



Water Works 2015-2020 in Support of the Water JPI ERA-NET Cofund Action



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

2nd Water JPI Mobility and Infrastructures Workshop - Proceedings

(WP7, Task 7.2)

September 2019

Disclaimer

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List of abbreviations

- AnaEE Infrastructure for Analysis and Experimentation on Ecosystems
- ENVRI ENVironmental Research Infrastructures
- EOSC European Open Science Cloud
- ERIC European Research Infrastructure Consortium
- ERRIS Engage in the Romanian Research Infrastructures System
- ESFRI European Strategic Forum for Research Infrastructures
- FAIR Findable, Accessible, Interoperable and Re-usable Data criteria
- FAQ Frequently Asked Questions
- |PI |oint Programming Initiative
- MERIL Mapping of the European Research Infrastructure Landscape
- MSCA Marie Sklodowska-Curie Actions
- NCP National Contact Point
- RI Research Infrastructure
- SRIA Strategic Research and Innovation Agenda

List of partners

- ANR Agence Nationale de la Recherche
- ISPRA Istituto Superiore per la Protezione e la Ricerca Ambientale
- MIPAAFT Ministero delle Politiche Agricole Alimentari, Forestali e del Turismo
- UEFISCDI Unitatea Executivă pentru Finanțarea Învățământului Superior, a Cercetării, Dezvoltării si Inovării
- IenW Ministry of Infrastructure and Water Management



Executive Summary

This report contains the proceedings of the second Mobility and Infrastructures Workshop of the Water Joint Programming Initiative (Water JPI). In its Implementation Plan, the Water JPI has identified Mobility schemes and Research Infrastructures (RI), as other relevant instruments, in order to support the activities of the Water JPI communities. It was held within the additional activities of the ERA-NET Cofund programme WaterWorks2015. Mobility actions can involve capacity transfer of individual persons working or visiting a place which is not the one they belong to (foreign Institutes, other sectors); or even the exchange of larger groups, e.g. among research infrastructures. The platform aims to be an important tool for supporting mobility and infrastructures actions within the entire water community.

The workshop took place in Rome at Ministry of Agricultural, Food, Forestry and Tourism Policies (MIPAAFT) on the 6th of June 2019. This workshop was the occasion to exchange views on recommendations on the two proposed draft platforms, considering in particular RI platform operators needs or evolution of transverse activities of the Task Force on Research Infrastructures. During the event the new Water JPI platform for Mobility schemes and Research Infrastructures, which is under development, were presented and commented by workshop participants. It ended with discussions on the next actions in this area within the Water JPI Community.



Introduction to the Water Joint Programming Initiative

The Competitiveness Council of the European Union agreed on the launch of Joint Programming Initiatives (JPIs) in 2008. JPIs were at the time conceived to support the new means of European cooperation in response to the perceived limitations of the policy instruments available at the time. Even though the Framework Programme had already achieved considerable success, as measured by the number of participations and collaborative projects, the lack of collaboration and coordination between national public Research, Development and Innovation (RDI) programmes had been reported within the RDI policy arena.

The Water JPI "Water Challenges for a Changing World" (http://www.waterjpi.eu/) was launched in December 2011 following a decision at the European Council of Competitiveness.

The Water JPI membership has grown in November 2017 and November 2018, with the integration of three new member countries: respectively Latvia and South Africa, and Czech Republic. Currently with twenty-two partner countries and three observers, the membership accounts for 88 per cent of all European public RDI annual expenditure on water issues. One of the main key achievements of the Water JPI, since its approval by the European Member States in December 2011, is the high level of partner involvement in implementing joint transnational calls.

As a result of coordination activities, Water JPI member countries have approved as of June 2016, a common Strategic Research and Innovation Agenda (SRIA) that lays down RDI priorities for the following 5 scientific themes:

- Maintaining Ecosystem Sustainability;
- Developing Safe Water Systems for the Citizens;
- Promoting Competitiveness in the Water Industry;
- Implementing a Water-Wise Bio-Based Economy; and,
- Closing the Water Cycle Gap sustainable management of water resources

Meeting Venue

The meeting was organised by ISPRA, leader of Task 7.2 on Mobility and Infrastructure of the ERA-NET Cofund WaterWorks2015, supported and hosted by MIPAAFT (also partner of WaterWork2015) in its headquarter - Via XX Settembre 20, 00187 Rome (Italy).

Welcome and Opening

Serenella Puliga (MIPAAFT) welcomed the participants and opened the workshop with a presentation of MIPAAFT activities and implication within international cooperation programme such as the FACCE and Water JPIs and R&I coordination at EU-international level. MIPAAFT is a partner of WaterWorks2015 and is involved in Work Package 7 related to Additional activities on implementation with the researchers mobility and research infrastructures platforms, as well as exchange and sharing of knowledge (Task 7.1 – Knowledge Hub) and synergies among stakeholders (task 6.1. Common vision and adapting the strategies of the Water and FACCE JPIs).



The welcome address was delivered by the Water JPI Coordinator, **Dominique Darmendrail (ANR)**. Dominique Darmendrail introduced the Water JPI activities with a focus on the role of the task forces, including RI taskforce, aiming to integrate all activities on the long term. Furthermore, implementation of the SRIA requires access to research infrastructures for a transdisciplinary and cross-sectoral approach. She continued with an overview of Water JPI future activities and the development of SRIA 2030.

Moreover, several Water|Plupcoming activities opportunities were presented to participants:

- ERA-NET Cofund AQUATICPOLLUTANS related to I"Risks posed to human health and the environment by pollutants and pathogens present in water resources", in collaboration with the JPIs AMR and Oceans (pending EC decision on cofounding)
- ERA-NET Cofund to be submitted in February 2020, related to "Conservation and restoration of degraded ecosystems and their biodiversity, including a focus on aquatic systems", in collaboration with BiodivERsA.

Giuseppina Monacelli (ISPRA) continued with a focus on the work achieved so far and the next steps. In particular illustrating the previous actions that include:

- Review and analysis of existing information platforms and individual observatories at national and European levels (Euraxess, Meril ERRIS, etc.)
- Identification of mobility actions and research infrastructures
- Definition and review of water related RIs, in particular those linked to ESFRI;
- Survey and results analysis
- Ist workshop on mobility and research infrastructures (June 2018)
- Developing the first platform draft for presentation at second workshop in June 2019.

Giuseppina Monacelli after a short recap of previous workshop topics and output coming from discussion session, introduced the workshop agenda.

The main outputs from the first workshop (June 2018) about Mobility schemes and Research Infrastructures were:

About Research Infrastructures:

- <u>Mapping national tools and new needs:</u> do not duplicate what is already done, start from what is existing with new information in order to avoid fragmentation and overlapping.
- <u>Water JPI SRIA implementation and existing infrastructures</u>: all mapping activities should be done with a focus on the Water JPI SRIA priorities in order to maximize the impact.
- <u>Avoid fragmentation</u>: There are many examples of RI, platforms and actions, creating new platforms could increment the fragmentation itself. A connection among all facilities could manage complexity, reducing fragmentation in the water sector and finalizing all information, data RIs etc. through the Water JPI platforms related to Mobility schemes and research infrastructures.
- <u>Use standards</u>: The use of a common standard dictionary will help with search tool and browsing applications.
- <u>Intermediate scale:</u> It is important to focus on crosscutting scales, for example RI at basin scale, with many dimensions. Danubius-RI is an example of this approach.
- <u>Dialogue with stakeholders</u>: the development process must include stakeholders, from the water communities, scientific experts, etc, potential users of the information platforms



About Mobility:

- <u>Summer School:</u> organize summer schools, linked with existing actions and programmes and focused on Water IPI SRIA topics.
- <u>Mobility actions:</u> The development of mobility actions should be planned targeting in particular young researchers, avoiding 'gap of life' costs among countries through incentives for low salaries. This is already considered in the Marie Sklodowska-Curie Actions (MSCA) and it should be taken as an example.
- <u>Evaluation mechanisms:</u> The choice of criteria and evaluation mechanism are important in order to maximize the impact of SRIA topics and internal needs.

Research Infrastructures and RI Task Force

Steffi Lehmann and Florian Selge from Project Management Jülich, as research infrastructures taskforce leaders, introduced the task force overall objective, defining the Water JPI strategic role and potential support for water related RIs.



A perspective paper based on a Member questionnaire, developed within the taskforce, is the main outcome: For mainstreaming potential opportunities within the Water JPI, experts on Research Infrastructure from ministries and R&I-organizations were invited to address specific questions regarding gaps and needs of water-related RIs. The responses from 10 countries, with 15 ministries/institutions to the questionnaire "Research Infrastructure" to GB members contributed to this perspective paper, which is under review and consultation by JPI members.

RI and mobility schemes are useful instruments for implementing the Water JPI SRIA, and participation of national, European and International RIs in European and international networks could enhance mobility, accessibility and knowledge transfer.

Stimulation of RIs and connection with knowledge hubs could foster the development of ideas and activities of different research groups and institutions to improve international cooperation and competitiveness.

The second part of Research Infrastructures and RI Task Force session focused on **Ari Asmi's** presentation about **ENVRI** Community of Environmental Research Infrastructures, providing data and services for researchers.

ENVRI is an example of distributed RI under the ESFRI Forum. It is a collaboration of European Environmental Research Infrastructures towards:

- Science Integration:
 - o a universal understanding of our planet
 - a framework for science on all interactions within the Earth System, from solid earth to near space
- Data Integration



- o common data access policies and technologies
- Resource Integration
 - o joint innovation, common technologies,
 - o co-location
- Common Societal Impact

ENVRI is based on the idea of joining similar Research Infrastructures together for creating a community. Many technical and managerial issues are not only relevant to a single RI and users often use multiple sources of data/services for their multidisciplinary studies.

ENVRI community is based on three different pillars:

ENVRI:

- Community Building
- Common framework
- ENVRI Reference Model

ENVRIplus:

- Common developments
- Shared solutions for RI
- Services portfolio

ENVRI-FAIR:

- Enabling RI for Findable, Accessible, Interoperable and Re-usable Data criteria (FAIR)
- FAIR compliant services
- Link ENVRI to European Open Science Cloud (EOSC)

Ari Asmi showed some examples of distributed RIs as Danubius RI, AnaEE, AQUACOSM, etc. and other European projects (e.g. RISCAPE).

Following this presentation, different issues were discussed by the Workshop participants:

- The coverage of national RIs, vs. who is really taking part in the ESFRI RIs, their EU13 countries' inclusiveness
- The types of services proposed by the RIs, vs. their level of standardisation, the level of involvement of private companies
- The connection with other existing platforms, such testing wastewater treatment plants
- The link with COST and MSCA actions
- Some foreseen needs: missing RIs, training to good practices.

Mobility and Research Infrastructures Platform

Alessandro Lotti (ISPRA) introduced the <u>draft platform</u>, illustrating proposed functionalities and tools. After a short presentation, the partners attending the workshop, reviewed and commented the draft platform within the discussion session.



For the sake of clarity, this section presents the draft platform as set for this workshop and for enlarged consultation of JPI partners (up to September 2019). The following proceedings section will address the comments and suggestions of modifications of the Workshop participants.

Home page

The platform style and design are similar to the Water JPI website, with a direct and friendly homepage setting. On the top right hand corner, it is possible to link to Water JPI socials directly. Moreover, there is a searching bar and the main menu.



Home

MOBILITY AND RESEARCH INFRASTRUCTURES PLATFORM

In its Implementation Plan, the Water JPI has identified Mobility and Infrastructure, as other relevant instruments, in order to support WaterJPI community and its network. Mobility actions can involve capacity transfer of individual persons working or visiting a place which is not the one they belong to (foreign Institutes, other sectors); or even the exchange of larger groups, e.g. between research infrastructures. The EC already has instruments (e.g. ESFRI, Marie Skłodowska-Curie actions etc.), but the support for mobility of researchers and students could also be strengthened at national and regional levels. There is potential to align national tools through coordination between national and EU calls to facilitate researcher mobility. Dedicated R&I strategies encompassing mobility and infrastructures realization at regional level are needed. Infrastructure actions refer to facilities, resources and related services used by the RDI community in conditions of excellence. The instrument develops the joint creation, management, access and updating of infrastructures.

Figure I – Home page

Scrolling through the homepage, it is possible to access Mobility and Research Infrastructures section clicking on the related images (see fig. 2).



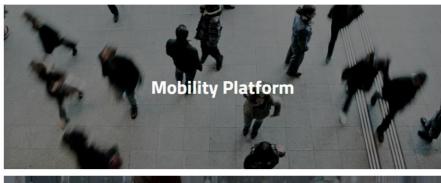




Figure 2 - Access to RI and Mobility sections

As it appeared important in previous discussions within the Water JPI, the Water JPI draft platforms are linked to other existing platforms, such as Euraxess and MERIL, or funding programmes (e.g. ESFRI). Therefore the draft homepage offers direct link with some of these programmes.



Figure 3 - Water JPI platform network

Furthermore, as already highlighted, all mapping activities should be connected to the Water JPI SRIA priorities in order to maximize the potential impact of the information platforms. direct link with Water JPI SRIA themes has been set up, as well as in the RIs description or searching filters.





Figure 4 - Link with Water JPI SRIA Themes

Mobility section

The Mobility section is structured in five different subsections:

- <u>Jobs and Opportunities</u>: All opportunities from our network will be aggregated on the page including job offers, e-learning courses, mobility opportunities, call for application etc. Now, the Opportunities section of the Water JPI newsletter are uploaded automatically on the platform through the RSS tool.
- <u>Career Development</u>: through the career development section, a user will have the opportunity to follow webinars, e-learning courses, on-line lectures proposed by partners, Water JPI staff and funded projects partners.
- Find Members: this section is designed as a searching tool for searching and identifying possible partners, institutions and researchers based on topics, skills and location filters.
- <u>Practical Information</u>: This section is designed as Frequently Asked Questions '(FAQ) page with all
 practical information for who is moving abroad, including information about bank, passport, travel
 documents etc.



Research Infrastructures section





Figure 5 - Research Infrastructures section

Research Infrastructures section is designed in two main subsections

- RI Catalogue: an online catalogue where a user can browse all RIs registered on the platform through a series of filters.
- RI Map: same catalogue can be consulted through the map, searching by location and filters

This section aims to provide a wide catalogue of water research infrastructures at national, EU and international levels.

As illustration of the RI description module, it was presented the example of Danubius-RI.



- Name
- Web link
- RI Type: National, European, Global, distributed, einfrastructure
- Services
- Person/Organization
- Domain and Key themes: connection with Water JPI SRIA themes and topics
- Location
- Keywords
- Description



Documents section

This section is designed in order to be a library of all documents related to research infrastructures, mobility actions and platforms. It will designed as a catalogue with a searching bar for browsing documents within the platform. The platform library will be in line with the <u>Water JPI library</u> as provided on the Water JPI Website.

ocedures and quality control (the DANUBIUS Commons).

Discussion session and outputs

This section addresses the comments and suggestions of modifications of the Workshop participants on the different parts of the draft platforms.

Home page review

- General introduction text
 - o to be reviewed with a better balance between mobility and research infrastructures



description.

- Link with other programmes (Euraxess, Horzion 2020 etc)
 - Connect the relevant programmes with the Mobility or Infrastructures parts in relation with their function.
 - Explaing link and connection with in order to avoid misunderstanding with what the Water
 JPI is proposing (it looks like they are partners see fig. 3 which is not the case).

Mobility section review

- Introduction text
 - o to be reviewed in order to better define what "opportunities" means

• Jobs and opportunities

- Several modes of uploading such information should be possible: flux from relevant parts of the Water JPI newsletter (not all Opportunities information are related to jobs), interconnection / interoperatibility with selected partners, direct upload by partners, with adhoc quality check (cf. editorial rules of the Water JPI newsletter as example).
- o A template for direct upload should be developed to facilitate this task.
- All opportunities coming from the Water JPI communities network should be listed, specifying the source, the kind of opportunity (job opportunity, call for project funds etc.) and the deadline for application.
- o For e-learning course opportunities, in case of Water JPI e-learning courses, the user should be redirected to the related page (Career development).
- o page should contain a search bar **and** filter**s**, such as type of opportunities (ex: internship, research funds, PHd, MSc, research fellow, tender, etc.) and location. https://www.joshswaterjobs.com/ is a good example of user-friendly approach.

• Find members section

- A clarification of the objectives behind this section is required: partnering for calls (vs. existing LinkedIn Water JPI researchers forum group)? Experts identification (vs. Funders databases)? Presentation of key research and innovation players (vs. mapping exercise done in the past, to be updated and renewed)
- o If implemented, it is necessary to distinguish between "who searches" and "who offers", creating two different pages.
- The presentation of key players in the Water challenges area should be then limit it to institution and organization (not people), providing information about the organization itself.

• Practical information section

o it should be developed as a "checklist" or a "to do" list for who is moving abroad. Moreover, it was suggested to link it with Euraxess section about banking information which is a good example.

Research infrastructures section review

RI MAP



o In case of distributed infrastructures, the map should display a diagram of connection and the network of sites/institutions/RIs.

RI Catalogue

- The template of information provided should be accurate and wider. The Romanian ERRIS platform presented at first workshop and The Dublin City University services platform sent following first workshop are good examples to follow to derive the Water JPI platform template. The support of ENVRI community could also be considered as they are making progress in such harmonisation.
- It is important to set a list of keywords (related to SRIA themes) and services (mapping of services of research infrastructures reviewed).
- As initial data core, it was suggested to start from RIs reviewed by Task Force on research infrastructures, identifying a first list of keywords, services, institutions and RI related.

General issues

- How to update the different sections: connect to the relevant webpages updated by their owners to avoid permanent check for updates.
- How to "publicise" the platforms to have the critical mass for ensuring its future use? Via RI coordinators for explaining the potential benefits for them (ex. Funding eligibility, enlarged access to their services), starting :from EU ESFRI infrastructures listed by TF on infrastructures, and then national infrastructures via the JPI members;
- Compliance with GDPR regulation and Water JPI privacy policy for all sections of particular sensitivity (e.g. draft find members section).
- Connection with the other tools (e.g. Water JPI OA/OD interface, Water projects database) and the knowledge hubs of the Water JPI to present a global and comprehensive view of the relevant data.
- Graphic style and design: the web-page should be more visually attractive by adding colours and dynamic sections.

Next steps

All comments and feedback by partners will be collected by the 5th of September 2019, in order to starting the upgrade of the platform after a thorough review.

The platform will be launched in December 2020 which coincides with the termination of the WaterWorks2015 project.



Annex I: Programme

6 June 2019				
9:30 – 10:00	Registration and Welcome Coffee			
	Welcome and opening			
	Water JPI Coordinator - Dominique Darmendrail (ANR)			
10:00 – 10:45	MIPAAFT Institutional Welcome – Serenella Puliga (MIPAAFT)			
	Water JPI Mobility and infrastructures task - Giuseppina Monacelli (ISPRA)			
	Research Infrastructures and RI Task Force			
10.45 – 11.30	Task Force on Research Infrastructure outputs — Steffi Lehmann / Florian Selge (JUELICH)			
	Research Infrastructures and EU network ENVRI-PLUS project - Ari Asmi (University of Helsinki)			
	Mobility and Research Infrastructures Platform			
11.30 – 12.30	Presentation of the platform — Alessandro Lotti (ISPRA)			
12.30 – 14.00	<u>Lunch break</u>			
	Discussion session			
14:00 – 16.15	Discussion and analysis of Water JPI mobility and Research Infrastructures platform			
16:15 – 16:30	<u>Coffee Break</u>			
16:30 – 16:45	Summary of the workshop, conclusions and next steps			
16:45 – 17.00	End of the workshop			



Annex 2: List of Participants

Name	Institution	Country
Alessandra Casali	ISPRA	Italy
Alessandro Lotti	ISPRA	Italy
Anna Di Noi	ISPRA	Italy
Antonio Lo Porto	IRSA-CNR	Italy
Ari Asmi	University of Helsinki	Finland
Dominique Darmendrail	ANR	France
Elena Capolino	MIPAAFT	Italy
Florian Selge	JÜLICH	Germany
Giuseppina Monacelli	ISPRA	Italy
Juliette Arabi	ANR	France
Lehmann Steffi	JÜLICH	Germany
Maria Chiara Sole	ISPRA	Italy
Prisca Haemers	lenW	Netherlands
Serenella Puliga	MIPAAFT	Italy
Silvia Baralla	MIPAAFT	Italy



Annex 3: Research Infrastructures description template

RI Acronym RI Full name	Logo		
INSTITUTIONS	Type of partners	Role	Country
Institution name	Coordination, full members		
	(funded), Expression of		
	interest etc		

Current Status Legal status, operation, preparation, etc. (it's base on ESFRI status level) Additional information: status of ESFRI project: current time line (Preparation Phase 2016-2019)

DESCRIPTION

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est labrum.

(Information provided by coordinators/reference and updated by them)

REFERENCES

https://www.website.com

KEYWORDS

General Keywords

WATER JPI SRIA KEYWORDS

SRIA Keywords

(based on ESFRI classification)

Name Surname (role) – <u>mailaddress@domain.com</u> Name Surname (role) – <u>mailaddress@domain.com</u> Name Surname (role) – <u>mailaddress@domain.com</u>

SOCIALS NETWORKS (Facebook, LinkedIn etc.)

SERVICES	EQUIPMENTS	DOMAINS AND STUDY AREA	DATA
(pre-defined list)	(pre-defined list)	(pre-defined list)	(pre-defined list)
Some example: Access to data sets and associated services, access to Site equipments, access to expertise, modeling etc			Some example: Access Policies, Quality control process and operation, Level of Standardisation and interoperability etc
LOCATION		_	





PICTURE UPLOAD (OPTIONAL, MAX 3-5 PICTURES)

ACCESS

Level of access to the RI

NETWORKS

A list where the RI can show, in which networks it is active

STATISTICS

How many views of this RI were counted. This could be also an indicator for platform evaluation when it is launched

RDI Projects which used the RI

Ethics Policy