

Proceedings from the Water JPI IC4WATER Knowledge Hub

Workshop #2

'Alignment of Water Related RDI Activities to Support UN SDGs in light of COVID-19 Challenges'

Virtual Meeting via MS Teams, 9 July 2020

<http://www.waterjpi.eu/implementation/thematic-activities/water-jpi-knowledge-hub-1>

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List of Abbreviations

CSA: Coordination and Support Action

JPI: Joint Programming Initiative

KH: Knowledge Hub

IC4WATER CSA: IC4WATER Coordination and Support Action

IC4WATERKH: International Cooperation for Water Knowledge Hub

KHCEC: Knowledge Hub on Contaminants of Emerging Concern

SRIA: Strategic Research and Innovation Agenda

UN SDGs: United Nations Sustainable Development Goals

Water JPI: Joint Programming Initiative on Water

WATER4SDGs KH: Knowledge Hub on Water Related SDGs

Executive Summary

The Water Joint Programming Initiative (JPI), “[Water Challenges for a Changing World](http://www.waterjpi.eu/)” (<http://www.waterjpi.eu/>), was launched following a decision of the Competitiveness Council of the European Union (EU) on 6 December 2011.¹ In June 2020, the Water JPI membership included 23 member countries and three observer countries, which collectively represented 88% of European public research, development and innovation investment in water resources. The Water JPI is dedicated to tackling the ambitious challenge of achieving “[sustainable water systems for a sustainable economy in Europe and abroad](#)”.

The Water JPI, as part of its Coordination and Support Action [IC4Water](#), is looking at opportunities to develop a common strategy for international cooperation with other European initiatives. IC4Water was launched in January 2017 and is funded by the European Commission under Horizon 2020. IC4Water aims to implement joint activities in a dedicated effort to reinforce international cooperation on research, development and innovation to address global water challenges.

Motivated by providing a fresh impetus to transnational collaboration and knowledge dissemination activities for proposing adaptive water policies, the second Knowledge Hub of Water JPI was launched in December 2019. Abbreviated as the [WATER4SDGs](#), the new Knowledge Hub functions as a platform to spread the outstanding water knowledge across international community by utilizing intelligible means. The Knowledge Hub specifically addresses the global water challenges posed against achieving UN Sustainable Development Goals (UN SDGs) under the theme “[New Water under Water Scarcity](#)”.

This report contains the proceedings of the Water JPI IC4WATER Knowledge Hub (Water4SDGs) Second Workshop “Alignment of Water Related RDI Activities to Support UN SDGs in light of COVID-19 Challenges”, which took place on 9 July 2020 as a virtual meeting.

There were 24 participants for this online workshop, from 8 countries. The attendees represented 24 initiatives/networks.

This was the second workshop in a series of four, designed to develop outputs that transmit policy recommendations for decision makers in order to support implementation of UN SDGs globally. In particular, the second workshop aimed to draft a position paper that calls upon research funding agencies and research programs to align water related RDI activities to support UN SDGs in light of COVID-19 Challenges.

1. Introduction

The World Health Organization (WHO) recognized the unprecedented conditions brought by the novel Corona Virus as a global pandemic on March 11, 2020. With a sense of urgency, many research funding organizations readjusted their programmes to call for empirical action at national, regional and global levels. While the bulk of these initial calls focuses on clinical trials aiming at medical treatments such as vaccine and medicine development in the form of crisis response, there will be need for further calls for managing social and economic risks that are expected to be more potent in long term.

Ensuring universal access to water, hygiene and sanitation (WASH) services is often embraced as a first line of defence against the spread of disease, along with social distancing measures. However, the inconvenient truth of 2.2 billion people lacking access to enough clean water and 4.2 billion people to basic sanitation at household level hinders the application of this simple measure ([WHO/UNICEF, 2019](#)). Achieving universal access to water and sanitation has already been set as a target in the UN SDGs framework, and COVID-19 conditions have revealed imperativeness of this target even further. The uniqueness of current challenge forces us to rethink the likelihood of achieving the goal on time by 2030, which was already under risk during the pre-pandemic era.

Guided by this background, [the 2nd Workshop of Water4SDGs Knowledge Hub](#) was attended by researchers, policy makers and funding agency representatives to frame a '[position paper](#)' that underlines options for aligning research agendas and call structures to overcome the grand challenge. The attendees were invited to handle this issue by addressing the following questions:

- What is the potential of water related RDI activities in responding the crises (short term) and building risk management and resilience capacity (long term) in response to pandemic conditions?
- How far are we from the global implementation of SDG 6 targets by 2030? How did the COVID-19 affected the UN SDGs agenda?
- How should research funding organizations address COVID-19-water security connections in national, regional and international call programs (in terms of call topics, structures, eligibility criteria, expected impacts, dissemination and exploitation procedures)?

2. Methodology

The workshop was organized by Formas by using MS Teams as the virtual meeting platform. The workshop was planned to be held in Dublin, Ireland and hosted by Royal College of Surgeons in Ireland (RCSI) as a two-day event. Due to the travel restrictions caused by the pandemic, the workshop was organized virtually and the agenda was cut down to half day (four hours) with one plenary session, two key-note speaks, two breakout sessions and a wrap-up session condensed in it. [Annex 1](#) provides the agenda of the workshop.

2.1 Workshop Aims and Objectives

The primary aim of the workshop was to explore possibilities and ideas to compose a Position Paper that addresses;

- Research areas in water domain to increase our socio-economic resilience and technical capacity against current and future pandemic situations.
- Risks and opportunities brought by the pandemic conditions with respect to implementation of UN SDGs.
- Strategies to align and adapt the research funding priorities and structures.

2.2 Workshop Attendees

24 out of 31 invited attendees participated to the workshop. While majority of the attendees (13) were representing the Seed Group members of the Water4SDGs Knowledge Hub, there were 8 attendees representing the Water JP member institutions. Remaining three attendees were invited as plenary session and key-note speakers. The invited speakers were representatives of the following institutions: EurEau, UN Water and European Commission. The list of attendees is available as [Annex II](#) at the end of the document.

2.3 Workshop Programme

The half day event started with the morning session, which included one plenary speech, two keynote speaks and the Q&A section. The opening and welcome address was done by [Osman Tikansak](#) (Formas). The morning session was chaired by the Scientific Chair of Water4SDGs Knowledge Hub, [Roberto Deidda](#) (University of Cagliari). [Bertrand Vallet](#) (EurEau) delivered the plenary speech that reports on the [recent study](#) of EurEau regarding the research gaps and opportunities related to public health resilience capacity underlined by the European water operators. The first keynote speech by [Olcay Unver](#) (UN Water) focused on the implementation status of SDG 6 concerning access to water and sanitation at global scale. The second keynote speech presented by [Avelino Gonzalez Gonzalez](#) (European Commission) depicted the measures implemented by European Commission (EC) for adaptation of research priorities in response to COVID-19.

Following a coffee break, attendees were split into two breakout groups to discuss the content and structure of a draft position paper that addresses research alignment needs under pandemic conditions. The discussions were facilitated around the following questions:

- Who should be the target audience of the position paper?
- What should be the objectives of the position paper?
- How should be the structure and the content of the position paper be organized?

Finally, all attendees re-joined for the wrap-up session, where the discussion during the breakout sessions were summarized by the rapporteurs.

3. Proceedings

3.1. Opening and Welcome Address

The workshop was opened by [Osman Tikansak](#) from Formas, who introduced the ground rules of the online meeting and presented the objectives of the workshop. [Roberto Deidda](#) of University of Cagliari addressed a welcoming speech as the chair of the morning session, then continued with introducing the speakers on their turn.

3.2. Plenary Session

[Bertrand Vallet](#) from EurEau delivered a plenary speech from the perspective of drinking and wastewater operators. EurEau represents 34 national associations from 29 European countries. His presentation elaborated the top challenges faced by water operators and highlighted how these challenges are bound to UN SDGs and EU Green Deal themes.



Figure 1 Findings from EurEau's recent [study](#)

In consultation with its members, EurEau analysed the priority areas underlined in 350 innovative projects coordinated by water operators around Europe. Protecting water as a vulnerable source, minimising the presence of micropollutants in the environment and increasing the public's

understanding of the water sector were underscored as top three priority areas. Further insight about the findings of this exercise can be accessed through EurEau's recent publication, "[Innovating for a Greener Future: European water service priorities](#)".

In the conclusion of his presentation [Bertrand Vallet](#) presented a list of lessons learned during the pandemic period as follows:

- Further studies are needed **to confirm that COVID-19 does not spread through contaminated water** and related products.
- Chemicals supply that are needed for water and wastewater treatment are mostly subject to international trade. The experience taught that trade restrictions may cause shortage of chemicals supply for some countries and impact on water treatment capacity. Thus, **there is a need for risk assessment of the systems' resilience**, not only in terms of availability of infrastructure, but also **in terms of chemical substance to operate these infrastructures smoothly**.
- **Human resources management** is another important aspect to ensure continuous operation of water and wastewater treatment plants during pandemic. Staff shortages may become imminent at facilities as the pandemic conditions prevail longer. **Risk management studies and adaptable infrastructures that require less human intervention** for operating can prove useful to avoid such problems in long term.
- **Sludge management** remains a crucial aspect for water operators to avoid any risk of transmission of viruses through waste intrusion into the receiving environment. Thus, **there is a need for sustainable and resilient long-term solutions**.
- Another interesting phenomenon that has been observed during the pandemic process is **the drop in the rate of water bill payments**. The pandemic has caused significant economic damage on industries, which eventually led to an increase in unemployment rates and decrease in people's ability to pay. In relation to that, water operators have lost parts of their revenues that is badly needed to keep treatment facilities operating. In long term this may also impact implementation of SDG 6, particularly the targets 6.1 and 6.2 concerning access to safe drinking water and sanitation services. **This factor obliges us to think of new ways of adaptation**, including income support for vulnerable communities or public incentives for water operators.

The plenary speech was followed by a pop-up online survey for the audience. The participants were invited to respond the question: Which research gaps do the water community need to prioritize in response to the COVID-19 pandemic? Out of 15 responses, 11 of them reveal that early warning systems linked with better sampling, testing and monitoring methods should be prioritized first. Governance solutions to increase resilience against long term socio-economic impacts of the pandemic has received exact same amount of attention by the respondents. The response distribution for all options is presented in figure 2.

Which research gaps do the water community need to prioritize in response to the COVID-19 pandemic? You can choose up to 3 options.

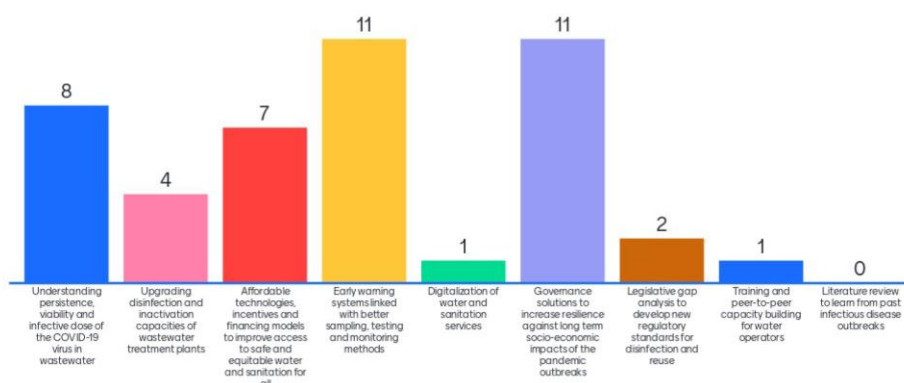


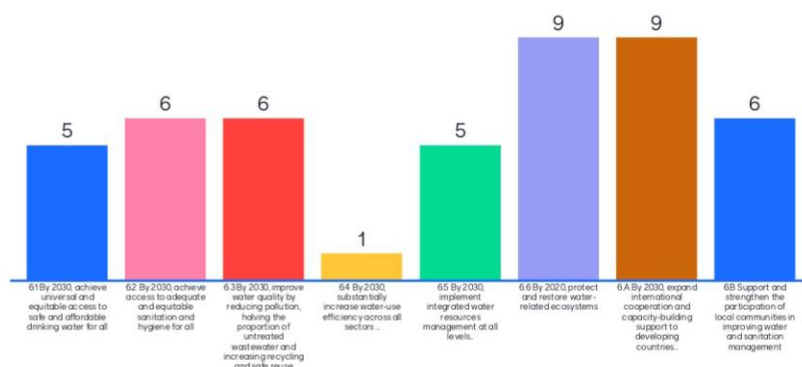
Figure 2 Mentimeter Survey-Question. I

3.3. Keynote Presentations

[Olca Unver](#), Vice-Chair of UN Water presented the agency’s new initiative that is called the [SDG 6 Global Acceleration Framework](#). This initiative is developed with the joint efforts of 32 agencies and 40 partners aiming to at intersectoral collaboration by building upon 4 pillars as Engagement, Alignment, Acceleration and Accounting. Through a resident coordinator system, a new generation of UN country teams will be able to provide access to expertise, technical assistance and advocacy support for developing countries to achieve their SDG 6 targets. There is a clear commitment for principles, which will enable UN entities work together better, together with governments and business. The Global Acceleration Framework will be complemented by the [SDG 6 Action Space](#), which is a multistakeholder stocktaking platform that will enable stakeholders to keep momentum, share their progress and lessons/best practices. On the days following the workshop, Water4SDGs Knowledge Hub is registered to the SDG6 Action Space [database](#) as an action case.

Following the keynote address by [Olca Unver](#), the second online survey question was opened for response. The attendees were asked “Which SDG 6 targets do you think will be impacted most by the COVID-19 pandemic globally in long term?”. Majority of the respondents (9/16) answered that SDG 6.6 concerning the protection of water related ecosystem and SDG 6.A related to international cooperation and capacity building will be impacted most in this process (figure 3).

Which SDG 6 targets do you think will be impacted most by the COVID-19 pandemic in long term globally? You can choose up to 3 options. Mentimeter



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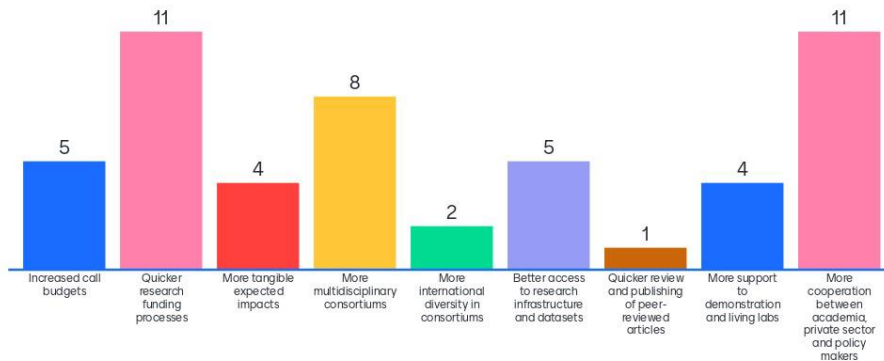
Figure 3 Mentimeter Survey-Question.2

The second keynote speak was presented by [Avelino Gonzalez Gonzalez](#) of the European Commission. His presentation summarized the responsive and proactive measures taken at European Research Area (ERA) in response to Covid-19 crisis. The [ERA vs Corona Action Plan](#) launched at the end of March 2020 together with national authorities. By the end of June, already some results had already been achieved for the coordination of R&I funding against the virus. One of the first measures taken was to widen the clinical trial network for vaccine studies. By the time of the workshop, 10 vaccines were already on the trial period. By May 2020, two calls had been launched for Expression of Interest for innovative and rapid health-related approaches to respond to COVID-19 and to deliver quick results. At the end of the first call 18 projects with total budget close to 50 million Euros were supported. For the second call, 454 proposals were submitted in three weeks to be evaluated until mid-August 2020. Gonzalez also introduced the [ERA Corona Platform](#), a one-stop shop regarding Coronavirus related research activities and funding opportunities.

The final pop-up survey question was designed to understand the preferred measures to adapt call and funding structures to improve our response capacity to pandemic conditions. According to 11 out of 17 responses, ‘quicker research funding processes’ and ‘more cooperation among stakeholders’ (academia, private sector and policy makers) are the most important areas of adaptation (figure 4).

How can we adapt the calls and funding systems/processes to improve our response capacity to pandemic conditions? You can choose up to 3 options.

Mentimeter



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Figure 4 Mentimeter Survey-Question.3

3.4. Break-out Discussions

The key note presentations were followed by a break-out session, where attendees were split into two parallel discussion groups. The objective of the break-out session was to exchange ideas about the target audience, objectives, structure and content of the position paper based on the zero draft that was shared with the attendees prior to the workshop. The following is the summary of discussions under each point aggregated for both groups.

3.4.1 The Target Audience of the Position Paper

The position paper will reflect an academic stance with respect to research and funding needs exacerbated by the pandemic conditions. Preconditioned by the urgency of the situation, researchers need the attention and the measures taken first and foremost by the research programme owners and managers.

As in the European Commission’s case presented earlier, some of the regional call partnerships have already started taking action to adapt call priorities and structures as early as March 2020. The

influence of regional initiatives even extends to research funding organizations (RFOs) at national level as they are in constant communication with each other. Thus, it is underlined that if the position paper can target the EC and other regional calls, then the national calls will adapt themselves gradually.

Considering the scale of the issue, the impact should be desired at the global level. In order to scale up the impact, decision makers at local level should also be targeted as the challenge well exceeds beyond borders. The famous ‘think global, act local’ motto is highly relevant especially if the aim is to commercialize the solutions at wider scale.

In addition to the research programs and funding agencies, another group of key stakeholders are the water operators being responsible for the operation of water treatment and distribution systems. Investment, operation and maintenance cost of water infrastructures have always been an important agenda item and the pandemic conditions can escalate the tension due to shrinking economic stability. There is a need for greater social awareness concerning the cost of environmental services. As access to sufficient quality of water and sanitation services is recognized as the primary measure to mitigate the effects of the pandemic, citizens and industry should bear the responsibility proportionally. Increasing the social innovation capacity of water operators and municipalities can be a key factor for increasing the resilience of current and future crises a like.

Last but not the least, focal points and custodian agencies that are responsible for the implementation and monitoring of the SDGs at national level should be targeted by the position paper.

3.4.2 The Objectives of the Position Paper

While the key objective of the position will be to identify the opportunities and challenges for the global research community brought by the COVID-19 in the context of UN SDGs, the associated aims are manifold. An ideal position paper should aim at identifying call topics of interest to be included in future calls, while proposing a list of expected impacts, improvements in funding models, consortium structures, and dissemination and exploitation strategies.

It is concurred that research of highest quality and excellence should be prioritized. Calls that demand for more multidisciplinary approaches could be a factor to contribute this target. Moreover, calls should promote not only financial, but also institutional and humanitarian resources to accomplish all-around impact. In order to encourage formation of multidisciplinary consortia further, new matchmaking platforms and more incentives can be facilitated, particularly for the engagement of local administrations and companies to get involved in the projects.

While the current situation requires urgent response and thus makes it imperative to have quicker evaluation of research proposals for funding, it is also important to not to sacrifice the reliability of

research findings. Speculative analysis in rush should be avoided that do not help, but rather worsen with lack of sound interpretation of data. In other words, the pace of financing for new research could be increased by implementing less burdensome administrative procedures, but the research itself should not sacrifice its quality before publicizing the research outcomes.

In terms of research priorities, predication models for future pandemics, better monitoring systems for the fate of viruses in different environments and integrated early warning systems are underlined. Improved access to databases and open-data policies are recognized as the first steps to improve the capacity of researchers. It is also important to demystify the perception of sacred and/or strategic data that is most often unpublicized.

The pandemic conditions should also give us a chance to re-evaluate the efficiency and performance of our policy frameworks, fiscal systems and governance structures. The main question could be formulated around how our institutional capacities are ready to handle such unprecedented challenges in the future?

3.4.3 The Structure and Content of the Position Paper

The position paper will compose of 2 to 4 pages maximum with the following sections:

1. Introduction,
2. Target audience,
3. Objectives and aims,
4. Opportunities and challenges brought by COVID-19 with respect to implementation of UN SDG 6,
5. Research priorities,
6. Rethinking call structures,
7. Recommendations to improve research capacity

Overall, the attendees expressed their satisfaction with the proposed structure of the position paper. A common recommendation is to emphasize the opportunities that might raise despite the challenging situation with a more optimistic stance.

The paper should also address the timeline of proposed actions with a step-wise fashion. There are several tools for addressing various needs at different times. For instance, at the phase of call announcements the funding agencies should decide and act quickly when opening the calls, whereas funded projects should be given enough time for proper assessment of their findings and communication of the results.

4. Closure of the Meeting

The workshop was closed by a wrap-up session to summarize the discussion points of each break-out group. The attendees were informed by the roadmap ahead for the preparation and dissemination of the position paper.

Accordingly the first draft of the position paper will be prepared by Formas until the end of September 2020 by taking into consideration the discussion points from the break-out session and further developing the content by literature review of the secondary sources. Then the first draft is to be developed further with the contributions from the Seed Group during October 2020, so that the final draft could be ready by the end of November 2020. Finally, the position paper will be ready for dissemination in December 2020 among the identified target groups with the joint efforts of the facilitator (Formas) and the Seed Group members.

Note: Due to a shift of priorities and additional work load on the facilitator side, the first draft of the position paper could be prepared only by the end of December 2020. Accordingly, the position paper will be finalized in January 2021 and will be disseminated in February 2021.

Annex 1. Agenda

MORNING SESSION		
Link to Meeting Room: Join Microsoft Teams Meeting		
09:00 - 09:20	INTRODUCTION Welcome Address Workshop Agenda and ground rules Tour de Table - introduction of meeting attendants	Roberto Deidda, Scientific Coordinator of Water4SDGs, Osman Tikansak, Facilitator, Formas
09:20 - 09:40	PLENARY SESSION Building community resilience for public health through water research: Gaps and opportunities in the international RDI landscape	Bertrand Vallet, Policy Officer, EurEau
09:40- 10:00	KEYNOTE 1- Identifying COVID-19 induced challenges against SDG 6: How far are we from the global implementation of SDG 6 targets by 2030?	Olcay Unver, Vice-Chairperson, UN-Water
10:00- 10:20	KEYNOTE 2- Adaptation of EU water research agenda in the light of COVID-19: Measures implemented and foreseen at the EC level	Avelino Gonzalez Gonzalez, Senior Policy Office, European Commission
10:40- 11:00	Q&A Session for the Keynote Speakers	Moderator: Roberto Deidda, Scientific Coordinator of Water4SDGs, University of Cagliari
11:00 - 11:15	<i>Coffee Break</i>	
BREAKOUT GROUPS		
Link to Breakout Group-1: Join Microsoft Teams Meeting		
Link to Breakout Group-2: Join Microsoft Teams Meeting		
11:15 - 12:30	BREAKOUT SESSION (2 groups in separate meeting rooms) Aim: Framing an outline for the 'Position Paper' to	Breakout Group-1 Moderator: Dominique Darmendrail, ANR Rapporteur: Kristina Laurell, Formas Breakout Group-2

	address research alignment needs in light of COVID-19 (see: Zero Draft-Position Paper)	Moderator: Lisa Sheils, EPA Rapporteur: Osman Tikansak, Formas
12:30 - 12:40	<i>Coffee Break</i>	
WRAP-UP SESSION		
Link to Meeting Room: Join Microsoft Teams Meeting		
12:40-13:00	WRAP-UP Rapporteurs' feedback on the Breakout Groups	Rapporteurs: Kristina Laurell (Group 1) and Osman Tikansak, Formas (Group 2)
13:00	Closure	Roberto Deidda, Scientific Coordinator of Water4SDGs, University of Cagliari

Annex 2. Attendees

Water JPI 2nd Workshop-Knowledge Hub on Water related UN SDGs/IC4Water

Participant name	Participant affiliation	Role
Antonio Lo Porto	CNR	Seed Group
Avelino Gonzalez Gonzalez	European Commission	Invited Speaker
Bertrand Vallet	EurEau	Invited Speaker
Corinne Cassier-Chauvat	CEA	Seed Group
Dominique Darmendrail	ANR	Water JPI member
Fernando Nardi	WARREDOC	Seed Group
Jeremy Jay Piggott	Trinity College Dublin	Seed Group
John Dini	WRC	Seed Group
Kati Vierikko	SYKE	Seed Group
Kristina Laurell	Formas	Water JPI member
Laurence Carvalho	UKCEH	Water JPI member
Lena Goldkuhl	LUT	Seed Group
Lisa Sheils	EPA	Water JPI member
Mamohloding Tlhagale	WRC	Water JPI member
Maria Chiara Sole	FORMAS	Water JPI member
Olcay Unver	UN Water	Invited Speaker
Osman Tikansak	Formas	Water JPI member
Rita Amaral	LNEC	Seed Group
Rita Lado	University of Porto	Seed Group
Roberto Deidda	University of Cagliari	Scientific Chair
Rui Munhá	RCT	Water JPI member
Séverine Tomas	IRSTEA	Seed Group
Tiyani Chauke	WRC	Water JPI member
Wei-Shan Chen	Wageningen University	Seed Group