action, for the prevention and management of water-related conflicts, and strategic analysis for evidence-based decision making.</p>						

<sup>11</sup> <https://data.europa.eu/euodp/en/data>
<sup>12</sup> <http://ec.europa.eu/eurostat>
<sup>13</sup> <https://www.genevawaterhub.org/>

	The Think Tank linked to organizations based in Geneva and in Switzerland to function as an independent, neutral platform to better understand, facilitate and mediate water-related tensions and conflicts.						
	WMO	Pu	L	Global	Low	<ul style="list-style-type: none"> <li>• Networking platform</li> <li>• Events and training</li> </ul>	
<b>Global Water Partnership<sup>14</sup></b>	The Global Water Partnership (GWP) is a global action network with over 3,000 Partner organisations in 182 countries. The network has 85 Country Water Partnerships and 13 Regional Water Partnerships. Created to advocate for the implementation of integrated water resources management (IWRM). The GWP ToolBox, is a public, online, up-to-date, knowledge centre with the tools, references, and case studies needed for implementing IWRM. Resources are primarily reports, not products.						
	<b>EC and national governments</b>	EU, Pu	L	Global	Med	<ul style="list-style-type: none"> <li>• Dialogue and knowledge exchange</li> <li>• Events and training</li> <li>• Resource repository</li> </ul>	<ul style="list-style-type: none"> <li>• Products and services</li> <li>• Focus on RBM</li> <li>• Support services</li> </ul>
<b>ICT for Water Observatory<sup>15</sup></b>	<p>A part of the <b>WIDEST project</b> (also linked to ICT4water cluster). IWO aims to promote the dissemination and exploitation of ICT for Water related information and become an aggregator of existing private/public technology, innovation and research advances and trends. The WIDEST project aims to establish and support a thriving and interconnected Information and Communication Technology (ICT) for the Water Community with the main objective of <b>promoting the dissemination and exploitation of the results of European Union (EU) funded activities in this area.</b></p> <p><b>NOTE</b> WIDEST Portfolio objective: 'Produce a portfolio of effective ICT for Water management technologies of varying readiness and propose the methodology to build, update and execute this portfolio.' This task will be guided by a living, updated portfolio of effective technologies of varying readiness. The methodology will have to be developed and shared with <b>EIP smart water technologies activities</b> groups, contributing to EIP objective of increasing the EU export markets in smart water technologies by 25% and cost-efficiency by 30% by 2020. <i>Roadmaps have been written, but no actual portfolio available currently.</i></p>						
	WIDEST project (ongoing)	EU (H2020)	L	Europe	High	<ul style="list-style-type: none"> <li>• Water research documentation, with focus on ICT</li> <li>• Resources – documents and books</li> <li>• <b>Technology portfolio – to be produced</b></li> <li>• <b>MOOCs</b></li> </ul>	<ul style="list-style-type: none"> <li>• Non ICT products and services</li> <li>• Focus on RBM</li> <li>• Support services</li> <li>• Better search facility</li> </ul>

<sup>14</sup> <http://www.gwp.org/>
<sup>15</sup> <http://iwo.widest.eu>

<b>INBO<sup>16</sup></b>	<p>International Network of Basin Organisations. Europe-INBO: The information and the news of the European Basin Organizations Group for Implementing Water Framework Directive. Objectives include Exchange of information, documentation and data, Definition of common standards facilitating data interoperability, Dissemination of information to professionals and decision makers, Decision-making support tools.</p> <p><i>Information, events and news appears to be very high level.</i></p>						
	INBO <sup>17</sup>	M	L	Global	Low	<ul style="list-style-type: none"> <li>• Networking and events</li> <li>• Source of end users</li> </ul>	
<b>IWA<sup>18</sup></b>	Global network for water professionals. Projects and advocacy.						
	IWA (Charity)	Pu, Pr, M	L	Global	Low	<ul style="list-style-type: none"> <li>• Networking community</li> </ul>	
<b>IW Learn<sup>19</sup></b>	<p>IW:LEARN is the Global Environment Facility's (GEF) International Waters Learning Exchange and Resource Network. It promotes experience sharing and learning among GEF International Waters projects, country officials, implementing agencies, and other partners. Goal is to strengthen transboundary water management around the globe by collecting and sharing best practices, lessons learned, and innovative solutions to common problems. IW: LEARN's website serves as the GEF International Waters' premiere archive and data collection service, with numerous Transboundary Diagnostic Analyses and Strategic Action Programmes from projects around the world, case studies and best practices, news and events related to International Waters, and targeted knowledge sharing tools are made available to IW practitioners and the wider public.</p>						
	GEF	Pu	L	Global	Low	<ul style="list-style-type: none"> <li>• Dialogue and knowledge exchange</li> </ul>	
<b>Swedish Water House<sup>20</sup></b>	A neutral platform for Swedish actors interested in international water issues, creating spaces for dialogue, cooperation and knowledge sharing.						
	SIWI	Pu	L	Sweden	Low	<ul style="list-style-type: none"> <li>• Dialogue and knowledge exchange</li> <li>• Events and training</li> <li>• Resources: primarily reports</li> </ul>	

<sup>16</sup> <http://www.inbo-news.org/>

<sup>17</sup> Secretariat based in Madrid.

<sup>18</sup> <http://www.iwa-network.org/>

<sup>19</sup> <http://iwlearn.net/un-water-platforms/>

<sup>20</sup> <http://www.swedishwaterhouse.se/en/>

Switch-on <sup>21</sup>	<p>SWITCH-ON will develop products and services for environmental management and awareness by re-purposing open data and using numerical models in new ways to describe the environmental system and it's variability in space and time. To ensure successful implementation, each product involves a detailed business plan and close cooperation with appointed end-users. The SMEs and service providers are expected to access new markets, increase their competences and achieve more efficient production as a result of the collaboration within SWITCH-ON, which will stimulate the market as a whole.</p> <p>The Switch-on Portal is a well-known “one-stop-shop” with water information and facilitates for community building, which is frequently being visited by water scientists, consultancies and managers. The portal consists of:</p> <ul style="list-style-type: none"><li>• Open Virtual Water-Science Laboratory providing a research infrastructure including data, models and protocols that facilitates collaboration, transparency and repeatable computational experiments among research groups.</li><li>• Open Virtual Product Market with water-information products and services for water managers.</li><li>• Open knowledge brokerage with a virtual meeting place for policy makers, water managers, product developers and researchers with an innovative dialogue on development and marketing of new scientifically sound commercial water-information products and services.</li><li>• <i>Project completing 2017.</i></li></ul>						
	Swedish Meteorological & Hydrological Institute	EU (FP7)	L	Europe	High	<ul style="list-style-type: none"><li>• List of products &amp; services that have been developed within the project by partners</li><li>• All products have associated business plans</li><li>• Improving access to open data</li><li>• Community building</li></ul>	<ul style="list-style-type: none"><li>• Broader range of products and services</li><li>• Targeted support services</li></ul>
TAG <sup>22</sup>	<p>Technology Approval Group (TAG) is a global innovation forum of the world's leading water utilities. TAG accelerates the market uptake of 'step-change' technologies by engaging the industry during the pre-commercial stages of development and by leveraging external investment from venture capital investors. We operate TAG forums for water utilities in different regions around the world. TAG is a forum for connecting innovators with people whose job it is to seek out new technology on behalf of large public and private sector organisations. Individually reaching out to these people through the normal channels is expensive and time consuming. Through TAG we bring them all together in one place, specifically to hear your pitch. The TAG programme is funded by the end-users, over 100 large organisations from around the world. Technology companies participate for free. Innovations are considered purely on technical and commercial merit.</p>						
	Isle Utilities	Pr, M	L	Global	Med	<ul style="list-style-type: none"><li>• Matchmaking pre-approved technologies</li></ul>	<ul style="list-style-type: none"><li>• Direct free access to products and organisations</li></ul>

<sup>21</sup> <http://water-switch-on.eu/products.html>
<sup>22</sup> <http://www.isleutilities.com/services/technology-approval-group>

						<ul style="list-style-type: none"><li>• Direct contact enabled between investors and innovators</li><li>• Webinars / events etc.</li></ul>	<ul style="list-style-type: none"><li>• Community / discussion building</li><li>• RBM focus</li></ul>
<b>The Water Network</b> <sup>23</sup>	<p>The Water Network by AquaSPE AG is the leading online knowledge sharing platform and business exchange for global water professionals. People and content are connected, based on proprietary algorithms and a professional water taxonomy. The smart buyers guide suggests products to people based on personal interest and relevance. Technology providers are matched with potential investors. Content is customized for each person based on their experience, and interests. Companies target promotion of their products, services and jobs by creating a Featured Company Profile. Individual membership is free.</p> <p>AquaSPE staff and consultants provide services to build engaging knowledge sharing communities for the water sector. 1. Community building; 2. Marketing.</p> <p>Note WRC portfolio is a partner (portfolio is a £2.0 million per annum shared-cost research programme, managed by WRC, which helps drive continual improvement and greater efficiencies in the water industry).</p> <p><i>Need to login to see content.</i></p>						
	AquaSPE (Switzerland)	Pr	L	Global	Med	<ul style="list-style-type: none"><li>• Networking</li><li>• Discussions</li><li>• Company profiles</li><li>• List of products and services</li><li>• Matchmaking (auto-mated)</li></ul>	<ul style="list-style-type: none"><li>• Targeted support services</li></ul>
<b>Water Innovation Network (WIN)</b> <sup>24</sup>	<p>The Water Innovation Network (WIN) is a dynamic initiative to bring together the water supply chain and industry to find the solutions to transform today's water industry. Three main areas of activity:</p> <ul style="list-style-type: none"><li>• Access to Anglian Water Experts: Network with Anglian Water decision makers; Reach the right people through submitting your solution.</li><li>• Challenge Alerts: Unique channel offering visibility of your solution</li><li>• News, Insight and Events</li></ul>						

<sup>23</sup> <https://thewaternetwork.com/>
<sup>24</sup> <http://waterinnovation.net/>

	Opportunity Peterborough, Allia, Anglian Water: partnership	Pu, Pr	L	UK	Low	<ul style="list-style-type: none"> <li>• Promotes linkage between innovators, supply chain and end user (utility)</li> <li>• Opportunity to show-case products</li> </ul>	<ul style="list-style-type: none"> <li>• Broader geographical</li> <li>• Broader end user community</li> <li>• Targeted support services</li> </ul>
<b>Water RtoM e-fair facility<sup>25</sup></b>	Project finished 2013. A set of research products or outputs not already on the market relevant to water sector. Data based can be searched but has not been updated since 2013.						
	N/A	EU (Life project)	D	Europe	Low	<ul style="list-style-type: none"> <li>• Products including models, hardware and guidance from previous EU research.</li> </ul>	<ul style="list-style-type: none"> <li>• Support services</li> </ul>
<b>Water Window<sup>26</sup></b>	Portal providing technology solutions and services to specific issues from Dutch companies (approximately 42 listed). Users can post problems, if no solutions are available.						
	No info	Pu, Pr	L	The Netherlands	High	<ul style="list-style-type: none"> <li>• Products and services relating to specific water issues</li> <li>• Information on TRL etc.</li> <li>• Access to contact details</li> <li>• Uploading solutions requires approval</li> </ul>	<ul style="list-style-type: none"> <li>• Targeted support services?</li> <li>• Community discussions etc.</li> </ul>
<b>WISE-RTD<sup>27</sup></b>	The Water Knowledge Portal can be used to locate considerable policy, research and industry resources that can help with water management. It has been designed to disseminate water research outcome and experiences. Acting as a smart switchboard, WISE-RTD provides an easy access to customised selections of information available on the web. The My WISE-RTD community allows you to publish your own research and technological development related information, to easily keep track of the latest information in your particular area(s) of interest and to interact with other members of the community to share knowledge and experiences. <i>Mostly publications, but some tools available. Difficult to see dates associated with products. Many links no longer active.</i>						

<sup>25</sup> [http://www.waterrtom.eu/efair\\_facility](http://www.waterrtom.eu/efair_facility)
<sup>26</sup> <https://waterwindow.org/>
<sup>27</sup> <http://www.wise-rtd.info/en>



	WISE-RTD Association <sup>28</sup>	EU	D	Europe	Med	<ul style="list-style-type: none"> <li>• List of projects</li> <li>• E-learning (for issues)</li> <li>• Self-publication</li> <li>• Community</li> </ul>	<ul style="list-style-type: none"> <li>• WaterInnEU has used WISE-RTD as a major resource for legacy EU-funded projects</li> </ul>
<b>WssTP<sup>29</sup></b>	<p>WssTP was initiated by the European Commission in 2004 for Research and Technology Development in the water industry and was transformed into an independent legal entity under Belgian Law in 2007.<sup>30</sup> Main aims are to: Foster collaborative, innovative and integrated European Research and Technologies Development; Ensure the European Growth and Competitiveness of the Water Sector; Provide Global answers to Global Challenges for the next generations; Address the challenges of an integrated and sustainable management of water resources.</p> <p>Consists of 16 working groups overseen by a steering group.</p> <p>WssTP consists of 161 members and a network of more than 700 individuals from Industry, research, technology providers, policy makers and water users.</p> <p>Since its launch in 2004, WssTP has succeeded in developing a Water Vision, a Strategic Research Agenda, and an Implementation Document, complemented by many thematic publications. Based on these three key documents, WssTP has been proactive in identifying the key research activities and gaps to be filled throughout the water cycle as well as involving the European Water sector and its supply chain in this common water vision.</p>						
	WssTP	EU, M <sup>31</sup>	L	Europe	High	<ul style="list-style-type: none"> <li>• Innovation in water sector to meet end user needs</li> <li>• Community of members</li> <li>• Events and training</li> </ul>	<ul style="list-style-type: none"> <li>• Specific products and services</li> <li>• Targeted support</li> </ul>

<sup>28</sup> WISE (Water Information System for Europe) is a partnership between the European Commission (DG Environment, Joint Research Centre and Eurostat) and the European Environment Agency, known as “the Group of Four” (Go4). It comprises a wide range of data and information collected by EU institutions to serve several stakeholders. EUROSTAT and the JRC Floods portal are also part of WISE.

<sup>29</sup> <http://wsstp.eu/>

<sup>30</sup> The European Technology Platforms (ETPs) are industry-led stakeholder platforms, funded by both private and public sources that develop short to long-term research and innovation agendas and roadmaps for action at European and national level.

<sup>31</sup> WssTP as an AISBL under Belgian Law supports its activities through membership fees.

<b>Venturi<sup>32</sup></b>	<p>Overall aim is to speed up innovation adoption in the water sector by providing an end-to-end identification, evaluation and implementation scheme. Innovations cover water, wastewater, environment &amp; catchment, energy, business management.</p> <p>For companies:</p> <ul style="list-style-type: none"> <li>• A public domain window into the water market driven explicitly by a market pull from end-users - offering insight into their needs.</li> <li>• <b>A triple tiered assessment structure offering first tier free evaluation and free listing of those technologies that match a need and can provide a real solution.</b></li> <li>• A range of paid for support services for companies, including market feasibility studies, verification, independent testing and support with pilot trials. These services are offered by experts at WRc and Arup.</li> </ul> <p>For end users:</p> <ul style="list-style-type: none"> <li>• A public domain window showcasing your needs and opening a gateway to best-in-class technology solutions.</li> <li>• A market-led vehicle for facilitating and managing innovation adoption by creating a steer for technology companies offering diverse innovative solutions, enabling them to operate within a consensus of guidelines derived from your needs.</li> <li>• A robust assessment structure distilling only the best suited technologies for trials while emphasis is put on your benefits and business KPIs.</li> </ul> <p><b>Currently the opportunities are generic – i.e. the end user is not made visible. Also – the ability to contact the company is limited to the website address.</b></p> <p>Approximately 80 innovations (Nov 2016) – mostly technologies. Filtering and searching quite limited (could become a problem as database grows).</p>					
Partnership between Arup and WRc	Pr	L	UK but global aspirations	<b>HIGH</b>	<ul style="list-style-type: none"> <li>• Covers broader range water segments</li> <li>• Services provided to technology companies and end users</li> <li>• Pre-assessment of technologies</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on EU funded products</li> <li>• Potentially a wider European reach</li> <li>• Clearer identification of end users</li> <li>• Clarity on what the technology partner can offer and is looking for</li> <li>• More advanced searching</li> <li>• Potential for discussions</li> </ul>

<sup>32</sup> <http://venturi.driversofchange.com>

<b>WaterJPI</b> <sup>33</sup>	<p>Water Joint Programming Initiative, started Dec 2011. High level aim is to achieve sustainable water systems for a sustainable economy in Europe and abroad. The Water JPI provides an opportunity for broader cross-border cooperation, greater collaboration and a more unified focus on water RDI both in Europe and further afield. Currently twenty partner countries and four observers.</p> <p>Achievements include dissemination of the Strategic Research and Innovation Agenda, common agreement on instruments to be applied by the Water JPI, Joint calls and participation in ERA-NETs.</p>						
	EC	EU	L	Europe	<b>Low</b>	<ul style="list-style-type: none"> <li>• Setting direction for RDI in Water related issues</li> <li>• Platform includes a database on ongoing water projects (research based).</li> </ul>	
<b>Watershare</b> <sup>34</sup> <a href="https://www.watershare.eu">https://www.watershare.eu</a>	<p>Set up by KWR in 2012 to help bring together knowledge associated with all forms of water issues and management from research institutes from around the globe in a form that is readily accessible to end users. It is an international collaboration in which water sector-proven methods, techniques and experiences are shared and applied.</p> <p>Members are therefore primarily research institutes from around the world.</p> <p>Practical tools that have been developed by the research institutes are made available in an easily accessible form.</p> <p>The tools cover current, urgent and relevant water themes: Subsurface Water Solutions, Future-Proof Water Infrastructures, Resource Recovery &amp; Upcycling, Emerging Substances and Resilient Urban Water Management. They can consist of databases, smart data handling tools or modelling tools. Most tools are web-based.</p>						
	KWR	M	L	Global	<b>Med</b>	<ul style="list-style-type: none"> <li>• Aim to provide most up to-date water related <b>tools</b> in a readily available format</li> </ul>	<ul style="list-style-type: none"> <li>• Link between research and end user via services</li> <li>• Better search facilities</li> </ul>

\*Pu = public sector; EU = European Commission; Pr = private; M = membership.

\* L = Live and active; D = data available but no new data being added.

<sup>33</sup> <http://www.waterjpi.eu>

<sup>34</sup> <https://www.watershare.eu/>

### 3 Competitive Positioning

As is evident from Section 2, The WaterInnEU Marketplace is seeking to compete in a relatively busy, yet fragmented environment. To be sustainable beyond the life of the current project, the distinct advantages and additional benefits of The Marketplace need to be clearly articulated, and validated by the activities of the current project.

The fact that WaterInnEU has focused specifically on the needs of stakeholders actively involved in river basin management has been a distinct advantage in the development of a more tailored and 'user friendly' platform. The ability to engage in depth with a specific audience has allowed the project to gain detailed insights in terms of their needs<sup>35</sup>, and this has informed the design and development of the Marketplace, both in terms of functionality, and parallel support services.

#### 3.1 Competitive Advantages - Functional

The technical basis for the Marketplace and its key differentiators are discussed in details in D 6.4 Marketplace Sustainability Report. In summary, the Marketplace provides the following core functionalities:

- browsing by linked categories through products, organisations, service requests, and service offerings
- common panel for upcoming events
- collaborative creation and editing of products, organisations, service requests/offersings and events
- option to subscribe for new products, service offerings, or service requests
- simple keyword search and advanced search facilities
- option to provide user feedback in the form of comments
- forum for open discussions about products or other related information
- learning tutorials on usage of certain products
- using a matchmaking functionality
- contacting an expert with special requests
- provision of an interactive e learning platform.

However, as described in Section 2, there are a number of similar portals offering information about water-related products and services to foster open innovation in the water sector.

Commonalities are the search and browsing of products, services, organisations, projects and events, as well as the option to register as 'user' in order to add content and to contact other users. Basic email alerts are also available in other portals.

Functional differences distinguishing the WaterInnEU marketplace from similar portals are as follows:

1. **Conceptual distinction between products & services:** Several platforms, including the EIP Water platform, treat both products and services as same entry types. In contrast, the WaterInnEU Marketplace makes an explicit distinction between products/services being

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<sup>35</sup> For a detailed description of user needs and requirements, please refer to deliverable D 3.2 ([http://www.waterinneu.org/deliverables/641821\\_D3.2%20-%20Final\\_requirements\\_report.pdf](http://www.waterinneu.org/deliverables/641821_D3.2%20-%20Final_requirements_report.pdf))

promoted by the innovators, and third party service providers who may have the relevant skills and capabilities to support an end user in adopting or implementing an innovation. As an example, the product resulting from a research project may be a new simulation tool that is available as open source software. However, in order to make use of the tool, it needs to be integrated in existing water management software. The integration work may be supported by an independent third party service provider whose profile is included on the Marketplace. Using the conceptual distinction, end users can search or subscribe for certain services offered for a specific product.

2. **Product Specification Sheet (PSS):** Based on the analysis of market requirements, Work Package 4 defined a Product Specification Sheet that specifies the metadata for products based on the users' needs. For example, the stakeholders consulted in WP3 mentioned several times that the potential application and purpose of a product is very important information for them. Though this may be provided in a general textual description of a product, having this information in a dedicated field enables an explicit search for it. A dedicated field also directly provides the information to users without having to search for it in a - perhaps extensive - general description. Similarly, dedicated fields are specified for a number of metadata elements that are considered as important by potential users.
3. **Fine-grained email alerts:** To allow users to receive alerts if new products, services or events are added to the Marketplace or if a certain entry has been updated, the WaterInnEU Marketplace allows for the definition of subscription using different filter options.
4. **Collaborative editing of entries:** The WaterInnEU Marketplace allows for collaborative editing of entries, with the author and moderator roles for registered users defined. By default, a registered user is an author that can add new entries or edit existing entries. In both cases, a moderator checks whether the information of the entry is correct, before it is publicly available in the Marketplace. If a user has created or updated an entry, he is able to use the alerting functionality to subscribe for further edits of this entry.
5. **Support for user feedback:** Registered users can add free text comments to all entry types and can hence provide comments on usability, applications, or any additional feedback. The forum can be used for more general discussions on certain water-related issues. Entries available in the portal can be linked from the discussions in the forum.
6. **Integrated e-learning platform:** The consolidated version integrates the e-learning platform in the Marketplace. This allows providers of products to directly provide e-learning material with these products and potential users of these products to learn more about usage, applications, etc. in the e-learning courses.
7. **Open data access:** The information that is publicly available in the WaterInnEU Marketplace is also provided as open data in a machine-readable way through a well-defined and publicly accessible API. This allows on the one hand that other portals can utilize the API to harmonize their underlying data with the data published in the WaterInnEU portal. For example, in case a product is available in several portals, the other portals can subscribe for new entries in the WaterInnEU Marketplace and can use the API to automatically fetch the new data and integrate it in their own database underlying the portal.
8. **Open source code:** All source code needed for building the WaterInnEU Marketplace is in the GitHub repository <https://github.com/52North/waterinneu> base on a Drupal<sup>36</sup>. This

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<sup>36</sup> <https://www.drupal.org/>

implemented solution follows the EU recommendations of the *Open source software strategy*<sup>37</sup> for ICT services and software solutions.

### 3.2 Competitive Advantages - Services

One major outcome of the project has been the intelligence that a virtual Marketplace alone will probably not be sufficient to facilitate the uptake of water-related innovations. Instead, this requires a combination of support services alongside the virtual Marketplace.

As a result, services developed for the Marketplace include a combination of relatively ‘light touch’ offerings, e.g. the “Ask the expert” option that forwards certain issues to selected experts, with more bespoke ‘hands on’ services and matchmaking activities, including E-Pitching events. In this way, the Marketplace serves as the foundation for a water innovation community, providing an entry point to search for, or get an overview on products, services and events, and to contact product and service providers. In addition, the services provide more detailed information, options for personal contacts and exchange of ideas as well as consulting on how to utilize the products in different environments.

It was envisaged at the outset of the project that demand for the more bespoke services might come from the end users interested in adopting the new products and services. However, in practice it appears that there is likely to be as much if not more demand from the innovators themselves, including assistance in refining their business propositions and support in getting them in front of the right audience. The services offered to date by The Marketplace are described in detail in D 4.2<sup>38</sup>.

Feedback from the first tranche of clients indicates that this support service is valued, in particular having access to an individual contact point who is responsible for a specific PSS and has the contacts and insights to facilitate meaningful interactions between the key parties.

A few of the existing platforms also offer additional service support, but not with such a specific focus on supporting the individual innovators in positioning themselves with potential supply chain partners and end users.

### 3.3 Market Validation

Table 2 below provides a summary of feedback on key elements of the Marketplace proposition that have been tested with end users and stakeholders during the course of the current project. It indicates which features/support they particularly valued, and where future improvement could be best focused. Further detail on individual support to clients is provided in D 4.5<sup>39</sup>.

Key insights include the following:

- There was clearly stronger interest and engagement with the platform and related services from Central and Eastern Europe than from other regions of the EU. It is evident that actors from these areas are keen to access solutions to assist in addressing the needs of compliance with the WFD. In some instances it is apparent that there are fewer existing legacy systems/hardware in place – thereby potential latent market demand is higher. In

<sup>37</sup> [http://ec.europa.eu/info/european-commissions-open-source-strategy\\_en](http://ec.europa.eu/info/european-commissions-open-source-strategy_en)

<sup>38</sup> Please refer to deliverable D 4.2 ([http://www.waterinneu.org/deliverables/DL\\_4\\_2\\_Project\\_integration\\_vFinal.pdf](http://www.waterinneu.org/deliverables/DL_4_2_Project_integration_vFinal.pdf))

<sup>39</sup> Please refer to deliverable D 4.5 ([http://www.waterinneu.org/deliverables/DL\\_4\\_5\\_ReportonUptake\\_vFinal.pdf](http://www.waterinneu.org/deliverables/DL_4_5_ReportonUptake_vFinal.pdf))

some instances these parties lack the necessary funding to support the direct procurement of new products and services, and so would benefit from access to open source resources, signposting to potential low-cost solutions and access to other organisations with which they could potentially partner to access (EU and other) funding. However, cultural nuances need to be accommodated in addressing these markets, such as terminology, language (provision of translation options) and the style of events (e.g. discussion fora).

- Provision of E-learning material is a key differentiator for the market platform, and is a particularly useful mechanism for the promotion of open source materials.
- The E-Pitch events were the most visible and focused support service that was provided on the Marketplace, with numbers registering for the second event significantly higher than the first. Feedback from presenters was clear that they considered it to be an effective and resource efficient mechanism for market engagement across the EU. At the same time, the number and nature of the questions received in the second event indicated that a relevant audience was engaged with an active interest in the products.
- Provision of services to innovators is often spread out over a significant 'lapsed time' after initial contact is made. Iterations of the PSS are typically required before final upload, as is the case when support is provided in the development of case studies, presentations and marketing material. Often this work has to compete with the clients 'day job', meaning it can take some considerable time before a client is ready for active match making support. Subsequently, further lapsed time is required to allow for ongoing discussions and data exchange between parties before any active decision making. Provision of third party facilitation is important at this stage to ensure momentum is maintained. This is discussed further in D 4.5 – Report on uptake of innovation technologies by end users.
- Feedback from the supply chain and stakeholders consulted during this project indicate that – at this stage - few would be prepared to pay fees for accessing the Marketplace and its services. It is anticipated that the portal would need to demonstrate a reasonable track record of success before it could justify charging commercial rates.

However, challenges remain for the next stage of the Marketplace development, including:

1. **Access to a consistent and high quality deal flow** – to date, WaterInnEU has relied upon the historical legacy of previous EU funded projects as its core source of products for the platform. It soon became apparent that a relatively small cohort of these was at an appropriate stage and of sufficient quality to be included on the platform. As a result, other sources of innovations were identified and some screening undertaken, e.g. recipients of H2020 Phase 2 and Climate-KIC funding. Going forward it will be important to identify and formalise a robust pipeline of sources to feed into the platform, which could include aligning with a larger number of current EU programmes and projects, non EU funded initiatives and private sector SMEs.
2. **Demonstration of a successful track record** – as indicated above, the future of the Marketplace will be dependent on its ability to demonstrate – and communicate – its success. The progress achieved by the current project to date has been good, but it is unlikely to be sufficient to underpin a commercially orientated business model in the short to medium term. It is anticipated that further investment of time and resources will be



required over the next 6-12 months to continue to scale the Marketplace, grow the audience and communicate success stories.

3. **Further technical development of the platform** – the Marketplace has been developed as a working prototype, and feedback from the end users and stakeholders indicates several areas for potential future improvement in usability and functionality of the platform to increase its user friendliness and scope of activities. Continual improvement and development is to be expected with any similar platform. Specific areas for short to medium term development have been identified in detail in D 6.4 Marketplace Sustainability Report, including:
- Simplification of adding new entries: Currently, all fields of the product specification sheet are presented in the form for adding new entries. This may be simplified by focusing on the mandatory fields; in addition, a wizard may be implemented that guides users through the process of creating new entries.
  - Simplification of complex search: The complex search requires a number of fields as search parameters. The potential fields are at the moment all listed on top of the products view. A search wizard that guides users through different search fields and presents intermediate results would simplify the search for end users.
  - Automated Linking of projects, products and services when adding new entries.
  - Provision of language translation function: The marketplace already provides multi-language support. However, translations need to be done manually by a translation manager. This may be automated by utilizing translation services available in the Web, e.g. Google translate.
  - Extended administration user interface: Provide graphical user interface for extended functionality, such as selecting the product of the month.



**Table 2 Summary of Market Feedback**

	Comments	Areas for Improvement
Overall experience of the Marketplace platform	<ul style="list-style-type: none"> <li>Attractive layout, clearly structured platform, useful scope and purpose.</li> <li>Functions easy to handle and intuitively designed.</li> </ul>	<ul style="list-style-type: none"> <li>Streamlining, e.g. visibility of the Registration button (see main text and also D6.4 for detail).</li> <li>Language switching functionality would be useful.</li> </ul>
Completion and submission of PSS	<ul style="list-style-type: none"> <li>In total 16 pre-screened PSSs successfully uploaded, of which 3 were completed directly by the product owners.</li> <li>Online submission process generally works well, but subject to areas for improvement.</li> </ul>	<ul style="list-style-type: none"> <li>Simplification of the fields in the form</li> <li>Streamline the ability to save draft before publishing.</li> <li>Lose need to align product with specific EU project.</li> </ul>
Provision of support services	<ul style="list-style-type: none"> <li>A good initial range of support available, as summarised in D 4.2. However, relatively few of the Level 3 services were deployed to date. Services most commonly used were support in the preparation of case studies, marketing materials and presentations for the e pitches. These were well received by the innovators.</li> </ul>	<ul style="list-style-type: none"> <li>Further testing of the Level 3 services and automatic matchmaking services. It is to be anticipated that demand for these would become greater with the maturation of the platform and the propositions presented.</li> </ul>
Presenter at E-Pitch events Two events held, each with four presenters who gave a 10 mins ppt and then took questions via the moderator.	<ul style="list-style-type: none"> <li>Good feedback from presenters who appreciated the opportunity to present to such a geographically dispersed audience. Appreciated the support provided in preparation, e.g. critique of the ppt, and practice run.</li> <li>Webinar is a good format to present and communicate to a European audience without having to travel.</li> </ul>	<ul style="list-style-type: none"> <li>Collate feedback from presenters to inform future improvements.</li> <li>Make sure all participants are muted during ppt!</li> <li>Provide an overview of the audience to better position the presentation (i.e. type of companies, areas of interest).</li> <li>Make the e-pitch more interactive, e.g. organizing for specific topics with a short panel discussing hot issues.</li> </ul>
Participation as audience in E-Pitch events	<ul style="list-style-type: none"> <li>Good, and increasing level of interest, with 46 participants registering for the second. All registrants subsequently provided with ppt and list of Q&amp;A after the event and encouraged to contact the presenters directly.</li> <li>Format well received, and accessibility to innovations that would not otherwise be visible was appreciated.</li> </ul>	<ul style="list-style-type: none"> <li>Give more guidance on how to interact with the session.</li> <li>Make allowance for cultural differences – could even provide translation for specific markets?</li> <li>Shorter individual ppts – max 3 or 4 slides.</li> <li>Format could be improved to encourage audience participation – Q&amp;A, profiles of presenters, etc.</li> </ul>
Interaction with E learning materials (comprises reading and video material).	<ul style="list-style-type: none"> <li>Liked that information in “course structure” can be hyperlinked to relevant part of the course.</li> <li>Videos the most entertaining part and available in HD.</li> <li>Technical quality of the material is good.</li> </ul>	<ul style="list-style-type: none"> <li>Streamline process for third parties to sign up and access the e-learning materials.</li> </ul>

## 4 Future Costs of Delivery

### Technical Support

A detailed breakdown of cost estimates for the future hosting, maintenance and technical support of the Marketplace platform are provided in D 6.4 Marketplace Sustainability Report, and indicate estimated annual **fixed costs in the region of €15-20k**.

The platform would be made available to the host free of any annual license fee.

Additional costs would be associated with further development of the platform in terms of new or improved functionality, such as those described in 3.3 above. It is assumed that these specialist support services would be provided on an 'as needs' basis from the individual professionals from the Consortium Partners (or other third party providers), on a pre agreed day rate basis.

### Professional Support

In addition, it is assumed that a resource will be required to project manage the platform, undertaking day to day management activities including:

- Moderation of new and uploaded content
- Marketing of the platform and networking
- Development and delivery of new events/activities
- Matchmaking services
- Signposting of clients to appropriate support services.

It is foreseen that this could be a part time role, with a fixed labour cost in the region of **€15-20k**.

It is proposed specialist support services would be provided on an 'as needs' basis from the individual professionals from the Consortium Partners (or other third party providers), on a pre agreed day rate basis.

For example, if 30 companies per year received an average of 3 days support (such as preparation of pitch packs, preparation of e learning material, development of case studies and marketing materials) at a day rate of **€500**, this would equate to **an annual cost of € 45k**.

Overall this gives an annual indicative operating cost in the region of **€80-100k, or €30-40k if the costs of specialist support services could be covered separately (e.g. by the SME or a third party source of funding)**.

## 5 Future Aspirations of the Consortium Partners

The Consortium Partners have worked well together over the last two years, and leveraged their respective skills and capabilities to good effect in the development and validation of the Marketplace.

However, as identified in preceding sections, it is clear that further development work is required to ensure the successful market translation of The Marketplace, and this will require time and resources from the individual Consortium Partners, and/or appropriate third parties.

The future aspirations of the individual partners are an important consideration in the development of an appropriate Exploitation Plan. Each Partner has its own strategic objectives and commercial imperatives that influence their decision making. Discussions with each of the Partners, and then together as a Consortium, have defined aspirations for future involvement in the exploitation of the project outputs. These are summarised in Table 2.

**Table 2: Future aspirations for the Consortium Partners**

Organisation	Potential Future Role	Comments	Next steps
<b>adelphi</b>	<ul style="list-style-type: none"> <li>Provision of strategic input to the future direction of the platform, i.e. further development of useful contents and functionalities for supply and demand sides of the Marketplace</li> <li>Commercialisation support services to The Marketplace and its clients (feasibility studies, replicability studies, analysis of market conditions and requirements)</li> </ul>	<ul style="list-style-type: none"> <li>Sees the potential of further development of such a Marketplace.</li> <li>Willing to support next generation activities with all partners as appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Make use of our contacts to other H2020 consortia and to potential end-users in European river basins to further develop an offer which is interesting for potential end-users in terms of functionalities and contents.</li> </ul>
<b>Antea Group</b>	<ul style="list-style-type: none"> <li>Provision of expert services, commercialisation support services and matchmaking services for innovators - end users (depending on business model fit and funding).</li> </ul>	<ul style="list-style-type: none"> <li>Willing to support transition or next generation activities with all partners as appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Support in strategic discussions with prioritised targets.</li> <li>Dissemination of the project and the platform where appropriate.</li> </ul>
<b>CREAF</b>	<ul style="list-style-type: none"> <li>As coordinator, CREAM will maintain the main contact point for interested persons and institutions and CREAM will redirect the potential future collaborations to the corresponding expert partners</li> <li>Dissemination of the main outcomes (i.e. the Marketplace) of the project, also beyond the end of the project</li> <li>Maintaining the collaboration activities in the ICT4Water cluster and WssTP</li> <li>Searching opportunities for adapting the WaterInnEU Marketplace to other sectors, in</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>	<ul style="list-style-type: none"> <li>Presentations in the next ICT4water cluster meetings, commission meetings</li> <li>Presentations in research events related to Water domain, mainly focused to standardization topics</li> <li>Maintain the IT infrastructure of the project.</li> </ul>

	<p>particular to Earth Observation domain</p> <ul style="list-style-type: none"> <li>Find new cooperation opportunities with EIP Water.</li> </ul>		
<b>52°North</b>	<ul style="list-style-type: none"> <li>Dissemination of the main outcomes (i.e. the Marketplace) of the project, also beyond the end of the project</li> <li>Continued IT technical support and development, subject to funding.</li> <li>Searching opportunities for adapting the WaterInnEU Marketplace to other sectors, in particular to Earth Observation domain</li> <li>Continue work on harmonization of metadata about water-related products, projects, and services provided in different portals.</li> <li>Extend some of the components developed in the interoperability pilot.</li> <li>Provide services in the marketplace with regard to standards for measurement data (WaterML) and its Web-based provision/integration (OGC SOS, Clients).</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>	<ul style="list-style-type: none"> <li>Technical support for hosting the platform.</li> <li>Explore options for re-using the technical implementation of the platform (or parts of it) for other domains or applications.</li> </ul>
<b>GWP CEE</b>	<ul style="list-style-type: none"> <li>Capitalisation of the results, mainly the Marketplace, in form of case studies</li> <li>Articles in Water Affairs magazine and Bulgarian newspapers and presentations during Maritsa basin and national water events</li> <li>Facilitate on demand matchmaking between experts/stakeholders of Scheldt/Maritsa river basins and exchange of good practices on WFD/IWRM.</li> <li>Articles on regional website and social media campaigns – Facebook and Twitter</li> <li>Presentation of the project at external events that bring together relevant stakeholders, e.g. Danube Strategy, EUROPE INBO, World Water Week in Stockholm, World Water Forum, etc.</li> <li>Disseminate the results within the GWP network in Central and Eastern Europe and beyond.</li> </ul>	<ul style="list-style-type: none"> <li>There is good scope for expanding to European Neighbourhood Instrument (ENI) East countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine) who are planning to implement WFD.</li> </ul>	<ul style="list-style-type: none"> <li>Articles on the website of GWP Central and Eastern Europe</li> <li>Social media campaign during the World Water Day on 22 March</li> <li>Presentation of the projects and display of printed materials at national (Maritsa River Basin), relevant regional and global events.</li> </ul>
<b>Orion Innovations</b>	<ul style="list-style-type: none"> <li>Dissemination of the main outcomes (i.e. the Marketplace) of the project, also beyond the end of the project</li> <li>Provision of strategic input to the future direction of the platform</li> </ul>	<ul style="list-style-type: none"> <li>Keen to see future market translation of the Marketplace.</li> <li>Willing to support next generation activities with</li> </ul>	<ul style="list-style-type: none"> <li>Support CREAM in strategic discussions with prioritised targets.</li> <li>Explore alternative funding routes.</li> </ul>

	and facilitate discussions with potential strategic partners <ul style="list-style-type: none"> <li>• Development of an appropriate Business Plan for exploitation.</li> <li>• Commercialisation support services to The Marketplace and its clients.</li> </ul>	all Partners as appropriate.	
<b>Randbee</b>	<ul style="list-style-type: none"> <li>• Supporting e-learning – existing and new materials</li> <li>• Promoting youth entrepreneurship and the project in a Europe context and in an international context(outside the Europe)</li> </ul>	<ul style="list-style-type: none"> <li>• Willing to participate in future activities with the Consortium</li> </ul>	<ul style="list-style-type: none"> <li>• User administration management for the e-learning module</li> </ul>
<b>TU Delft</b>	<ul style="list-style-type: none"> <li>• Provision of technical expertise to clients of the Marketplace.</li> </ul>	<ul style="list-style-type: none"> <li>• n/a</li> </ul>	<ul style="list-style-type: none"> <li>• n/a</li> </ul>

## 6 'Best Fit' Strategic Options

Given the current market positioning and future development needs, it is apparent that the Consortium Partners alone (individually or as a collective) do not currently have the scale, resources or reach to effectively deliver the market translation of the Marketplace. Further applications could be made to national and EU funding programmes to support the next stage of development, but this will take time to secure (between 6-12 months), during which the window of opportunity may have been lost.

However, given the market analysis presented in Section 2, and an understanding of the relative competitive advantages of the WaterInnEU platform, it would appear that opportunity exists to align/partner with existing platforms/organisations where there is potential for mutual synergies. Specifically, this could relate to:

- Organisations managing a platform with an appropriate target audience, but currently without a 'marketplace' and/or currently providing limited services in terms of innovation and commercialisation support for their clients.
- Organisations currently operating a platform and marketplace where WaterInnEU would provide a logical 'bolt on' in terms of river basin management focus, functionality/service support, and/or geographic reach.
- Organisations with good reach back into the innovation chain, but without the mechanisms to support market translation.
- Organisations with good reach into Central and Eastern Europe. Evidence from this project has demonstrated that the potential demand for new innovations is greater from these areas of Europe where significant challenges remain in meeting the requirements of the WFD.
- Organizations currently managing water related platforms outside EU, e.g. China Europe Water Platform (CEWP).

The Consortium Partners remain committed to supporting the Marketplace during a transition period whilst an appropriate partner is secured, and providing future 'hand off' or support services as appropriate.

On this basis, the following organisations have been identified as potentially 'best fit':

- **EIP for Water** – potential additionality in terms of functionality and services to their existing on line Market Place, and to specifically support the implementation of the WFD in river basins.
- **ICT4Water Cluster** – potential for the Marketplace to become the 'market translation hub' for the cluster, and with good connectivity into other organisations via WIDEST (below).
- **JRC** – as an active player in the generation of new innovation for the EU, with several of their open source products having been promoted via the Marketplace, it was considered appropriate to discuss potential options for collaboration on the future of the platform.
- **Switch-on** – a potential source of new tools from its own internal projects, and operates a very similar platform to WaterInnEU.
- **WIDEST** – potential for the products and services associated with WaterInnEU to be linked to the 'portfolio' being produced by WIDEST, the research resources collected by the IWO and the collaborative framework from @qua network. Strong links with ICT4Water Cluster.

- **WssTP** – linked to WIDEST and EIP for Water, but also specifically the TECHWATCH working group which has significant potential overlap with WaterInnEU. Good potential to act as a central ‘Hub’ for several of the key EU sector organisations.

In addition, Corporates or a large Membership Organisation may be potential partners. There is evidence that a few similar platforms are being operated by organisations either as a direct revenue generating opportunity, or as a marketing tool related to their (or their members’) core business activities e.g. environmental engineering firms. The Marketplace may be of interest to a large organisation in this regard.

Potential models to be discussed are likely to include the following:

- a. Package up the Marketplace and ‘hand off’ to the third party to take forward independently. In this instance the Consortium would provide some transitional support but no longer term involvement.
- b. Some form of collaboration partnership where The Marketplace would be ‘bolted on’ or integrated into the existing platform, and run (or supported via service contracts) by the Consortium Partners (or a subset thereof).
- c. The Consortium continues to run the Marketplace independently on behalf of a third party (i.e. outsourced model).

Summary propositions were prepared for the key target audiences and forwarded to individual organisations for discussion (see Appendix A – Public Sector Partner and Appendix B – Corporate Partner).

Table 3 provides a summary of the current status of discussions with relevant key parties at the end of the projects.



**Table 3 Status of Discussions**

Comments	
<b>Priority Targets for Partnership:</b>	
<b>EIP for Water</b>	<b>Key Contact: Guido Schmidt.</b> During the course of the project it has not been possible to secure engagement with the EIP for Water platform to allow for the development of a directly compatible architecture. In addition, several email exchanges have indicated that, whilst they acknowledge some of the benefits of the Marketplace, there is no interest in future collaboration.
<b>WssTP</b>	<b>Key Contacts: Durk Krol and Gaetano Casale and Mtserrat Musssons</b> CREAF is member of the WssTP, Lluís Pesquer is member of its ICT & Water Working Group and CREAF will continue to disseminate the WaterInnEU outcomes in the WssTP and explore the potential for collaboration. CREAF will participate in the next Open for Water Market Europe, 28 March 2017 WssTP event.
<b>ICT4Water</b>	<b>Key Contact: Gabriel Anzaldi , Lydia, S. Vamvakeridou-Lyroudia and Sander Smit</b> Alison Cavey to attend ICT4Water Cluster meeting in London on March 2017 to pursue discussions. Christoph Stasch, Joan Masó and Lluís Pesquer will keep working in Interoperability issues with Gabriel Anzaldi and Xavier Domingo (eurecat).
<b>JRC</b>	<b>Key Contact: Cesar Carmona.</b> Cesar Carmona is member of WaterInnEU Advisory Board and CREAF and RandBee have had initial discussions regarding potential collaboration.
<b>Switch-on</b>	<b>Key Contact: Berit Arheimer</b> This project is also reaching the end of its contract with the EU so it may be assumed that they are exploring their own options for future sustainability. Therefore agreed that initial contact will be established by CREAF.
<b>Antea Group</b>	<b>Key Contact: Renaat De Sutter.</b> As a large commercial organisation active in water and wastewater management, as well as a key Consortium member, Antea Group was approached to explore whether they may have a longer term interest in developing the platform. Whilst they see the potential, and are prepared to undertake the role of host on an interim basis, they are not in a position to take permanent ownership of the Marketplace.
<b>Next Targets for Partnership:</b>	
<b>The Water Network</b>	To be contacted
<b>Watershare</b>	To be contacted
<b>Waterwindow</b>	To be contacted
<b>Corporates</b>	Initial discussions to be had via ICT4 Water Cluster to see if any corporates within the cluster may be potential partners. Others to be identified as appropriate by Consortium Partners.



## 7 Next Steps

The priority for the next stage of exploitation of the Marketplace is to secure a long term sponsor/owner of the platform, and for the Consortium to provide the appropriate transitional support to ensure its successful hand over, or an appropriate joint development model.

The Consortium Partners are committed to continue to support the operation of the Marketplace at their own cost over the next 4 months (to the end June 2017). During this time, the Marketplace will remain active, with the Partners continuing to develop some new content (such as blogs, uploading new PSS, and News items) and responding to any interaction from the market. 52°North will continue to host the platform and provide interim technical support services. Antea will lead in the provision of any specialists support services, and will call on the services of the other Consortium Partners as required. CREAM will continue to lead discussions with potential third parties, involving the other Partners as appropriate.

In the longer term, the Consortium is committed to maintaining the WaterInnEU public web site for at least two years beyond June 2017. After this date, without a new Sponsor or source of financing, no further new content will be developed for the Marketplace.

## 8 Conclusions and Recommendations

The WaterInnEU Marketplace is now operational and has received good initial feedback from its first tranche of clients. However, it is operating in a fragmented and competitive market landscape, with a myriad of similar looking portals. Review of these has indicated a potential overlap in a number of instances, although it is clear that there are some key technical and service provisions that are potential differentiators and that are valued by the market. Consultation with potential end-users (both product owners and river basin managers) has identified some key challenges when seeking to source new solutions to fulfil the requirements of the WFD. Adopting a strongly user-centred approach – as has been the case with the Marketplace – has allowed for the development of a focused and efficient vehicle for dissemination and market translation of innovation.

Analysis of the other portals also indicates that few are operated on a truly commercial basis, and some may in fact be operated as ‘loss leaders’ or as a marketing tool for the organisations involved, offset by associated downstream consulting revenues. Feedback from the supply chain and stakeholders consulted during this project indicates that – at this stage – few would be prepared to pay fees for accessing the Marketplace and its services. It is anticipated that the portal would need to demonstrate a reasonable track record of success before it could justify charging commercial rates to its community.

Several key challenges remain for the next stage of the Marketplace development, including:

1. **Achieving a consistent and high quality deal flow** – to date, WaterInnEU has relied upon the historical legacy of previous EU funded projects as its core source of products for the platform. It soon became apparent that a relatively small cohort of these was at an appropriate stage and of sufficient quality to be included on the platform. As a result, other sources of innovations were identified and some screening undertaken, e.g. recipients of H2020 Phase 2 funding. Going forward it will be important to identify and formalise a robust pipeline of sources to feed into the platform, which could include aligning with a larger number of current EU programmes and projects, non EU funded initiatives and private sector SMEs. There would be significant benefit in developing a single platform that can act as a central ‘curator’ of deal flow from early stage product development from across the EU water sector.
2. **Demonstration of a successful track record** – as indicated above, the future of the Marketplace will be dependent on its ability to demonstrate – and communicate – its success. It is anticipated that further investment of time and resources will be required over the next 6-12 months to continue to scale the Marketplace, grow the audience and communicate success stories. Importantly, this also allows for an appropriate amount of lapsed time to adequately support the innovators and assist them in developing relationships with the supply chain and market. There are relatively few ‘quick wins’ for an innovation platform of this nature.
3. **Developing strong outreach networks amongst the end user community** – this project has demonstrated that there is good demand for new innovations to support the

realisation of the requirements of the WFD. However, demand would appear to be strongest from Central and Eastern Europe, as evidenced by their more active engagement with the Marketplace than participants from other regions. It is recommended that the future strategy for exploitation should place a strong emphasis on outreach to these end user markets, and active encouragement of their participation. This will require consideration of appropriate developments to address cultural nuances, including language/translation, but also the nature of communications and dissemination events employed and other barriers to uptake – such as lack of availability of appropriate input data, and finance.

All of these challenges indicate the need for further time and resourcing if longer term financial sustainability is to be achieved. Given the scale and nature of these requirements, the current Consortium does not consider itself to be the optimum vehicle to realise the successful market translation of the Marketplace.

The Consortium has therefore selected to identify and engage with a strategic partner(s) to provide access to wider deal flow, routes to market, market credibility, and importantly, resources. A short list of potential partners have been identified, and discussions initiated. These will be further developed over the coming months.

In the meantime, the Consortium Partners have committed to provide a further four months of unfunded support to allow the Platform to remain operational until an appropriate Partner is secured. CREAM will continue to lead on Partner discussions, and the other partners will provide specialist support services as required. Wherever possible, synergies with other ongoing EU funded projects, such as DESSIN, SUBSOL, FREEWAT, etc. will be explored.

## Appendix A

# **EU Framework Program for Research and Innovation (WATER-4a-2014 - H2020)**



Project Nr: 641821

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

## ***Marketplace Exploitation Summary Proposition for Public Sector Partner***

Version 1.0

## Introduction

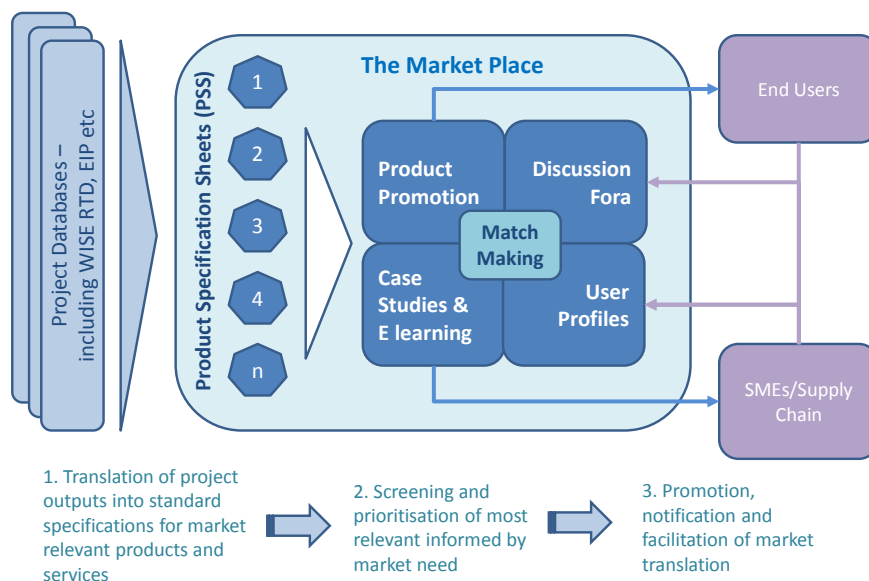
The WaterInnEU Marketplace is a market led innovation platform that screens the most relevant products and services for River Basin Managers and accelerates their uptake through targeted dissemination and support services (see <https://marketplace.waterinneu.org/en>).

The platform seeks to bring together all elements of the river basin community including researchers, SMEs, industry and public bodies in order to achieve better exploitation and market translation of EU funded tools and improve implementation of the Water Framework Directive.

Potential end-users surveyed and interviewed indicated that the Marketplace should offer pre-screened suitable products for River Basin Management (RBM) and matchmaking services to facilitate the selection and application of products. In particular, there was a need to overcome the ‘information overload’ faced by many RBM practitioners, by presenting a selection of innovative and outstanding products, indicating all relevant information at first sight, and supporting implementation where interest is generated.

The overall approach of the WaterInnEU Marketplace is summarised below<sup>40</sup>:

**Strategic Objective** – Market led innovation platform that screens and accelerates the most relevant products and services to River Basin Managers



To date, more than 120 legacy EU funded projects have been comprehensively screened for their relevance to current river basin management and their readiness and suitability for translation into market ready products. A small cohort has been subsequently shortlisted and developed into clearly articulated and standardised materials to ensure that users are presented only with high quality and relevant material.

The Marketplace is enhanced by the provision of active matchmaking and support services. These facilitate product selection and implementation, via a combination of automated matching between end

<sup>40</sup> Consortium Partners are CREAM, Delft University of Technology, GWP-CEEE and five companies: 52North, RandBee, Adelphi, Antea Group and Orion Innovations.

users and supply chain providers, one-on-one expert advice, targeted dissemination, training modules, and discussion fora.

## Market Overview

There are a number of organisations and companies with similar offerings within the overall landscape within which The Marketplace is operating. Many of these are also funded by the European Commission, some by national programmes and a small number by commercial organisations. Many are operating on a pan European basis.

WaterInnEU has identified and analysed the attributes of 28 platforms (including the EIP for Water) in order to identify key areas of differentiation for the Marketplace. This analysis has identified the following:

- There are a large number of potentially competing platforms and organisations, the majority of which are related to specific parts of the water sector, or aligned with a specific strategic objective/theme. In addition, several of these platforms are interlinked. This has resulted in a fragmented market, and from the point of the end users, potentially confusing.
- Many of the platforms are relatively 'passive', focused on presenting and providing access to publicly available data and market information. The majority aim to fulfil some sort of knowledge transfer function via community fora, workshops and other events (hosting or signposting), working groups and training.
- A smaller number are seeking to provide technical/commercial support services, including matchmaking between innovators and end users, although in several instances the precise nature and quality of these is not apparent.
- The business models adopted are variable, and in some cases not transparent. A number are clearly subsidised by public funding, some charge a membership fee for signing up to the platform. Others are funded by large commercial end users, e.g. TAG, whilst others appear to operate the platforms as a 'loss leader' ahead of generating downstream commercial fees from services, e.g. Venturi.

## Key Differentiators of the Marketplace

The fact that WaterInnEU has focused specifically on addressing the needs of stakeholders actively involved in river basin management has been a distinct advantage in the development of a more tailored and 'user friendly' platform. The ability to engage in depth with a specific audience has allowed the project to gain detailed insights in terms of their needs, and this has informed the design and development of The Marketplace, both in terms of functionality, and but also parallel support services.

## Competitive Advantages - Functional

The Marketplace provides a number of standard core functionalities, including:

- browsing by linked categories through products, organisations, service requests, and service offerings
- common panel for upcoming events
- collaborative creation and editing of products, organisations, service requests/offerings and events
- option to subscribe for new products, service offerings, or service requests
- simple keyword search and advanced search facilities
- option to provide user feedback in the form of comments
- for a for open discussions about products or other related information

However, whilst some of the competing platforms have similar functionality (or parts thereof), there are several differences distinguishing the WaterInnEU Marketplace. These are as follows:

1. **Conceptual distinction between products & services:** The EIP Water Marketplace treats both products as well as services, as same entry types. In contrast, the WaterInnEU Marketplace makes an explicit distinction between products and services. As an example, the product resulting from a research project may be a new simulation tool that is available as open source software. However, in order to make use of the tool, it needs to be integrated in existing water management software. The integration work may be offered as an additional service. Using the conceptual distinction, people can search or subscribe for certain services offered for a specific product.
2. **Product Specification Sheet:** Based on the analysis of market requirements, a Product Specification Sheet has been developed that specifies the metadata for products based on the users' needs, e.g. information on the potential application and purpose of the product. Though this may be provided in a general textual description of a product, having this information in a dedicated field enables an explicit search for it. A dedicated field also directly provides the information to users without having to search for it in a - perhaps extensive - general description. Similarly, dedicated fields are specified for a number of metadata elements that are considered as important by potential users.
3. **Fine-grained Email Alerts:** To allow users to receive alerts if new products, services or events are added to the Marketplace or if a certain entry has been updated, the WaterInnEU Marketplace allows for the definition of subscription using different filter options.
4. **Collaborative editing of entries:** The WaterInnEU Marketplace allows for collaborative editing of entries, with the author and moderator roles for registered users defined. By default, a registered user is an author that can add new entries or edit existing entries. In both cases, a moderator checks whether the information of the entry is correct, before it is publicly available in the Marketplace. If a user has created or updated an entry, he is able to use the alerting functionality to subscribe for further edits of this entry.
5. **Support for user feedback:** Registered users can add free text comments to all entry types and can hence provide comments on usability, applications, or any additional feedback. The forum can be used for more general discussions on certain water-related issues. Entries available in the portal can be linked from the discussions in the forum.
6. **Integrated e-learning platform:** The consolidated version integrates the e-learning platform in the Marketplace<sup>41</sup>. This allows providers of products to provide associated e-learning material enabling potential users to learn more about usage and applications, etc.
7. **Open Data Access:** The information that is publicly available in the WaterInnEU Marketplace is also provided as open data in a machine-readable way through a well-defined and publicly accessible API. This enables other portals to utilize the API to harmonize their underlying data with the data published in the WaterInnEU portal. For example, if a product is available in several portals, the other portals can subscribe for new entries in the WaterInnEU Marketplace and can use the API to automatically fetch the new data and integrate it into their own underlying database.
8. **Open Source code:** All source code needed for building the WaterInnEU Marketplace is in the GitHub repository <https://github.com/52North/waterinneu> base on a Drupal<sup>42</sup>. This implemented solution follows the EU recommendations of the *Open source software strategy*<sup>43</sup> for ICT services and software solutions.

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<sup>41</sup> The integration of the e-learning platform will be delivered in month 24 and the e-learning platform is still under development, will be finalized by the end of the project in Feb 2017.

<sup>42</sup> <https://www.drupal.org/>

<sup>43</sup> [http://ec.europa.eu/info/european-commissions-open-source-strategy\\_en](http://ec.europa.eu/info/european-commissions-open-source-strategy_en)



## Competitive Advantages - Services

Results from the project have clearly shown that a virtual Marketplace alone is not sufficient to facilitate the uptake of water-related innovations. Instead, this requires active management and the provision of complementary support services. The WaterInnEU model provides an individual contact point, or Account Manager, who is responsible for managing all interactions and communications relating to an individual product or service listed on the Marketplace.

Support services developed for the Marketplace include a combination of relatively 'light touch' offerings, e.g. the "Ask the Expert" option that forwards queries to selected experts, together with more bespoke 'hands on' services and matchmaking activities, including hosting of e-Pitching events. In this way, the Marketplace serves as the foundation for a water innovation community, providing an entry point to search for, or get an overview on products, services and events, and to contact and engage with product and service providers. The services provide more detailed information, options for personal contacts and exchange of ideas as well as consulting on how to utilize the products in different environments.

Demand for the more bespoke services comes from both the end users interested in adopting the new products and services but importantly also from the innovators themselves, including assistance in refining their business propositions and support in getting them in front of the right audience. The services offered to date by The Marketplace include the following:

Level 1 Platform based services	Level 2 Dissemination/Brokering	Level 3 Commercialisation Support
On line product directory (searchable)	Newsletters/promotional targeted mailshots via key third parties and Intermediaries, e.g. national water partnerships	Outline Strategic Plan (aspirations of partners, key target markets, etc.)
Product of the month/promotions	One to one introductions – suppliers, end users or third party intermediaries	Work with 'owners' to identify options for exploitation – defining market translation needs.
Themed discussion fora	Preparation of 'Teasers' and case studies (and promotional material)	Review of value proposition/business model
Automatic notifications/preferences	Signposting to other third party services – IPR advice, business planning support, test houses etc.	Preparation of marketing/communication plan
Expression of interest button	Promotion of PSS by Partners via presentations at events and conferences	Defining the needs for E learning materials
		Technical Advice on OGC compliance
		<i>E pitch event</i> /showcase webinars/online videos (including support in preparation of materials)
		Market Competitions
		Signposting to sources of finance/grants.

Few of the existing platforms offer this level of additional service support, and those that do tend to be run by commercial consultancies, e.g. TAG and Venturi.

## Next Steps for Exploitation

The WaterInnEU Marketplace is now operational and has received good initial feedback from its first tranche of clients. The project will finish at the end of February 2017 before which time the functionality and service offerings will be further developed and validated. Feedback from the supply chain and stakeholders consulted during this project indicate that – at this stage - few would be prepared to pay fees for accessing the Marketplace and its services. It is anticipated that the portal would need to demonstrate a reasonable track record of success before it could justify charging commercial rates. Both of these challenges indicate the need for further funding support before the platform could achieve commercial sustainability.

In the light of the market analysis, and the relative competitive advantages of the WaterInnEU Marketplace, it is considered to be most appropriate to seek to align/partner with one or more existing entities with relevant synergies to allow the platform to gain scale and credibility. Specifically we are seeking potential partners with the following attributes:

- Currently managing a platform with an appropriate target audience, but without a 'Marketplace' and/or currently providing limited services in terms of innovation and commercialisation support for their clients.
- Good reach back into the innovation chain, but without the mechanisms to support market translation of innovations.
- Outreach to market end users and acknowledgement of the barriers faced in implementing innovative products
- Access to funding, or willingness to bid together for future funding to support on-going delivery.

In return, the WaterInnEU Marketplace would provide its Partner(s) with:

1. A '*ready to go*' value added service for its target audience across the supply chain from innovators to end users. In the short term this relates specifically to RBM, but can readily be expanded to other market segments as appropriate.
2. Readily integrated platform that has been developed to be compatible with the majority of standard website configurations.
3. Access to a skilled set of professionals to provide the appropriate technical and commercial support services for delivery (or alternatively training up and 'hand off' to partner personnel).
4. In the medium to longer term, the Marketplace is anticipated to become capable of generating revenue, e.g. via membership fees, sponsorship, online courses, etc.

The individual Partners within WaterInnEU have their own strategic objectives and commercial imperatives that influence their potential future involvement in the Marketplace. However, the team remains committed to the future success of the platform, and is willing to consider a variety of potential models for collaborating with/supporting a new Partner(s)

## Contact Details:

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## Appendix B

# **EU Framework Program for Research and Innovation (WATER-4a-2014 - H2020)**



Project Nr: 641821

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

## ***Marketplace Exploitation Summary Proposition for Corporates***

Version 1.0

## Introduction

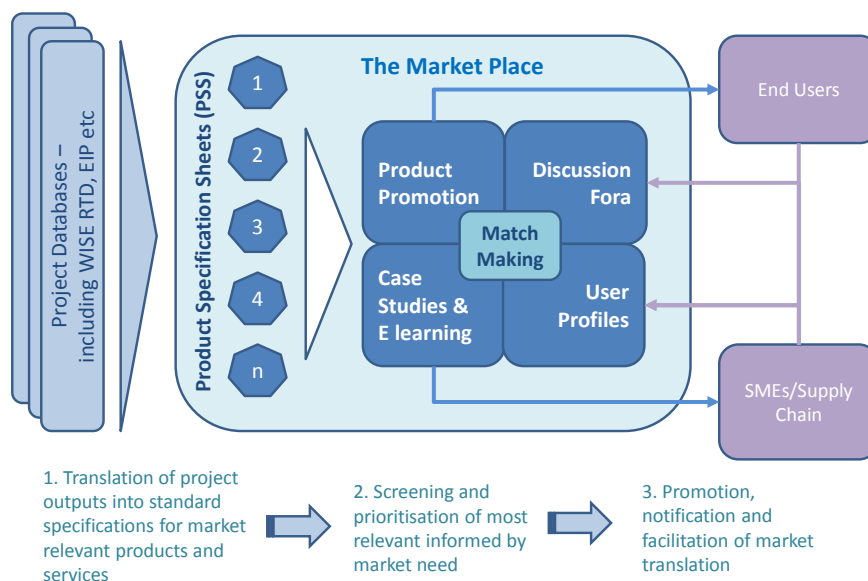
The WaterInnEU Marketplace is a market led innovation platform that screens the most relevant products and services for River Basin Managers and accelerates their uptake through targeted dissemination and support services (see <https://marketplace.waterinneu.org/en>).

The platform seeks to bring together all elements of the river basin community including researchers, SMEs, industry and public bodies in order to achieve effective dissemination and market translation of EU funded innovation outputs (tools, products, services, best practice guidance etc.) and to support improvements in the implementation of the Water Framework Directive.

Potential end-users surveyed and interviewed by the Project Team indicated that the Marketplace should only offer pre-screened and relevant products for River Basin Management (RBM), and support services to facilitate the targeted introduction and uptake of products to the end users and their intermediaries. In particular, there was a need to overcome the 'information overload' faced by many RBM practitioners, by presenting a selection of innovative and outstanding products, presenting all relevant information in a user friendly interface.

The overall approach of the WaterInnEU Marketplace is summarised below<sup>44</sup>:

**Strategic Objective** – Market led innovation platform that screens and accelerates the most relevant products and services to River Basin Managers



To date, more than 120 legacy EU funded projects have been comprehensively screened for their relevance to current river basin management, together with their development status and suitability for translation into market ready products. A small cohort has been subsequently shortlisted and developed into clearly articulated and standardised dissemination materials to ensure that users are presented only with high quality and relevant material.

<sup>44</sup> Consortium Partners are CREAM, Delft University of Technology, GWP-CEEE and five companies: 52North, RandBee, Adelphi, Antea Group and Orion Innovations.

The Marketplace is enhanced by the provision of active matchmaking and professional support services. These facilitate product selection and implementation via 'hands on' introduction and follow on dialogue between end users and supply chain providers, provision of one-on-one expert advice, targeted dissemination, development and provision of appropriate training modules (e-learning), and discussion fora.

## Market Overview

There are a number of organisations and companies with similar offerings within the overall landscape within which The Marketplace is operating. Many of these are also funded by the European Commission, some by national programmes and a small number by commercial organisations. Many are operating on a pan European basis.

WaterInnEU has identified and analysed the attributes of 28 platforms (including the EIP for Water) in order to identify key areas of differentiation for the Marketplace. This analysis has identified the following:

- There are a large number of potentially competing platforms and organisations, the majority of which are related to specific parts of the water sector, or aligned with a specific strategic objective/theme. In addition, several of these platforms are interlinked. This has resulted in a fragmented market, and from the point of the end users, potentially confusing.
- Many of the platforms are relatively 'passive', focused on presenting and providing access to publicly available data and market information. The majority aim to fulfil some sort of knowledge transfer function via community fora, workshops and other events (hosting or signposting), working groups and training.
- A smaller number are seeking to provide technical/commercial support services, including matchmaking between innovators and end users, although in several instances the precise nature and quality of these is not apparent.
- The business models adopted are variable, and in some cases not transparent. A number are clearly subsidised by public funding, some charge a membership fee for signing up to the platform. Others are funded by large commercial end users, e.g. TAG, whilst others appear to operate the platforms as a 'loss leader' ahead of generating downstream commercial fees from services, e.g. Venturi.

## Key Differentiators of the Marketplace

There are a number of organisations and companies with similar offerings within the overall landscape within which The Marketplace is operating. Many of these are also funded by the European Commission, some by national programmes and a small number by commercial organisations. Many are operating on a pan European basis.

WaterInnEU has identified and analysed the attributes of 28 platforms (including the EIP for Water) in order to identify key areas of differentiation for the Marketplace.

The fact that WaterInnEU has focused specifically on addressing the needs of stakeholders actively involved in river basin management has been a distinct advantage in the development of a more tailored and 'user friendly' platform. The ability to engage in depth with a specific audience has allowed the project to gain detailed insights in terms of their needs, and this has informed the design and development of The Marketplace, both in terms of functionality, content, and also parallel support services.

## Competitive Advantages – Strategic focus

The Marketplace has been designed and developed to meet the specific needs of an individual market segment, River Basin Management. This enables the development of a depth of relevant content for a specific target audience/community, and informed the 'less is more' approach whereby content is pre-screened prior to listing. Very few competing platforms adopt this approach.

In addition, practical experience over the last 12 months has indicated that there is potentially more interest in the innovations presented from Eastern and Southern Europe, where the supply chain is less well developed and many agencies are struggling to implement the needs of the WFD. There is very little evidence of other platforms address this 'technology transfer' need.

### Competitive Advantages - Functionality

The Marketplace provides a number of standard core functionalities, including:

- browsing by linked categories through products, organisations, service requests, and service offerings
- common panel for upcoming events
- collaborative creation and editing of products, organisations, service requests/offerings and events
- option to subscribe for new products, service offerings, or service requests
- simple keyword search and advanced search facilities
- option to provide user feedback in the form of comments
- fora for open discussions about products or other related information.

However, whilst some of the competing platforms have similar functionality (or parts thereof), there are several differences distinguishing the WaterInnEU Marketplace. These are as follows:

1. **Conceptual distinction between products & services:** The WaterInnEU Marketplace makes an explicit distinction between products and services. As an example, the product resulting from a research project may be a new simulation tool that is available as open source software. However, in order to make use of the tool, it needs to be integrated in existing water management software. The integration work may be offered as an additional service. Using the conceptual distinction, people can search or subscribe for certain services offered for a specific product.
2. **Product Specification Sheet:** Based on the analysis of market requirements, a Product Specification Sheet has been developed that specifies the metadata for products based on the users' needs, e.g. information on the potential application and purpose of the product. Though this may be provided in a general textual description of a product, having this information in a dedicated field allows for an explicit search. A dedicated field also directly provides the information to users without having to search for it in a - perhaps extensive - general description. Dedicated fields are specified for a number of metadata elements that are considered as important by potential users.
3. **Fine-grained Email Alerts:** To allow users to receive alerts if new products, services or events are added to the Marketplace or if a certain entry has been updated, the WaterInnEU Marketplace allows for the definition of subscription using different filter options.
4. **Collaborative editing of entries:** The WaterInnEU Marketplace allows for collaborative editing of entries, with the author and moderator roles for registered users defined. By default, a registered user is an author that can add new entries or edit existing entries. In both cases, a moderator checks whether the information of the entry is correct, before it is publicly available in the Marketplace. If a user has created or updated an entry, he is able to use the alerting functionality to subscribe for further edits of this entry.
5. **Support for user feedback:** Registered users can add free text comments to all entry types and can hence provide comments on usability, applications, or any additional feedback. The forum can be used for more general discussions on certain water-related issues. Entries available in the portal can be linked from the discussions in the forum.
6. **Integrated e-learning platform:** The consolidated version integrates the e-learning platform in the Marketplace. This allows providers of products to provide associated e-learning material enabling potential users to learn more about usage and applications, etc.

7. **Open Data Access:** The information that is publicly available in the WaterInnEU Marketplace is also provided as open data in a machine-readable way through a well-defined and publicly accessible API. This enables other portals to utilize the API to harmonize their underlying data with the data published in the WaterInnEU portal. For example, if a product is available in several portals, the other portals can subscribe for new entries in the WaterInnEU Marketplace and can use the API to automatically fetch the new data and integrate it into their own underlying database.
8. **Open Source code:** All source code needed for building the WaterInnEU Marketplace is in the GitHub repository <https://github.com/52North/waterinneu> base on a Drupal<sup>45</sup>. This implemented solution follows the EU recommendations of the *Open source software strategy*<sup>46</sup> for ICT services and software solutions.

### Competitive Advantages - Services

Results from the project have clearly shown that a virtual Marketplace alone is not sufficient to facilitate the uptake of water-related innovations. Instead, this requires active management and the provision of complementary support services. The WaterInnEU model provides an individual contact point, or Account Manager, who is responsible for managing all interactions and communications relating to an individual product or service listed on the Marketplace.

Support services developed for the Marketplace include a combination of relatively 'light touch' offerings, e.g. the "Ask the Expert" option that forwards queries to selected experts and access to e-learning modules, together with more bespoke 'hands on' services and matchmaking activities, including hosting of e-Pitching events. In this way, the Marketplace serves as the foundation for a water innovation community, providing an entry point to search for, or get an overview on products, services and events, and to contact and engage with product and service providers. The services provide more detailed information, options for personal contacts and exchange of ideas as well as consulting on how to utilize the products in different environments.

Demand for the more bespoke services comes from both the end users interested in adopting the new products and services but importantly also from the innovators themselves, and includes assistance in refining their business propositions and support in getting them in front of the right audience.

The services offered to date by The Marketplace include the following:

Level 1 Platform based services	Level 2 Dissemination/Brokering	Level 3 Commercialisation Support
On line product directory (searchable)	Newsletters/promotional targeted mailshots via key third parties and Intermediaries, e.g. national water partnerships	Outline Strategic Plan (aspirations of partners, key target markets, etc.)
Product of the month/promotions	One to one introductions – suppliers, end users or third party intermediaries	Work with 'owners' to identify options for exploitation – defining market translation needs.
Themed discussion fora	Preparation of 'Teasers' and case studies (and promotional material)	Review of value proposition/business model
Automatic notifications/preferences	Signposting to other third party services – IPR advice, business planning support, test houses etc.	Preparation of marketing/communication plan

<sup>45</sup> <https://www.drupal.org/>

<sup>46</sup> [http://ec.europa.eu/info/european-commissions-open-source-strategy\\_en](http://ec.europa.eu/info/european-commissions-open-source-strategy_en)



Expression of interest button	Promotion of PSS by Partners via presentations at events and conferences	Defining the needs for E learning materials
		Technical Advice on OGC compliance
		<i>E pitch event</i> /showcase webinars/online videos (including support in preparation of materials)
		Market Competitions
		Signposting to sources of finance/grants.

Potential exists to further develop the support services offered on commercial basis, such as engineering design and implementation support.

Few of the existing platforms offer this level of additional service support, and those that do tend to be run by commercial consultancies, e.g. TAG (run by Isle Utilities with a commercial/investor bias <http://www.isleutilities.com/services/technology-platform-membership>) and Venturi (run by Arup and WRC - engineering bias. <http://venturi.driversofchange.com/>). It is evident that these companies use these platforms as effectively a marketing tool to generate downstream commercial revenues related to their service provision.

## Next Steps for Exploitation

The WaterInnEU Marketplace is now operational and has received good initial feedback from its first tranche of clients. The project will finish at the end of February 2017 before which time the functionality and service offerings will be further developed and validated. Feedback from the supply chain and stakeholders consulted during this project indicate that – at this stage - few would be prepared to pay fees for accessing the Marketplace and its services. It is anticipated that the portal would need to demonstrate a reasonable track record of success before it could justify charging commercial rates. Both of these challenges indicate the need for further funding support or investment before the platform could achieve commercial sustainability.

In the light of the market analysis, and the relative competitive advantages of the WaterInnEU Marketplace, it is considered to be most appropriate to seek to align/partner with one or more existing entities with relevant synergies and market presence to allow the platform to gain scale and credibility. Specifically we are seeking potential partners with the following attributes:

- Currently providing limited services in terms of innovation and commercialisation support for their clients.
- Good connectivity within the innovation chain (particularly Universities and SMEs), but without the mechanisms to support market translation of innovations.
- Networks with market end users and understanding of their key needs and gaps in terms of innovation needs.
- Access to funding, or willingness to bid together for future funding to support on-going delivery.

In return, the WaterInnEU Marketplace would provide its Partner(s) with:

1. A 'ready to go' value added service for its target audience across the supply chain from innovators to end users. In the short term this relates specifically to RBM, but can readily be expanded to other market segments as appropriate.  
Likewise, there is scope to develop the platform to:

- Include innovations from non EU funded projects and start-ups which would significantly increase the potential 'deal flow' for the platform.
  - Target specific emerging markets/geographies, where latent demand for new solutions is potential highest, e.g. Easter Europe, Sub Saharan Africa, South America and South East Asia.
  - Expand the professional support services provided by the platform.
2. A readily integrated web based platform that has been developed to be compatible with the majority of standard website configurations (license free).
  3. Access to a skilled set of professionals to provide the appropriate technical and commercial support services for delivery (or alternatively training up and 'hand off' to partner personnel).
  4. In the medium to longer term, the Marketplace is anticipated to become capable of generating revenue, e.g. via membership fees, sponsorship, online courses, and provision of downstream professional support services.

It is estimated that the annual fixed costs for running the Marketplace would be in the region of €40k, including technical support/maintenance of the web platform itself, together with administration, marketing and moderation of the Marketplace content.

Variable costs would mainly relate to the provision of the additional support services which would need to be either paid for by the participants on the basis of commercial rates, or covered via an alternative source of funding (e.g. EU, regional, other 'soft' grant funding).

The individual Partners within WaterInnEU have their own strategic objectives and commercial imperatives that influence their potential future involvement in the Marketplace. However, the team remains committed to the future success of the platform, and is willing to consider a variety of potential models for collaborating with/supporting a new Partner(s).

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