



**Water Works 2016-2020 in Support of the Water JPI
ERA-NET Cofund Action**



**WATER-3-2015: Stepping up EU research and
innovation cooperation in the water area**

Plan for Dissemination and Exploitation of results
(WP 5)

June 2019

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List of Abbreviations

AAs:	Additional Activities
AB:	Advisory Board
ANR:	National Research Agency (France)
AKA:	Academy of Finland (Finland)
ASRT:	Academy of Scientific Research and Technology (Egypt)
CA:	Consortium Agreement
CDAs:	Communication and Dissemination Activities
CDTI:	Centre for the Development of Industrial Technology (Spain)
CIP:	Center of International Projects (Moldova)
CONFAP:	National Council of State Funding Agencies (Brazil)
COST:	European Cooperation in Science and Technology
CSA:	Coordination and Support Action
DG:	Direction General
EC:	European Commission
EIP:	European Innovation Partnerships
EPA:	Environmental Protection Agency of Ireland (Ireland)
ERA:	European Research Area
ERA-NET:	European Research Area-Network
ETAg:	Estonian Research Council (Estonia)
EURAQUA:	European Network of Freshwater Research Organisations
EWA:	Electricity and Water Affairs
FACCE-JPI:	Joint Programming Initiative on Agriculture, food security and climate change
FORMAS:	Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Sweden)
FPOs	Funding Partner Organisations
F.R.S.-FNRS:	Fund for Scientific Research (Belgium)
GA:	Grant Agreement
GB:	Governing Board
GWRC:	Global Water Research Coalition
H2020:	Horizon 2020 - EU Framework Programme for Research and Innovation
IA:	Innovation Action
IenW:	Ministry of Infrastructures and Water Management (Netherlands)
IP:	Intellectual property
IPR:	Intellectual Property Rights
IRESA:	Institution de la Recherche et de l'Enseignement Supérieur Agricoles (Tunisia)
ISPRA:	National Institute for Environmental Protection and Research (Italy)
JPI:	Joint Programming Initiative
JTC:	Joint Transnational Call
KH:	Knowledge Hub
KT:	Knowledge Transfer
MHESR:	Ministry of Higher Education and Scientific Research (Tunisia)
MB:	Management Board
MINECO/AEI:	Ministry of Economy, Industry and Competitiveness / State Research Agency (Spain)
MIUR:	Ministry for Education, University and Research (Italy)
MoE-IL:	Ministry of National Infrastructure, Energy and Water (Israel)

MTA:	Material Transfer Agreement
NCBR:	National Centre for Research and Development (Poland)
NERC:	Natural Environment Research Council of UK (UK)
NGO:	Non-Governmental Organisation
NWO:	Netherlands Organization for Scientific Research (Netherlands)
OA:	Open Access
OD:	Open Data
OD/OA:	Open Data / Open Access
PDER	Plan for Dissemination and Exploitation of Results
PRIMA:	Partnership for Research and Innovation in the Mediterranean \ Area
RCN:	Research Council of Norway (Norway)
RDI:	Research, Development and Innovation
RIA:	Research and Innovation Action
RPF:	Research Promotion Foundation (Cyprus)
R&D:	Research and Development
SAB	Scientific Advisory Board
StAG	Scientific and technological Advisory Board
SAG:	Stakeholder Advisory Group
SC5:	Societal Challenge 5 "Climate action, environment, resource efficiency and raw materials"
SME:	Small and Medium Enterprise
SRA:	Strategic Research Agenda
SRIA:	Strategic Research & Innovation Agenda
TAP:	Thematic Annual Programming
TFs:	Task Forces of Water JPI
UEFISCDI:	Executive Agency for Higher Education, Research, Development and Innovation Funding (Romania)
UN:	United Nations
UN SDGs:	UN Sustainable Development Goals
UNESCO:	United Nations Educational, Scientific and Cultural Organisation
Water JPI:	Joint Programming Initiative on Water challenges for a changing world
WaterWorks2015:	Water Works 2016-2020 in Support of the Water JPI (WaterWorks2015) - Sustainable water use in agriculture, to increase water use efficiency and reduce soil and water pollution
WIPO:	World Intellectual Property Organization
WssTP:	Water Supply and sanitation Technology Platform
WP:	Work Package
WRC:	Water Research Commission (South Africa)

Executive Summary

The “Plan for Dissemination and Exploitation of Results” – PDER – of **WaterWorks2015** defines the strategy and the implementation of measures envisioned to efficiently communicate about project objectives and activities and disseminate project outputs in order to ensure the best exploitation of its results. The PDER will be implemented by ISPRA as the lead beneficiary of Work Package 5 – Communication, Exploitation and Dissemination of the results from the co-funded call – of **WaterWorks2015**, with the participation of WP5 partners¹, to support the communication, dissemination and exploitation of results foreseen by the co-funded call.

The **WaterWorks2015** proposal responds to the Horizon 2020 (H2020) Societal Challenge 5 2015 Call topic Water-3 [2015]: *Stepping up EU research and innovation cooperation in the water area*.

WaterWorks2015 is a collaboration between the Joint Programming Initiatives (JPIs), Water JPI² (“Water Challenges for a Changing World”) and FACCE-JPI (“Agriculture, Food Security and Climate Change”)³. Achieving a “sustainable water use in agriculture, to increase water use efficiency and reduce soil and water pollution” is at the intersection of the two JPIs, contributing to the implementation of their respective Strategic Research Agendas (SRAs).

To achieve this aim, the Communication Strategies of both JPIs - Water JPI Communication and Dissemination Strategy⁴ (April 2013) and the FACCE-JPI Communication and Valorisation Strategy⁵ (October 2014) - will be maintained, whilst the PDER of **WaterWorks2015** has been integrated and built on elements of both JPIs’ Communication Strategies to promote actions of common dissemination for the **WaterWorks2015** activities.

This document should be considered a “living document”, since it be revisited and updated throughout **WaterWorks2015** lifetime (five years, 2016-2020) and adapted to emerging needs and activities.

The document has been prepared with the collaboration of the FACCE JPI and the **WaterWorks2015** Management Team.

¹ **WaterWorks2015** – WP5 partners: EPA, ANR, IRESA

² <http://www.waterjpi.eu/>

³ <https://www.faccejpi.com/>

⁴ http://www.waterjpi.eu/images/documents/Dissemination%20Strategy_201304_web.pdf

⁵ <https://www.faccejpi.com/Document-library/FACCE-JPI-Communication-and-Valorisation-Strategy>

1. Introduction

This document has been prepared in the frame of Work Package 5 (WP5) *Communication, Exploitation, and Dissemination of the results from the co-founded call of **WaterWorks2015***.

The main objectives of the WP5 include:

- a. To communicate **WaterWorks2015** activities;
- b. To implement the **WaterWorks2015** Plan for Dissemination and Exploitation of Results;
- c. To implement the web services in support of the Call management; and
- d. To set up a contact point on Open Access and Open Data (OD/OA)

Furthermore, WP5 has foreseen the realisation of the following deliverables:

1. Call announcement web-materials (October 2016) ;
2. ERA-NET Cofund booklet on funded projects (August 2017) and the [online version of WaterWorks2015 funded projects booklet](#);
3. Publication of information on each funded project, containing data on each consortium and its participants, and an overview of the project results collected using the Open Access & Open Data procedures for making them available via the dedicated webpages (December 2019)

In **WaterWorks2015**, the specific objectives of communication are:

- a. To make **WaterWorks2015** visible in the Water/ Agriculture Research, Development and Innovation (RDI) landscape, as a project effectively contributing to the objectives of the Water JPI and FACCE-JPI and to the general ideas of efficiency and effectiveness of European research and innovation actions;
- b. To ensure a regular flow of project news, information, and suggestions to interested parties;
- c. To ensure the availability of the communication materials on the project and its findings; and
- d. To stimulate **WaterWorks2015** partners to exchange knowledge and experiences

In addition, the Communication and Dissemination Activities (CDAs) in **WaterWorks2015** are oriented also to implement a central knowledge and networking activity between the broader Water and Agriculture research communities and key stakeholders. Therefore, all reciprocal exchanges of information and the promotion of common CDAs between the Water and FACCE JPIs are needed, including the elaboration of the PDER.

To achieve the aim of **WaterWorks2015** and to promote the interaction between the Water and Agricultural sectors, this plan will develop the communication and dissemination tools based on the [Water JPI Communication Strategy](#)⁶ taking also into account the communication and dissemination tools developed by [FACCE-JPI](#) as described in the [FACCE-JPI Communication and Valorisation Strategy](#). This interaction will result in creating a growing and efficient connection between the research activities supported by both JPIs and promoting their effects on policy implementation.

The CDAs in **WaterWorks2015** consist of two phases:

- 1) The first phase is devoted to spread general information about the Joint Call with the aim of creating awareness about the project among dedicated target audiences. This

⁶ <http://www.waterjpi.eu/resources/document-library/communication-and-dissemination-strategy>

communication activity started during the launch of the Joint Call (February 2016) and will continue throughout the life of the call;

- 2) The second phase focuses on the technical issues and requires the identification of the communication needs related to the individual key stakeholders. This phase is focused on the dissemination of the project results and knowledge, guidelines and solutions, providing a comprehensive set of tools and documents covering all aspects of the funded projects' results to relevant stakeholders.

1.1 Context

1.1.1 Water Works 2016-2020 in Support of the Water JPI

The **WaterWorks2015** proposal responds to the Horizon 2020 (H2020) Societal Challenge 5 2015 Call topic Water-3 [2015]: *Stepping up EU research and innovation cooperation in the water area*. **WaterWorks2015** aims at pooling resources from the 32 participating research programme owners/managers of 23 countries to implement a joint call for proposals, with EU co-funding in the area of sustainable water use in agriculture and forestry.

WaterWorks2015 will contribute specially to address the following challenges:

- ⇒ Ensuring the provision of water resources for the agricultural, forestry and freshwater aquaculture sector in a context of global climate change and consumers' demands for more ecologically friendly products. The reuse of treated water from different sources (e.g. industries, cities) should be further exploited;
- ⇒ Protecting humans against health risks if additional water sources, such as reuse, are made available;
- ⇒ The more sustainable growth of the agriculture, forestry and freshwater aquaculture sectors whilst paving the way towards job creation in all these economic areas.

In consideration of the challenges to be tackled, **WaterWorks2015** foresees a collaboration between two JPIs - Water JPI and FACCE-JPI.

Therefore, **WaterWorks2015** develops its PDER considering elements of interest for both the JPIs' Communication Strategies, contributing to the implementation of their respective SRAs, through the development of a common framework and an action plan identifying themes and already covered topics, possible overlapping activities and synergies that could be developed between the two JPIs.

The main challenges of **WaterWorks2015** are:

- Challenge – 1: Increasing the efficiency and resilience of water uses
- Challenge – 2: Monitoring and reducing soil and water pollution
- Challenge –3: Integrating social and economic dimensions into the sustainable management and governance of water resources

Tab.1 – **WaterWorks2015** Specific Objectives

(derived from Deliverable D1.2 – Risk Management Plan)

Type	WaterWorks2015 Specific Objectives
Cofunded Call for RDI Proposals	1. Improving coordination of European Water RDI by launching a €26.1M Joint Transnational Call for RDI proposals using funds from 25 institutions in 22 countries and the EC Cofund;
	2. Delivering the Water and FACCE JPIs SRIA/SRA by launching a Cofunded joint Call which thematically addresses key water and agriculture RDI challenges;
	3. Cofunding between 12 and 24 transnational projects selected with criteria promoting excellence in RDI and impact on the Water JPI societal challenge;
	4. Impacting society through dissemination and exploitation of the projects resulting from the Cofunded Call, enforcing Open Access and promoting Open Data.
Additional Activities	5. Developing a common vision between the two JPIs and updating their SRIA/SRA and Implementation Plans, coordinating 22 National Agendas. Strengthening links with other EU water related activities and with major international partners in industrialised and under development countries;
	6. Contributing to Water JPI Implementation through launch of a knowledge hub on Water, defining mobility and infrastructures schemes / protocols and strengthening alignment activities.

2. Plan for Dissemination and Exploitation of the Results of WaterWorks2015

The **WaterWorks2015** PDER describes the CDAs, specifying the targets, tools and evaluation methodologies adopted in order to reach the following objectives:

- ✓ Provide information to wide audiences and at the same time ensure efficient knowledge transfer to specific users;
- ✓ Encourage the cooperation of European public and private stakeholders in the water and agriculture sectors through a regular information exchange about the outcomes of **WaterWorks2015**;
- ✓ Facilitate public engagement in the conservation of water and agriculture resources;
- ✓ Contribute to the European Research Area by making RDI results available to stakeholders in Europe; and
- ✓ Establish the Water JPI under which **WaterWorks2015** is performed as the primary and authority source of water RDI information in Europe.

At the start of **WaterWorks2015**, the communication is mainly focused on raising project awareness among the stakeholders. Therefore the main communication activities developed are related to:

- ⇒ Communicating on the activities of **WaterWorks2015**;
- ⇒ Providing support during the start of the **WaterWorks2015** co-funded call to maximize the early mobilization of the Water and Agriculture research communities through the publication of the documents on the Water JPI website and Water JPI e-Newsletters; the reciprocal exchanges of information between the Water and FACCE JPIs were ensured through the Twitter info days; and
- ⇒ Making available, in addition to the public Water JPI website, the dedicated intranet sections such as all the linked tools developed for the CDAs (e.g. mailing list systems,

subscribe/registration systems in the initiatives to support the call management, social networks and other tools). The management of the website and intranet services include the technical support and permanent updating of all the web services linked to the website.

The communication activities carried out during the first step of **WaterWorks2015** (January 2016) are described in the Water JPI Deliverable 5.1 – Call announcement web materials⁷ -and will continue throughout the project timeline (up until December 2020) using the tools addressed to individual stakeholder groups as described in this Plan.

At the same time, FACCE-JPI contributes to spread information on **WaterWorks2015** using its communication tools, and in particular FACCE-JPI website⁸.

In the frame of this Plan, [the online booklet on funded projects](#) was released in August 2017 as Deliverable D5.2 – ERA-NET Cofund booklet on funded projects described in [Section 2.2.4](#).

During the second step, when the first project results become available, the phase of dissemination and exploitation of project outputs will start through the Water JPI Open Data & Open Access⁹ tools, which are presented in [Section 5.2](#).

During all the Communication, Dissemination and Exploitation phases, evaluation and monitoring activities are foreseen. These activities will be monitored on a 6-monthly basis in order to ensure the maximum reach and efficiency of all the tools considered. They are described in the [Section 6](#).

2.1 Targeting and Addressing Stakeholder Groups

WaterWorks2015 communication, dissemination and exploitation efforts are based on the 2013 Water JPI Communication Strategy¹⁰, ensuring the up taking of **WaterWorks2015** outputs by specific targets (e.g. industries, policy makers, environmental organisations, educational communities, general public). The aim of the CDAs is to contribute to transforming the knowledge produced within **WaterWorks2015** (particularly, co-funded Call and AAs on strategy and implementation), vital for the Water and FACCE JPIs Implementation Plans (IPs) into solutions for the European Union (EU) Water Challenges identified in the Water JPI Vision Document¹¹.

Targeted stakeholder groups include water users, environmental organisations, water and agri-food industries (including innovation hubs, technology platforms, SMEs), R&I performers, sectoral and RDI policy makers (e.g. EC, European Bodies such as JRC) National Governments, International Bodies such as UN Water, Food and Agriculture Organisation of the United Nations (FAO), in addition to, farmers' associations, other actors in the agricultural sector, other programmes outside Europe, educational communities, investors, standardization networks, and finally, consumers and society at large, although only as an indirect audience reached via popular press and based on the scientific results provided by JPIs' actions.

Both the Water JPI and FACCE-JPI have identified major stakeholder groups in their respective Communication and Dissemination Strategies.

The Water JPI identified them as:

- JPI actors (Governing Board (GB), Management Board (MB), Scientific Advisory Board (SAB), Stakeholder Advisory Group (SAG))

⁷Call Announcement web materials – March 2016 – Deliverable 5.1

⁸ <https://www.faccejpi.com/>

⁹ <http://opendata.waterjpi.eu/>

¹⁰ http://www.waterjpi.eu/images/documents/Dissemination%20Strategy_201304_web.pdf

¹¹ http://www.waterjpi.eu/images/documents/Vision_Document.pdf

- Scientific Community, individually and as members of different types of consortia (projects and initiatives – research alliances such as EURAQUA or EWA, COST Association);
- Public and private research organisations;
- Environmental organizations;
- Water Industry (including the WssTP and SMEs);
- Science Performers;
- Water Policy Makers (at European and national levels – DG Environment– Ministries/ Agencies);
- RDI Policy Makers (at European and national levels – DG Environment– Ministries/ Agencies);
- Other programmes outside Europe - international conventions/ policies and international research fora, such as the Belmont Forum or the Global Water Research Coalition;
- Educational Communities at international and national level – UNESCO;
- Standardization Networks (such as EIP Water, OECD, LMI, CAP);
- Investors; and
- Society at large, water users.

FACCE JPI identified the following stakeholder groups:

- FACCE JPI actors (GB, SAB, SAG, Secretariat members)
- Industry: Innovation hubs, technology platforms;
- Farmers’ associations, other actors in the agricultural sector;
- Policy makers: European Commission, different European bodies, national governments, when appropriate – international bodies (FAO and others, as identified in FACCE European and international strategy)
- Research funders
- Non-governmental organizations (NGO’s)

Communication, dissemination and exploitation activities contribute to the expected impact of **WaterWorks2015** by the following principles:

- Focus on communicating results rather than processes;
- Be interactive;
- Adapt messages to the audience;
- Perform selective and targeted activities to maximise the impact;
- Go International/National/Local;
- Focus on people to give science a “human face”; and
- Use clear, simple and jargon-free language in all activities.

Considering the main goals and objectives of the CDAs on **WaterWorks2015**, the list of target groups has been defined and listed in Table 2 below, together with the related appropriate tools used.

Table 2: Key messages, target groups and kind of tools used.

Goals and objectives	Target groups	Water & FACCE JPIs Communication and Dissemination tools
<ul style="list-style-type: none"> To spread information about the Call; Communication activities 	<ul style="list-style-type: none"> Water JPI actors Scientific Community National level stakeholders (provided by each partner in national language) 	<ul style="list-style-type: none"> Website Newsletter Press releases Social Networks
<ul style="list-style-type: none"> To inform on the funded projects and their progress Communication activities 	<ul style="list-style-type: none"> Water JPI actors Public & private research organisation Scientific Community / Researchers of JTC funded projects RDI /Water/Agriculture policy makers and others actors at International level National level stakeholders (provided by each partner in national language) 	<ul style="list-style-type: none"> Website “online” Booklet Newsletter Press releases Social Networks Public Workshop /Meeting
<ul style="list-style-type: none"> To communicate the results of the funded projects Dissemination and Exploitation activities 	<ul style="list-style-type: none"> Water JPI actors Scientific Community / Researchers of JTC funded projects; RDI /Water/Agriculture policy makers and others actors at International level National level stakeholders (provided by each partner in national language) 	<ul style="list-style-type: none"> Web site Newsletter Social Networks Public Workshop /Meeting Press releases Open Data/Open Access Innovation hubs/technology platform <i>And other communication tools to be defined</i>
<ul style="list-style-type: none"> To share information among the partners Internal communication (Intranet page access via account) 	<ul style="list-style-type: none"> All partners involved on activities of the WaterWorks2015 	<ul style="list-style-type: none"> Via Mail; Water JPI Intranet pages, WebEx; Skype; Internal Workshops / Meetings

Furthermore, all **WaterWorks2015** partners will be involved in communicating this project to different audiences. The consortium will set up communication measures to be jointly

developed. In addition, partners will address interested parties in their own countries, in their own languages.

For this reason, dedicated networks have been created as explained in [Chapter 3](#).

2.2 WaterWorks2015 Communication and Dissemination Tools

As for other Water JPI EC-supported projects, the main tools considered for the implementation of the PDER of **WaterWorks2015** are the ones developed in the frame of **Water JPI** since its creation:

- Water JPI Website¹² (including Public and Intranet sections)
- e-Newsletters
- Thematic events, workshops, meetings included AAs Workshops
- Online funded projects booklet
- Press releases
- Leaflets and flyers
- Policy briefs
- Videos
- Posters
- Social networks
- Webinars
- Active participation at European / International events and networks
- Projects database
- Mobility schemes and infrastructure

More information on the main communication and dissemination tools are described below.

2.2.1 Water JPI Public Website

A dedicated area to relevant information of **WaterWorks2015** (Governance, Participants, WPs description, etc.) was included in the Water JPI website¹³. Information regarding Water JPI and EC-supported projects is regularly updated according to the ongoing activities. As leader of WP5, ISPRA is responsible for managing the Water JPI website, including the **WaterWorks2015** dedicated area, while updates of specific thematic contents related to **WaterWorks2015** can be carried out through direct contribution of the consortium partners.

Updates/changes to the **WaterWorks2015** dedicated area on the Water JPI website are requested by the partners in charge, according to the procedure "Water JPI Website Requesting Rules" (updated in November 2018).

Information on EC-supported projects' activities of **WaterWorks2015** is regularly published at dedicated webpages and include:

- ✓ the [Kick-off meeting](#) of the projects;
- ✓ the [online booklet](#) of the funded projects;
- ✓ the [Open Data&Open Access](#) of the funded projects under the 2016 Joint Transnational Call (JTC);
- ✓ the [Guidelines on project management](#) and [Mid-term Progress Report](#) and the [Final Progress Report](#) templates.

An Intranet section was also created to enable the **WaterWorks2015** consortium partners to share information and documents with restricted access.

¹² <http://www.waterjpi.eu>

¹³ www.waterjpi.eu

2.2.2 Water JPI e-Newsletter

Aimed to inform the international community on ongoing Water JPI and related EC-supported projects' activities, the Water JPI e-Newsletter has been identified, since the beginning of the Water JPI, as one of the key communication tools of the Water JPI Communication and Dissemination Strategy (April 2013). Additionally, this tool informs the international water-related community on relevant water resources initiatives, progress and outcomes of other water-related programmes and/or projects, funding opportunities for researchers, and international events. Currently, the Water JPI e-Newsletter reaches over 5,580 users¹⁴. As done for other Water JPI EC-supported projects, relevant information on **WaterWorks2015** ongoing activities are included in the Water JPI e-Newsletter. It is thus envisaged a greater involvement of the **WaterWorks2015** consortium partners in contributing to the e-Newsletter content, particularly in writing articles related to news to be published including not only international events, but also those organised at national level. In addition to this, **WaterWorks2015** consortium partners are involved in the dissemination activities of the e-Newsletter, through their own websites and other applicable communication tools.

To subscribe to the Water JPI e-Newsletter, it is required to fill-in a specific online registration form¹⁵ included in the Water JPI website. With the voluntary acceptance of the subscriber (fully respecting the General Personal Data Protection Regulation¹⁶), information on the subscriber's Age, Nationality, Gender, Activity, being Internal or External to Water JPI, Qualification Awarded and Position held is collected online (cf. Water JPI Privacy Policy available online¹⁷).

Given the volunteer registration principle, subscribers can 'unsubscribe', i.e. cancel their Water JPI e-newsletter registration at any time, through the same online registration form.

The dissemination of the Water JPI e-Newsletter is achieved as follows:

- Publication on the Water JPI website;
- Delivery to the registered subscribers mailing list;
- Dissemination at international level by Water JPI members;
- Dissemination at national level through the Water JPI and **WaterWorks2015** consortium partners' networks, publication on the websites of the JTC funded projects and of the local institutions;
- Dissemination through social media: Facebook, Twitter and LinkedIn.

Articles published in the Water JPI E-Newsletter and focusing on **WaterWorks2015** progress and activities are listed in [Table 3](#) below.

¹⁴ Data from December 2018.

¹⁵ http://www.waterjpi.eu/resources/newsletter/subscriptionform_view

¹⁶ https://ec.europa.eu/info/law/law-topic/data-protection_en

¹⁷ http://www.waterjpi.eu/images/documents/water_jpi_privacy_policy-1.pdf

Table 3: Water JPI e-Newsletter articles focusing on WaterWorks2015 activities

Date of e-Newsletter	Topic addressed
January-February 2017	Kick-off meeting of 2016 Joint Call Funded Projects, 6 April 2017 ¹⁸
March-April 2017	Online booklet of the 2016 Joint Call funded Projects and Water JPI Knowledge Hub 1 st Workshop, 22 March 2017, Stockholm, Sweden ¹⁹
May 2017	Third Alignment Workshop, 4 April 2017, Stockholm, Sweden ²⁰
June-July 2017	Workshop on Common Vision and Adapting the Strategies of the Water and FACCE JPIs, 21 June 2017, Bonn, Germany ²¹
April 2018	Workshop for the Water JPI Knowledge Hub kick off on Emerging Pollutants, 15 March 2018, Stockholm, Sweden ²²
June 2018	First Workshop on Mobility and Infrastructures Platform, Rome, Italy, 21 June 2018 ²³

2.2.3 Workshops and Meetings

The Kick-off meeting of the 21 transnational research projects funded under the Water JPI 2016 JTC was held in Stockholm (Sweden) on the 6th of April 2017. The information of the meeting has been disseminated using the Water JPI communication tools and the presentation of the projects, including the results of the evaluation procedure, are available on the website²⁴.

In addition to the thematic workshops, Management Board (MB) meetings among **the Water JPI members** are periodically organized, in order to discuss about the communication activities undertaken and those to be developed. During these meetings, the communication activities developed are described, updates are provided and the future planning of needs including dissemination and evaluation methods are discussed.

In line with Water JPI activities, all the thematic public workshops and meetings planned within **WaterWorks2015** are organised to the highest standard and, in general, back-to-back with other Water JPI activities, as described in the **WaterWorks2015** Project Management Plan Report (Deliverable D 1.1, August 2016).

With the support of the event-hosting organizer and the **WaterWorks2015** Secretariat, relevant information about the events are disseminated via all channels mentioned before, as already being used in the frame of Water JPI and its related EC-supported projects.

2.2.4 Online Booklet of funded projects

The preparation of the online booklet²⁵ of the 21 transnational research projects funded under the Water JPI 2016 JTC - listed in the Annex - is part of the activities of the ERA-NET Cofund

¹⁸ http://www.waterjpi.eu/resources/newsletter/archive/2017/waterjpi_newsletter_2017_01.pdf

¹⁹ <http://www.waterjpi.eu/resources/newsletter/archive/2017/2017-02.pdf>

²⁰ <http://www.waterjpi.eu/resources/newsletter/archive/2017/2017-03.pdf>

²¹ <http://www.waterjpi.eu/resources/newsletter/archive/2017/2017-04.pdf>

²² <http://www.waterjpi.eu/resources/newsletter/archive/2018/2018-03.pdf>

²³ <http://www.waterjpi.eu/resources/newsletter/archive/2018/2018-05.pdf>

²⁴ http://www.waterjpi.eu/index.php?option=com_content&view=article&id=571:ww2015-presentations&catid=80:documents&Itemid=1008

²⁵ <http://www.waterjpi.eu/joint-calls/joint-call-2016-waterworks-2015/waterworks-2015-booklet>

WaterWorks2015, and included in Work Package WP5, Task 5.1 “Communication, Exploitation and Dissemination of the results from the co-funded Water JPI Joint Call” led by ISPRA and involving EPA, ANR, and IRESA as partners.

The online booklet is an interactive communication tool aiming at giving visibility to the funded projects and to the involved institutions, both funding and research bodies. The first online version of the booklet was published on August 2016 and it was released with the collaboration of the Network of Researchers in charge of CDAs. It describes all the 2016 JTC funded projects including abstracts, organisations involved and funding. The booklet also contributes to the dissemination of the technical and scientific information about the funded projects by providing an easy access to the studies and promoted research. Finally, the booklet has a high level of interactivity and provides an easy access to all information about the projects.

2.2.5 Social Networks

Water JPI Social Network

Social and professional networks as well as video-sharing websites are already used for the Water JPI and to communicate on **WaterWorks2015** outputs, with the intention of increasing their use to enlarge the flow of information and reach new target audiences.

Figure 1: Logos and links of Water JPI Networks



With the purpose of ensuring the continuous dissemination of relevant information via social networks, **WaterWorks2015** consortium members actively participating in WP5 activities have the responsibility of continuously updating and publishing in each of the above-mentioned social networks. Nevertheless, active contribution and participation of all Water JPI and **WaterWorks2015** partners is requested.

Twitter: For each breaking news related to Horizon 2020 programme, the following hashtag and tag will be used as indicated by the EU Commission: @EU_H2020 and #ResearchImpactEU. Breaking news related to partners and networks of **WaterWorks2015** are promptly tweeted and partners hashtagged and tagged (in case of having a twitter user account).

Additionally, pictures published can also be tagged by referencing other twitter users (e.g. @WaterJPI, @FACCEJPI, @EU_Commission, @EU_H2020 or **WaterWorks2015** consortium partners). This enables identified twitter users to be notified and potentially retweet the post that they were identified.

Currently the Water JPI Twitter account has 2066 Followers and 8916 Tweets published (16/04/2019).

The FACCE JPI twitter account has 1073 Followers and 701 Tweets published (16/04/2019).

Facebook: The Water JPI Facebook account is used to promote all funded projects, including **WaterWorks2015**. The use of Facebook is aimed at promoting the project activities and the related events to a wide audience

LinkedIn: The Water JPI has a LinkedIn Group²⁶ called the Water JPI Researchers Forum, which allows to reach a professional target on water-related issues. The Water JPI Researchers Forum Group, moderated by the Water JPI Secretariat, was created in January 2016 for:

- ✓ Encouraging discussion and networking among researchers in the Water RDI area in Europe and beyond;
- ✓ Informing about Water JPI activities, in particular on JTCs, on results of R&I projects (i.e. dissemination of the information on the **WaterWorks2015** JTC launch and results, on the funded projects booklet, etc.); and
- ✓ Facilitating the partnering and networking between its researcher members for future activities.

Currently, the Water JPI Researchers Forum has 1,872 members registered (18/04/2019).

YouTube: On the Water JPI channel²⁷, videos of meetings, conferences and other materials related to the project are uploaded.

The use of social networks will be encouraged among the Water and FACCE JPIs and **WaterWorks2015** consortium partners, relying on the Network of Researchers in charge of the project CDAs.

2.2.6 Press Releases and other Communication Tools

A press release is a written communication, published on the homepage of the Water JPI website and disseminated via e-mail, addressed to the broader Water JPI community, aimed at announcing newsworthy information (e.g. new actions, updating of important documents, such as, the SRIA, launch of JTCs, Workshops, etc.).

Additionally, with the purpose of raising public awareness about the Water JPI and its related EC-supported projects, including **WaterWork2015**, a series of dissemination material, such as flyers, posters and brochures, can be consulted online and/or downloaded. This material was prepared to be used by and provided to different scientific/technical and institutional groups of interest and events.

Articles focusing on the presentation of the project (activities, outcomes, etc.) are published on different channels. They may take the form of news, announcements, tweets, LinkedIn posts, press releases, published on the project website, on external websites including partners' websites, on social networks, e-newsletter Water JPI and e-newsletter. All the articles approved within the Water JPI, especially the ones addressing agriculture issues, will be shared with FACCE JPI for publication (and vice versa).

2.2.7 Internal communication

The PDER of **WaterWorks2015** takes also into account the Internal communication that is the basic tool to integrate information and awareness and to promote the spreading of a sense of belonging and to share the objectives and information among **WaterWorks2015** Consortium partners. Internal communication makes use of different tools, including:

- ✓ E-mail messages: each information / document transfer (to or from partners) shall, whenever possible, be done by e-mail; an updated Partner email contacts list is shared

²⁶ <https://www.linkedin.com/groups/8455262/>

²⁷ <https://www.youtube.com/channel/UCIR880cyeg5v87KzLzeVlkQ>

by **WaterWorks2015** and Water JPI Partners, allowing the internal circulation of information / documents among partners. This list is managed by the Water JPI Secretariat.

- ✓ Video and phone conferences: different communication/conversation systems, including Skype and webinar video/phone meeting platforms available to the Water JPI and **Waterworks2015** partners' usage are encouraged.

ISPRA and the Water JPI Secretariat interact with the **Waterworks2015** consortium partners to manage both public and private (intranet) sections of the Water JPI website, to collect contributions, to edit the Water JPI e-Newsletter, to manage other communication tools (Mailing-list/Facebook/Twitter/etc.), to upload documents in the intranet section.

2.2.8 WaterWorks2015 Intranet website

The **WaterWorks2015** Intranet section, accessible from the Water JPI website, is designed to provide repositories of several documents shared only among the project's partners, such as agendas, minutes of meetings, working papers, databases, contact lists, deliverables etc. The content, functions and use of the intranet are outlined in a manual available on the intranet section that includes instructions on how to use these functions. WP leaders may post documents relating only to their WP, and inform partners of the updates.

Similarly, to what is already being implemented for other Water JPI Intranet pages, the **WaterWorks2015** dedicated area page has several document repositories shared among partners, including agendas, minutes of meetings, working papers, databases, contact lists, deliverables produced, etc. The dedicated intranet page consists of a drop-down menu allowing the access to the following items:

- Participants;
- General documents;
- Meeting documents;
- WP1 - Coordination and management;
- WP2 - Co-funded call management: preparation and launch;
- WP3 - Co-funded call management: Evaluation and proposal selection;
- WP4 -Monitoring and assessment of the projects funded through the **WaterWorks2015** co-funded call;
- WP5 - Communication, Dissemination and Exploitation of the results from co-funded call;
- WP6 - AAs on Strategy;
- WP7- AAs on Implementation; and
- WW2015 RMT Application.

An individual user personal login and password is required to access the **WaterWorks2015** dedicated intranet page. The password provides access to pages where it is possible to create folders, upload and download documents. A total number of 189 passwords have been assigned²⁸.

²⁸ Data collected in December 2018

2.2.9 FACCE JPI Communication tools

In addition to the tools described above, FACCE JPI has its own communication tools:

- FACCE JPI website²⁹: the external website already exists. FACCE-JPI Communication team will ensure the continued elaboration of the website into a state-of-the-art repository of FACCE-JPI information and the on-going entry of new information and updates. The external website is used for external dissemination and communication activities, to provide general information on the objectives and activities of the initiative and to store freely available dissemination material, such as flyers, public reports, presentations, policy briefs and other documents. The website will be reformatted and re-organised in order to better reflect the Core research Themes through which FACCE-JPI actions are operating.
- FACCE JPI Social Network: The JPI's social media account on Twitter³⁰ and the LinkedIn group discussions will be further elaborated with specific channel focuses.
- Internal and external Newsletters: which have and will continue to disseminate information on the **WaterWorks2015** call and projects.
- Press releases & Leaflets and flyers.

3. Implementation of the WaterWorks2015 CDAs

To increase the visibility of the Water JPI and of the projects funded under the **WaterWorks2015** JTC, including the results that researchers need to accomplish, it is necessary to activate and reinforce networks with tasks of communication, dissemination and monitoring of the activities carried out both within and outside the Water and FACCE JPIs.

The general aims of the reinforcement of the networks system are to:

- increase the consistency of the general communication;
- strengthen and maintain a fruitful and an effective exchange of information among the different networks involved;
- share communication methodologies within the partnership;
- coordinate activities for data collection related to funded projects (see the online booklet of funded projects);
- coordinate researchers acting as "Contact Points on Open Data (OD) and Open Access (OA) and their activities for data collection related to the results of the funded projects";
- share monitoring activities useful for the evaluation of the communication actions

3.1 Communication Networks within the Water JPI

All **WaterWorks2015** partners are involved in CDAs activities, some of them in a systematic way in relation to specific communication tools used (such as for the e-Newsletter or for the updating of the Water JPI website). The Water JPI **Governing Board** (GB) and **Advisory Boards** (AB) members have been invited to collaborate to draw up the articles for the Newsletter and

²⁹ www.faccejpi.com

³⁰ <https://twitter.com/faccejpi>

to identify upcoming international, national and local events of interest for the issues of **WaterWorks2015**.

In addition, the WP5 Partners have also been invited to draw up the articles to be disseminated through the communication and dissemination tools (e-Newsletter/website etc.). This group is called “Communication and Dissemination Network- WP5 partners”.

These networks are also invited to disseminate at national level the news about the Water JPI and **WaterWorks2015** activities and to carry out the evaluation of the communication activities developed.

3.2 Communication networks composed of members outside the Water JPI

At the same time, other networks were created in order to improve the CDAs in **WaterWorks2015**. The Networks and their tasks are listed below:

- Network of Researchers in charge of CDAs: all 2016 Joint Call funded projects must develop CDAs related to their own project. They may use their communication tools as well as the Water JPI communication tools, such as the Water JPI e-newsletter and Water JPI website. For this purpose, Communication and Dissemination Contact Points in charge of the activities of the funded projects have been identified. The contact with this communication network is guaranteed by ISPRA.
- Network of Researchers in charge of Open Data and Open Access activities. This network is addressed in particular to the dissemination activities foreseen through the OD/OA tool available on the Water JPI website (see the 5.2 section dedicated to OD/OA).

The collaboration among the **WaterWorks2015** partners and the 2016 JTC Communication and Dissemination contact points is ongoing and will continue in order to intensify the CDAs, including evaluation actions.

In addition and in order to achieve the CDAs aims of WaterWorks2015, an exchange of information and communication with FACCE is ongoing.

4. Dissemination vs Exploitation principles for WaterWorks2015

One of the key questions for all projects generating new knowledge is related to the vision in the long term for utilizing the outputs of the project. If there is a willingness to protect an output of the project through instruments such as a patent or a trademark, the project partners should discuss this issue and apply a no-dissemination rule concerning that specific item: disclosing a confidential information at an early stage may result in a failure in its future protection (see Table 4).

All involved partners should identify the different items, outputs of the project, explicitly define the level of dissemination proposed for each of them and provide explanations as to how the process will take place.

Table 4: Differences between Dissemination and Exploitation activities (Ref. modified from European IPR helpdesk, Fact sheet “Publishing vs. Patenting”, 2015).

	Publication	Open Data	Defensive publication	Patenting	Secrecy
Applicability	For knowledge sharing purposes	For knowledge sharing purposes	For commercially exploitable technology	For commercially exploitable technology	For new production processes, end products
Rights granted	Copyright		No exclusivity (anteriority)	Exclusive rights	No disclosure
Procedure	No		Yes (simpler)	Yes	No
Costs	Low to none	Low to none (depending of the OA publishing model – Green or Gold)	Medium	High	Low, but high management level
Use of the technology	Everyone	Everyone	Locks competitors out,	Only the patent owner, unless licensed	At risk, as the invention covered by confidentiality can be patented by others
Technology protection	Only the article text		Used for patent examiners, IP litigation risks	By patent claims	
Financial gain	Likely (paper publication)		Yes	Yes	
Technology disclosure	immediately		After 18 months	After 18 months	

4.1 Intellectual Property Rights

According to the World Intellectual Property Organization³¹ (WIPO), Intellectual Property Rights (IPR) refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce. Intellectual Property (IP) can be divided into two main categories:

- Industrial property (e.g. patents, industrial designs and trademarks) and
- Copyright (right of the author or creator).

³¹ <http://www.wipo.int/portal/en/index.html>

The results of **WaterWorks2015** RDI activities must be exploited, the IP issues are a core part of the project success and require appropriate identification and protection.

As indicated in the Communication (2008) 465/332 from the EC on the IPR strategy for Europe: “protection of IP is a key framework condition for innovation, stimulating research and development investment and transfer of knowledge from the laboratory to the marketplace (...). This may also contribute as part of wider policy to finding solutions that could address global issues of increasing significance such as climate change, the ageing world population, and a possible energy crisis”.

Therefore, all researchers involved in the co-funded projects and all **WaterWorks2015** consortium partners involved in the Cofund project and its AAs, must ensure that society can be made aware of the project’s non-confidential information to be of benefit to European society and consumers (see also “Exploitation channel for public research results”³³) and to create the basis for further R&I. In fact, a wider access to scientific publications and data can help to accelerate innovation, foster collaboration and avoid duplication of effort.

Ownership and transfer of newly developed IP, as well as access to existing IP should be properly managed and any arrangement would need to comply with relevant national and/or European legislation.

Thus, in **WaterWorks2015**, protection, management and sharing of IPR is promoted using the specific Framework Condition (see Voluntary Guidelines Framework Conditions for Joint Programming in Research 2010³⁴). Moreover, Article 23a – Management of IP - of the **WaterWorks2015** Grant Agreement (GA), specifically refers to the obligation to take measures to implement the EC Recommendation on the management of IP in knowledge transfer activities.

4.2. Dissemination of results of the WaterWorks2015 JTC Funded Projects

The Dissemination activity regards the disclosure of the results of the **WaterWorks2015** JTC funded projects, whereas the exploitation starts when the first results are available and aims at their valorisation. The scope of the **WaterWorks2015** JTC was focused accordingly to the Water 3 [2015] H2020 topic “Stepping up EU research and innovation cooperation in the water area” and has been launched in order to support research on the sustainable management of water resources in agriculture, forestry and freshwater aquaculture sectors, in line with the Water and FACCE JPIs SRIA/SRA.

The scientific and technical production delivered by the **WaterWorks2015** JTC funded projects may include publications (any forms) and/or data. Any IPR issues will be taken into account in the Consortium Agreement (CA) systematically requested for the funded projects under a JTC.

The Water JPI promotes its Open Access (OA) policy, with a balanced support to both Green OA (immediate or delayed open access that is provided through self – archiving proposed by the Water JPI OA/OD interface) and Gold OA (immediate open access that is provided by a publisher – Metadata provided on the JPI OA/OD interface) (see section 4.3).

The consortium of a funded project promotes the project and its results with a comprehensive communication plan that defines clear objectives and planning. It may choose the form for disseminating their results (website, presentation at a scientific conference, peer-reviewed publication, press releases, etc.). Any dissemination of results (in any form) must include the following acknowledgement reference to funding and funders:

³² https://ec.europa.eu/internal_market/indprop/docs/rights/communication_en.pdf

³³ <https://www.iprhelpdesk.eu/node/2277>

³⁴ https://ec.europa.eu/research/era/docs/en/voluntary_guidelines.pdf

- a) display the EU emblem and
- b) include the following text:

For communication activities: “This project has received funding from the *European Union’s Horizon 2020 research and innovation programme* under grant agreement No 689271 as well as the FPO (XXX) ”.

For specific communication on equipment acquired by funded project X, this equipment has been acquired within a project that has received fund from EC and XX agencies....”

When displayed together with another logo, the EU emblem must have appropriate prominence.

Recipients must ensure that all outcomes (publications, etc.) of transnational 2016 JTC projects include a proper acknowledgement of the Water JPI, the European Commission and the respective FPO. If possible, the acknowledgement reference should also include the Water JPI, FACCE-JPI and **WaterWorks2015** logos (see Figure 1)

Figure 2: Logos of Water JPI, FACCE JPI and of **WaterWorks2015** ERA-NET Cofund



4.3 Open Access and Open Data

WP5 of **WaterWorks2015** envisages the promotion of OA and to stimulate Open data (OD) for all scientific publications produced within **WaterWorks2015** JTC funded projects. This output is expected, particularly, to improve conditions for conducting research by minimising the time spent searching and accessing relevant information on funded projects. The Water JPI OD/OA³⁵ tool is set up to include submitted metadata on all relevant data resources directly generated by the funded project, as well as additional information on how this data will be exploited, if and how data will be made accessible for verification and re-use, and how it will be curated and preserved. There will be also made available a catalogue of datasets, publications and other projects outputs, fed by project partners.

The OD/OA (tool) section of the Water JPI website was given an interface with specific options, enabling third parties to access, mine, exploit, reproduce and disseminate the uploaded research data free of charge for any user, for instance by attaching a Creative Commons Attribution License ([CC BY- SA 4.0](https://creativecommons.org/licenses/by-sa/4.0/)³⁶) to the data deposited.

Although the OD/OA Interface tool is open and available for public consultation without a password, a password supported access has been assigned to the **WaterWorks2015** Projects’ Coordinators (enabling them to direct upload of research data) and to the **WaterWorks2015** OD/OA Contact Points (enabling them to monitor the funded projects’ OD/OA requirements). ISPRA communicates both with the **WaterWorks2015** Projects’ Coordinators and the **WaterWorks2015** OD/OA Contact Points, to encourage the uploading of research data in the OD/OA Water JPI Interface tool by:

- informing about the online OD/OA tool and its updates;

³⁵ <http://opendata.waterjpi.eu/>

³⁶ <https://creativecommons.org/licenses/by-sa/4.0/>

- providing support in the use of the tool if needed;
- collaborating in the monitoring activity.

The use of this OD/OA projects research database tool will guarantee the traceability of the results of the funded projects, as well as their accessibility.

The Water JPI OD/OA tool User guide (October 2018)³⁷ is available on the Water JPI website to facilitate its access and use.

The funded projects' research results included in the OD/OA are of particular interest and can be used for future research and policy making. They can also be used for educational, societal or any other relevant purpose. At a broader Water JPI scope, it is of utmost importance that funded projects research results will be used to benefit the two JPIs, policy makers and stakeholders. This is also stressed in the [Voluntary Guidelines on Framework conditions](#)³⁸.

In the context of the Water JPI, the following policy should apply:

- Publishing costs in an open access context, related to scientific results obtained in the context of **WaterWorks2015** JTC funded project, should be considered eligible;
- The Water JPI and the **WaterWorks2015** JTC funders expect researchers to maximize the opportunities to make the research data resulting from their scientific work available free in an open repository;
- In case that data originate from ongoing projects, the related funding conditions need to be taken into account and the conditions cannot be overruled;
- Authors are encouraged to retain their copyright or, in case of transfer of copyright to third parties, at least to retain the right to disseminate via OA;
- The open dissemination and access policies among those of the participating funding bodies should prevail, unless such openness should be judged to represent a risk for the EU global competitiveness.

In **WaterWorks2015**, management of the knowledge transfer, IPR and legal and ethical issues are part of WP1- Task 1.2 "Consortium coordination and project management" (ANR as leader and EPA, FCT, MINECO and ISPRA as partners).

5. WaterWorks2015 Exploitation activities

5.1 Exploitation of Results of the 2016 JTC Funded Projects

5.1.1 Basic Principles

Each selected Consortium will generate its own results and has an obligation to conclude in turn its own Consortium Agreement to deal with exploitation issues and undertake that exploitation according to the nature and objectives of the research performed in that Consortium.

It is up to the owners within each project consortium to decide on whether to first seek protection for IPR or whether to publish, in particular using the OD/OA policies. Dissemination and exploitation and IPR policies within the funded projects, **WaterWorks2015** and the Water JPI should be compatible and coherent.

³⁷ http://opendata.waterjpi.eu/User_guide_OD_OA.pdf

³⁸ https://ec.europa.eu/research/era/docs/en/voluntary_guidelines.pdf

This requires an appropriate identification and protection of the IP and an effective knowledge transfer (KT) to specific end-users, in compliance with the relevant European and/or national legislation.

The researchers involved in the **WaterWorks2015** and Water JPI activities should be careful that dissemination activities carried out during their project do not later jeopardise the future exploitability of the results. Any dissemination activity will need to be delayed until a decision about the possible protection of RDI results has been made by the project consortium.

5.1.2 Intellectual Property Rights - Management in Funded Project Consortium Agreements

IPR rules should be set at the project level through the development and the signature of multilateral CA in the framework of the **WaterWorks2015** JTC. Therefore, joint owners (within funded project consortium) should establish an agreement regarding the allocation and terms of exercise of that joint ownership in accordance with their obligations under the project.

Any particular protection and exploitation strategy should be agreed before the research activities start. The consortia will have to decide which type of model suits best the situation of each project. (**Table 5** Consortium Agreement Model)

Table 5: Consortium Agreement model

Agreement Model	Terms
A	Each member of the consortium owns the IP in the results that it creates. They grant each other party a non-exclusive license to use those results for the purposes of the project and any other purpose.
B	The other parties assign their IP in the results to the lead exploitation party (or the lead exploitation party granted an exclusive license).
C	Each party takes an assignment of IP in the results that are germane to its core business and exploits those results.
D	Each member of the consortium owns the IP in the results that it creates. They grant each other party a non-exclusive license to use those results for the purposes of the project only. If any member of the consortium wishes to exploit another's IP they must negotiate a license or assignment with the owner of that IP.

The CA should at least address the following points:

- common start date and duration of the research project
- organization and management of the project
- role and responsibilities of each partner resources and funding
- confidentiality and publishing: it is recommended at the beginning of the project to define the non-confidential information that can appear on the project website, leaflets, or other dissemination materials.
- provisions for conditions for dissemination, including procedure for consulting with project partners prior to carrying out a dissemination activity (an agreed time limit should be fixed for any objection to the dissemination)
- IPR
- decision making within the consortium

- handling of internal disputes
- the liabilities of the research partners towards one another (including the handling of default of contract).

To avoid or resolve ownership disputes, beneficiaries should keep documents such as laboratory / experimentations notebooks, workshop proceedings, etc. to show how and when they produced the results.

5.1.3 Goals of the exploitation of results of the Waterworks 2015 JTC project

The overall aim of **WaterWorks2015** is to transform the knowledge produced within this Action (2016 JTC and AAs) into the solutions to the EU water challenges by making them part of public policies.

Within this context, technologies of a great commercial value are presumed to be better meant in the framework of the individual R&I **WaterWorks2015** JTC funded projects. In this sense, dissemination of the **WaterWorks2015** results to a wide range of stakeholders seems to prevail over the commercial exploitation.

Nonetheless, it may not be excluded that some of the products and results developed by **WaterWorks2015** consortium partners could benefit from a form of IPR (e.g. copyright).

Here below is an itemized non-comprehensive list of the generated results/expected results under **WaterWorks2015**:

- Call text and related documents and guidelines for applicants;
- Monitoring and evaluation framework with related reporting templates for the R&I funded projects the 2016 JTC;
- **WaterWorks2015** JTC funded projects online-booklet;
- **WaterWorks2015** webpages located in the Water JPI Website;
- **WaterWorks2015** Plan for Communication, Dissemination and Exploitation of Results;
- **WaterWorks2015** Project management, quality and risk control guidelines;
- **WaterWorks2015** webpages integrated in the Water JPI portal with The website domain;
- Communication materials developed under **WaterWorks2015** budget;
- Any Photos/Videos provided by **WaterWorks2015** partners for communication, dissemination;
- Logo of **WaterWorks2015** and the visual identity of the **WaterWorks2015** project (templates);
- Logo of **WaterWorks2015** JTC and the visual identity of the **WaterWorks2015** JTC (templates);
- **WaterWorks2015** Project reports and outputs, such as conference and workshop proceedings, Policy briefs, mapping reports and similar as part of **WaterWorks2015** activities;
- Impact assessment guidelines for the **WaterWorks2015** JTC and its funded projects.

The Exploitation of WaterWorks2015 results should, thus, be consistent with the nature of the project and the objectives to be achieved. A sensitive and flexible approach is advisable so that the exploitation of results is based on a common strategy of the Water and FACCE JPIs.

It is important to develop tailored valorisation tools for different types of target audiences. The most appropriate outputs depend to whom Water JPI and FACCE JPI want to address and at what level.

Looking in particular at Water JPI, it is important to stress that in the last years many different actions were undertaken for rationalising and promoting the exploitation activities with the

aim to influence the global agenda and to participate to it, both relating to the policies in the domain of Water and to the Research and Innovation Agenda.

In fact, the strategic R&I Agenda was shared with other stakeholders (including international institutions and partners) in order to update it in line with the new European and international needs. Also, the complementarities between Horizon2020 water programme and Water JPI programme was investigated.

Looking at the policies, within the ERA-NET Cofund WaterWorks2015, different tools were envisaged for the launch of science – policy interface for delivering specific documents for supporting the implementation of the Water Framework Directive & associated daughter directives ("Drinking Water", "Urban Waste Water Treatment", upcoming "Water Reuse"), or other EU policies (7th EAP, REACH, Industrial Emissions Directive, CAP and Food 2030, SET Plan (alternatives to fossil fuels – water dependent) and of the international conventions (UN SDGs, COP21 – Paris Agreement).

In addition, to improve communication of knowledge and collaborative networking between stakeholders and scientific community, a Knowledge Hub on "Emerging Pollutants" was created as further tool for dissemination of the outputs of the co-funded projects.

As some previous experiences have already demonstrated, the added value of a KH includes establishing a critical mass of research and technological excellence, integration and sharing of knowledge, improvement of infrastructures, implementation of mobility, providing data and modelling tools, training and capacity building.

Moreover, since the very first result of this finalized working group was a "policy brief on emerging contaminants", it is clear that the KH can be considered an excellent working tool for those researchers who intend to actively support political decision makers on specific topics.

The policy brief is therefore an output addressed to policy makers, while the practice briefs, another type of KH output, will be made more usable by end users. These tools, within the communication and dissemination strategy, will be written in an accessible and non-scientific language and will be focused on the implications of WATER-JPI and FACCE-JPI, finalizing them by group, specific target or sector to which they will be addressed.

5.1.4 FACCE JPI Exploitation of projects' results

Importance of policy context

To demonstrate the impact and added-value of FACCE-JPI work, it is important to identify to which relevant EU and international policies FACCE-JPI-generated research could contribute or which relevant policies can be influenced. The EU voice is becoming increasingly important in the international policy fora and FACCE has a role to play. In addition, FACCE-JPI members accord high importance to the contribution of FACCE to the global policy agenda. Therefore, as a primary objective, the relevance and value of FACCE-JPI projects research outcomes need to be better matched to European/international policies they relate to. Firstly, the work will be done by agreeing on the main European/international policies on which FACCE-JPI should focus. Then there will be an analysis of groups of thematically related FACCE-JPI projects that are linked to those identified policies. FACCE-JPI funded research should mainly contribute to these policies:

- The forthcoming European Food and Nutrition Security Strategy – Food 2030 (FACCE-JPI contributions with JPI "Healthy Diet for a Healthy Life" and JPI "Oceans")
- The European Bioeconomy Strategy (published in 2012 and reviewed and updated in 2018)
- The EU Climate and energy package action and COP21 follow-up

- The Common Agricultural Policy (CAP) and CAP 2020+ Moreover, results from FACCE-JPI projects should contribute to other EU policies, such as:
- Water Framework Directive
- Circular Economy Strategy
- New DG Agri strategy on Agricultural Research and Innovation, which sets out research priorities during H2020 and beyond.

An overall goal is to contribute to the Sustainable Development Goals.

One of the best examples is the contribution of the FACCE-JPI Knowledge Hub MACSUR (Modelling European Agriculture with Climate Change for Food Security) to the Working Group II of the 5th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). This work was done in partnership with a highly visible global initiative, the Agricultural Model Intercomparison and Improvement Project (AgMIP).

6. Monitoring and evaluation of communication and dissemination activities

The monitoring and evaluation process of the CDAs aims at verifying the effectiveness of the CDAs, by using both qualitative and quantitative indicators. Evaluating communication activities provides the opportunity to adjust the communication plan and to improve its processes, when needed, on the basis of feedbacks and constructive suggestions.

In order to analyse the impact of **WaterWorks2015** communication activities, monitoring actions are envisaged each 6 months, (in line with other supporting projects – see **Table 6**).

Table 6 - WaterWorks2015 communication indicators

WaterWorks2015 communication indicators	
website Online webpages dedicated WaterWorks2015	Contents are kept up to date
	Webpage fully complies with accessibility guidelines
	New or Unique Visitor Conversion
	Geographical breakdown of the visitors
	Sources for Incoming Traffic
	Interactions per Visit (Pages/Sessions)
	Return Visitor
	Bounce Rate
	Exit Pages
	Page Views
	Average Session Duration
Social Network: Facebook	Number of posts dedicated to WaterWorks2015
	Number of likes
Twitter @WaterJPI	Number of posts dedicated to WaterWorks2015
	Number of followers

WaterWorks2015 communication indicators	
	Retweets & Favourites
LinkedIn Water JPI Researchers Forum Group	Number of Members
	Number of discussions
Water JPI monthly newsletter	Number of news dedicated to WaterWorks2015
	Number of clicks per items of the Newsletter
National level media tools	Monitored via 6-monthly report/feedback from the partners (see the table 7)
Press releases addressed to international and national audiences	Number of Press Releases dedicated to WaterWorks2015
	Number of click on the press release on the website
	Number of websites who links to the press release / number of mention in the press/web
Internal Communication: Water JPI Intranet Section dedicated to WaterWoks2015	Number of WaterWorks2015 documents uploaded
	Number of WaterWorks2015 documents downloaded
	Number of visits

Additionally, a survey among the Consortium partners is conducted every six months on the JPI communication and dissemination at national level, through the following format (**Table 7**):

Table 7: CDAs indicators “National level media tools”.

WaterWorks2015 National level media tools	Data
Name Organization	
Website (Institutional website of the partner/member)	Link to organization’s website
Number of news dedicated to WaterWorks2015 activities;	n.
Number of website webpages dedicated to the WaterWorks2015 activities;	n.
Press releases addressed to international and national audiences	
Number of press releases dedicated WaterWorks2015 activities	n.
Communication at Conferences / Events	
Number of WaterWorks2015 presentations at Conferences/Events (breakdown at International, European, National levels);	n.
Number of info-days (breakdown at International, European, National levels);	n.

Social media	
Number of “national” Tweets dedicated to WaterWorks2015 activities	n.
Number of “national posts” on Facebook dedicated to WaterWorks2015 activities	n.
Number of “national posts” on LinkedIn dedicated to WaterWorks2015activities	n.

7. Monitoring and evaluation of exploitation activities

7.1. WaterWorks2015 project itself

The activities of the **WaterWorks2015** funded projects is ensured via WP4, through the use of:

- The mid-term and final term review reports
- The data collected in the OD/OA interface, on which each funded project is required to provide meta-data on the project outputs (publications, patents, licences, etc.).

The following indicators (see **Table 8**) will be surveyed every year by the WP4 and WP5 leaders:

Table 8: Indicators for monitoring exploitation of WaterWorks2015 JTC projects.

Exploitation tools	Indicators
Funded Project consortium agreements	Number of CA received by WP4 leader Number of CA with specific IPR mentioned
Funded projects outputs	Number of outputs (all categories) declared by WaterWorks2015 JTC funded projects Number of publications published by all funded projects Number of patents from all funded projects

For the **WaterWorks2015** project outputs, the indicators of monitoring and evaluation will be (**Table 8**):

Table 8: Indicators for monitoring exploitation of WaterWorks2015 JTC projects.

Exploitation tools	Indicators
Guidance documents	Number of documents presenting WaterWorks2015 outputs Number of WaterWorks2017 outputs Number of presentations outside the consortium
Communication tools	Number of webpages generated for WaterWorks2015 Number of communication materials (all categories) generated under WaterWorks2015 budget

9. Annexes

Definitions

The following definitions of key terms used in this document originate from the EC participant portal website³⁹ and the Regulation (EU) No 1290/20138 of the European Parliament and of the Council of 11 December 201340, laying down the rules for participation and dissemination in "Horizon 2020 - the Framework Programme for Research and Innovation" (2014-2020).

Communication

Communication on projects is a strategically planned process, which starts at the outset of the action and continues throughout its entire lifetime, aimed at promoting the action and its results. It requires strategic and targeted measures for communicating about the action and its results to a multitude of audiences, including media and public, and possibly engaging in a two-way exchange.

Dissemination

Dissemination is the public disclosure of the results by any appropriate means (other than resulting from protecting or exploiting the results), including by scientific publications in any medium. Dissemination of the project outputs to key stakeholders aims at making the knowledge (results) developed through the project available to the widest audience and enhancing project exploitation potential.

As stated in the Horizon 2020 (*H2020*) *Voluntary Guidelines*⁴¹ dissemination and take-up of research results are critical issues to be addressed, so as to ensure transparency, promote good science, engage society and raise public awareness. This is especially important for publicly funded research, for which accountability to the taxpayers is necessary, and consequently JPIs should put appropriate strategies in place to meet these needs."

Figure 2 highlights the main differences between CDAs.

³⁹ <http://ec.europa.eu/research/participants/portal/desktop/en/home.html>

⁴⁰ www.fch.europa.eu/sites/default/files/h2020-rules-participation_en.pdf

⁴¹ http://ec.europa.eu/research/era/docs/en/voluntary_guidelines.pdf

COMMUNICATION	DISSEMINATION
Covers the whole project (including results)	Covers project results only
Starts at the outset of the project	Happens only once results are available
Multiple audiences Beyond the project's own community, including the media and general public. Multiplier effect.	Specialist audiences Groups that may use the results in their own work, including peer groups, industry, professional organisations, policymakers
Informing and engaging with society , to show how it can benefit from research	Enabling the take-up and use of results
<i>Legal reference</i> Grant Agreement Article 38.1	<i>Legal reference</i> Grant Agreement Article 29

Figure 2 – About Communication and Dissemination⁴².

Exploitation

Exploitation is defined as “the use of results in further research activities other than those covered by the action concerned, or in developing, creating and marketing a product or process, or in creating and providing a service, or in standardisation activities”, according to the H2020 Rules for Participation⁴³.

It may require the protection of some of the results of the research conducted in the frame of the RDI project, via suitable forms for:

- an invention (e.g. patent, confidential information);
- the design of a technology (e.g. industrial design, copyright);
- a website (e.g. industrial design, copyright, trademark).

Communication, Dissemination and Exploitation (CDE) are all three related to the transfer of RDI results to end-users and/or beneficiaries. Selecting one of them implies the consideration of the other means because they are mutually dependent. With the aim to better protect and reap commercial and economic benefits from EU-funded R&I initiatives, H2020 has established a set of rules concerning the CDE of project results (see Figure 3), including their protection, through IPR.

⁴²http://ec.europa.eu/research/participants/data/ref/h2020/other/grants_manual/amga/soc-med-guide_en.pdf

⁴³www.fch.europa.eu/sites/default/files/h2020-rules-participation_en.pdf

Communication	Dissemination	Exploitation	
<p>“Communication on projects is a strategically planned process that starts at the outset of the action and continues throughout its entire lifetime, aimed at promoting the action and its results. It requires strategic and targeted measures for communicating about (i) the action and (ii) its results to a multitude of audiences, including the media and the public and possibly engaging in a two-way exchange.”</p> <p>(Source: EC Research & Innovation Participant Portal Glossary/Reference Terms)</p>	<p>“The public disclosure of the results by any appropriate means (other than resulting from protecting or exploiting the results), including by scientific publications in any medium.”</p> <p>(Source: EC Research & Innovation Participant Portal Glossary/Reference Terms)</p>	<p>“The utilisation of results in further research activities other than those covered by the action concerned, or in developing, creating and marketing a product or process, or in creating and providing a service, or in standardisation activities.”</p> <p>(Source: EC Research & Innovation Participant Portal Glossary/Reference Terms)</p>	 Definition
<p>Reach out to society and show the impact and benefits of EU-funded R&I activities, e.g. by addressing and providing possible solutions to fundamental societal challenges.</p>	<p>Transfer knowledge & results with the aim to enable others to use and take up results, thus maximising the impact of EU-funded research.</p>	<p>Effectively use project results through scientific, economic, political or societal exploitation routes aiming to turn R&I actions into concrete value and impact for society.</p>	 Objective
<p>Inform about and promote the project AND its results/success.</p>	<p>Describe and ensure results available for others to USE → focus on results only!</p>	<p>Make concrete use of research results (not restricted to commercial use.)</p>	 Focus
<p>Multiple audiences beyond the project’s own community incl. media and the broad public.</p>	<p>Audiences that may take an interest in the potential USE of the results (e.g. scientific community, industrial partner, policymakers).</p>	<p>People/organisations including project partners themselves that make concrete use of the project results, as well as user groups outside the project.</p>	 Target Audience
<ul style="list-style-type: none"> • Rules for Participants • RIA & IA Proposal Template 2.2 b) • Grant Agreement Art. 38.1 	<ul style="list-style-type: none"> • Rules for Participants • RIA & IA Proposal Template 2.2 a) • Grant Agreement Art. 29 	<ul style="list-style-type: none"> • Rules for Participants • RIA & IA Proposal Template 1.1, 2.1, 2.2 a) • Grant Agreement Art. 28 	 Formal Obligations

Figure 3 – Communication, Dissemination and Exploitation rules⁴⁴.

Other Definitions

Participant: person representing a beneficiary organisation for a particular grant⁴⁵.

Results: means any tangible or intangible output of the action, such as, data, knowledge or information, generated in the action, whatever its form or nature, whether it can be protected, as well as, any rights attached to it, including IPR.

Access rights: means rights to use results or background. Unless agreed otherwise, do not include the right to sub-license.

⁴⁴ https://iprhelphdesk.eu/sites/default/files/EU-IPR-Brochure-Boosting-Impact-C-D-E_0.pdf

⁴⁵ http://ec.europa.eu/research/participants/portal/desktop/en/support/reference_terms.html

Ownership of results: Results shall be owned by the participant whose employee(s) and non-employees (researchers, students) generated them; each participating organisation should reach an agreement with its personnel.

Joint Ownership / Co-Ownership: Where participants in a project have jointly generated results, and where their respective contribution to the joint results cannot be ascertained, or where it is not possible to separate such joint results for applying for, obtaining or maintaining the relevant IPR protection, they shall have joint ownership of those results.

Protection of results: Each participant should examine the possibility of protecting his/her results and must adequately protect them - for an appropriate period and with appropriate territorial coverage – if:

- results can reasonably be expected to be commercially or industrially exploited; and
- protecting them is possible, reasonable and justified (given the circumstances).

Access to Background knowledge: 'Background' means any data, know-how or information - whatever its form or nature (tangible or intangible), including any rights, such as, IPR – that is: held by the beneficiaries before they acceded to the project, and is necessary to implement the action or exploit the results.

Examples of it are prototypes; cell lines; patents, database rights, etc.. Although not obligatory, participants are strongly advised to agree on background before the project starts about the terms and conditions to utilize the background knowledge of other partners.

Sharing the results: Each participant may transfer ownership of its results. When transferring ownership, participants must consider the other participants' legitimate interests. Participants may also grant licences to their results. However, they must ensure that access rights can be exercised and that any additional exploitation obligations are complied with.

Confidentiality: Participants should not disclose confidential information to a third party without agreement of the partner from whom the confidential material originates. Two approaches are considered:

- explicit identification of confidential material; and
- 'assumed confidence'.

IP Provisions in case of Mobility of Researchers: Each participating organisation should reach an agreement with its personnel, establishing if the latter is entitled to claim rights to research results. An 'ad hoc' agreement should be signed between the host organisation and the researcher (or student) concerned.

New Parties joining: Suitable measures aiming at unreasonably restricting new parties' rights should be avoided. Equally, care should be paid in safeguarding the interests of the original partners.

Consortium Agreement (CA): Signed between the project participants aiming at supplementing the standard grant agreement; it can cover management issues with reference to IPR.

Confidentiality agreements / Non-disclosure agreements: Designed to ensure a safe and secure exchange of information, materials and samples. Parties must be clearly identified and the usage of material designated confidential clearly stipulated. This ensures that parties can only use material, as far as, their intended purpose.

Material Transfer Agreements (MTA): A contract that governs the transfer of tangible research materials (e.g. biological materials, such as reagents, cell lines, plasmids and vectors,

or other types of materials, such as, chemical compounds) between partners. MTA define the rights of the provider and the recipient with respect to the materials. Usually, recipients do not have a right to use the information for commercial purposes, though this is determined by the contract. The agreement will define the parties, terms, IP issues, and confidentiality conditions, including the rights for publication.

Joint ownership agreements: Lay down the rules of ownership of the project results where this belongs to several/all participants in a project. Partners should conclude appropriate agreements regarding the assignment and implementation of ownership, how costs and revenues will be shared, under which conditions licences can be given to third parties, etc.

Licensing agreements: The owner of an IPR (licensor) authorises another party (licensee) to use the subject matter of it, during a certain period and, generally, including the payment of royalties. There is no transfer of ownership, only an authorisation to use the object of the IPR in question.

Code of Practice for universities and other public research institutions: EC Recommendation on the management of IP in knowledge transfer activities for universities and other public research institutions. The Code consists of a set of general principles aiming to improve IP management and knowledge transfer by exploitation and dissemination of research results.

Open access: can be defined as the practice of providing on-line access to scientific information that is free of charge to the end-user and that is re-usable. 'Scientific' refers to all academic disciplines; in the context of research and innovation, 'scientific information' can refer to (i) peer-reviewed scientific research articles (published in scholarly journals) or (ii) research data (data underlying publications, curated data and/or raw data).

Open access to scientific publications: refers to free of charge online access for any user. Legally binding definitions of 'open access' and 'access' in this context do not exist, but authoritative definitions of open access can be found in key political declarations on this subject, for instance the Budapest Declaration of 2002⁴⁶)

Open Data: Open data refers to the practice of publishing (raw) data in a way that is accessible, reusable, machine readable and licensed permissively. It can be generated by a wide range of parties, including public authorities, the semi-public sector, businesses and the public.

Research data: refers to information, in particular, facts or numbers collected to be examined and considered, as a basis for reasoning, discussion or calculation. In a research context, examples of data include measurements, results of experiments, observations, statistics, survey results.

⁴⁶ <http://www.budapestopenaccessinitiative.org/read>

The funded projects under the Water JPI 2016 JTC

Project Acronim	Project Title	Coordinator	Participating countries
ABAWARE	Advanced biotechnology for intensive – freshwater aquaculture wastewater reuse	Norway	Norway, Germany, Finland, Ireland, Romania, Sweden
AgriAs	Evaluation and management of As contamination in agricultural water and soil	Finland	Finland, Germany, France, Sweden
AGRINuPeS¹	Integrated monitoring and control of water, nutrients and plant protection products towards a sustainable agricultural sector	Portugal	Portugal, Spain, The Netherlands, Sweden, Turkey
AgWIT	Agricultural Water Innovations in the Tropics	Canada	Canada, Germany, Brazil, Costa Rica, Denmark, Sweden, Taiwan
AquaVal	Valorisation of water use in aquaculture using multi trophic systems	Portugal	Portugal, Spain, Italy
AWARE	Assessing the fate of pesticides and wastewater-borne contaminants in agricultural crops and their environmental risks	Spain	Spain, Germany, France, Norway
CLEARANCE	Circular Economy Approach to River pollution by Agricultural Nutrients with use of Carbon-storing Ecosystems	Poland	Poland, Germany, Denmark
ECOSAFEFARMING	Development and testing of a novel photocatalytic system for efficient cogeneration of clean water and hydrogen for ecosafe agriculture	Turkey	Turkey, Germany, Canada, Spain
Euro-Sed	Eutrophication hotspots resulting from biogeochemical transformations and bioavailability of phosphorus in the fluvial suspended sediment of geologically contrasting agricultural catchments	Ireland	Ireland, Canada, Sweden,
FORWARD	Operational monitoring and Forecasting system for Resilience of agriculture and forestry under intensification of the WAteR cycle: a bid Data approach	Spain	Spain, Belgium, Denmark
IMPASSE	Impacts of MicroPlastics in AgroSystems and Stream Environments	Norway	Norway, Canada, Spain, The Netherlands, Sweden

<u>INNOMED</u>	Innovative options for Integrated Water Resources Management in the Mediterranean	Spain	Spain, Cyprus, France, Italy, Moldova, Portugal
<u>LEAP</u>	Legacies of Agricultural Pollutants (LEAP): Integrated Assessment of Biophysical and Socioeconomic Controls on Water Quality in Agroecosystems	Canada	Canada, Denmark, Portugal, Sweden
<u>OPERA</u>	Operationalizing the increase of water use efficiency and resilience in irrigation	The Netherlands	The Netherlands, South Africa, France, Italy, Poland, Spain
<u>POTENTIAL</u>	Variable rate irrigation and nitrogen fertilization in Potato; engage the spatial variation	Belgium	Belgium, Germany, Denmark, The Netherlands
<u>ProWspers</u>	How to PROtect Water, Soil and Plants production all together	Romania	Romania, France, Portugal
<u>REWATER</u>	Sustainable and safe water management in agriculture: Increasing the efficiency of water reuse for crop growth while protecting ecosystems, services and citizens' welfare	Portugal	Portugal, Romania, Spain, Sweden
<u>SMARTECOPONICS</u>	On-site microbial sensing for minimising environmental risks from aquaponics to human health	Spain	Spain, France, Italy
<u>SOSTPRO</u>	SOURCE STREAM (headwater) PROtection from forest practices: what are the costs and benefits, and how best to do it?	Canada	Canada, Finland, Sweden
<u>Water4ever</u>	Optimizing water use in agriculture to preserve soil and water resources	Portugal	Portugal, Spain, Italy, Turkey
<u>WaterFARMING</u>	Improvement of water and nutrient retention and use efficiency in arable farming systems from field to catchment scale in Europe and North Africa	Denmark	Denmark, Germany, Egypt, The Netherlands, Tunisia

¹ Due to legal reasons, the project' original acronym was replaced by AGRINuPeS with the agreement of the CSC, the [**WaterWorks2015**](#) Coordinator and the EC. (August 2017 – first edition of the booklet August 2016)