

D2.2 – Stakeholder engagement activities and feedback

WP2 WATERVERSE data management approach in water data spaces

Author: Mollie Torello Date: 29/03/2024



Co-funded by the European Union



GRANT AGREEMENT NUMBER	101070262		
FULL TITLE / ACRONYM	Water Data Management Ecosystem for Water Data Spaces / WATERVERSE		
START DATE	1 October 2022	DURATION	36
END DATE	30 September 2025	DURATION	months
PROJECT URL	https://waterverse.eu/		
DELIVERABLE	D2.2 Stakeholder en	ngagement activities and feedba	ck
WORK PACKAGE	WP2		
CONTRACTUAL DATE OF DELIVERY	01/04/2024		
ACTUAL DATE OF DELIVERY	03/04/2024		
ТҮРЕ	R- Document,	DISSEMINATION LEVEL	
LEAD BENEFICIARY	KWR		
RESPONSIBLE AUTHOR	Mollie Torello (KWR)		
CONTRIBUTIONS FROM	Jos Frijns (KWR), Suze van der Meulen (PWN), Maximilian		
	Solomos Charalamb	ous (WBL), Sergi Baena-Miret (C	CET)
ABSTRACT	Stakeholder engage	ment is vital in the developme	ent of the
	developed within th	e WATERVERSE Project. Deliver	able D2.2
	explains the method of multi-stakeholder forums (MSFs) for		
	stakeholder identification, engagement, and feedback		
	collection. In this interim deliverable, the facilitation		
	guidelines for planning, developing, managing, moderating,		
	the MSF 1 final repo	ort for each pilot expressing the	activities,
	outcomes, and fee	dback. The follow up Delivera	able D2.4
	(Month 36), will further analyse the outcomes from the		
	engagement activiti	es and the stakeholder feedbac	k.

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



Disclaimer

Any dissemination of results reflects only the author's view and the European Commission is not responsible for any use that may be made of the information it contains.

Copyright message

© WATERVERSE Consortium, 2023

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both. Reproduction is authorised provided the source is acknowledged.



4

REVISION HISTORY

Version	Date	Who	Description
0.1	17/02/2023	Mollie Torello	Initial Draft of MSF Guidelines developed for the facilitation of MSF1.
0.2	23/4/2023	Mollie Torello	Updates to facilitation guidelines after completion of the Finland MSF1.
0.3	15/12/2023	Mollie Torello	Added section for reporting MSF findings
1.0	29/3/2024	Mollie Torello	Finalization of internal reviewers.

QUALITY CONTROL

Role	Date	Who	Approved/Comment
Internal Reviewer	27/03/2024	Matteo Basile (ENG)	Approved with minor corrections and comments.
Internal Reviewer	27/03/2024	Roberto di Bernardo (ENG)	Approved with minor corrections and comments.

 ${\sf WATERVERSE}\ {\sf D2.2-Stakeholder}\ {\sf engagement}\ {\sf activities}\ {\sf and}\ {\sf feedback}$

WATERVERSE

EXECUTIVE SUMMARY

In WATERVERSE, stakeholders are involved through Multi-Stakeholder Forums (MSFs) organised in a minimum of three meetings at each case study. The MSFs aim to create an engaging environment for stakeholders to assist in the development of the Water Data Management Ecosystem (WDME). More specifically, the objective is to make data management practices and resources in the water sector FAIR (Findable Accessible Interoperable Reusable), affordable, secure, and easy to use. This will improve the usability and interoperability of data-intensive processes. This will, in turn, lower the entry barrier to data spaces, enhance the resilience of water utilities and boost the perceived value of data and therefore the market opportunities behind it. The relevant stakeholders differ for each case study. In general, these will include the operators & local authorities dealing with the water cycle, enterprises working in Artificial Intelligence (AI) and data science, research centres and universities, innovation hubs/networks/clusters, emergency response services, citizen initiatives, policy makers and governments.

WATERVERE MSF framework builds off and extends from past EU Horizon projects of NextGen and Ultimate. Specifically, the NextGen framework for Communities of Practice (COPs).

Organising and moderating the MSFs

This document provides a roadmap and facilitation guidelines for the MSFs. First, the approach for setting up and managing the MSFs is described. An important role is given to the organiser (coordinator) who is responsible for managing the MSF. In the case of WATERVERSE, the MSF organiser is the formal contact person of the case study, i.e. either a representative of the case study or of the related research organisation. The MSF organiser will be supported by the WATERVERSE WP2 staff, as they appreciate this can be a demanding task.

The MSF organiser is also responsible for selecting a moderator (or if possessing the right skills, may choose to fulfil this task by himself/herself). The main task of the MSF moderator is to create a conducive environment for knowledge exchange and learning. Conditions have to be created to facilitate open dialogue whereas individuals collectively develop new knowledge by making use of the diversity of perspectives and understandings at hand. An overview of moderation techniques is provided for the moderator to apply.

Monitoring outcomes is also an important requirement. The MSF organisers are responsible for the reporting of the meetings. The reporting format for WATERVERSE MSF meetings is provided in *Annex C: MSF Meeting Evaluation Form*. These MSF reports are essential input to the cross-fertilization and reflexive learning between the different MSFs.

Roadmap and key topics

A general roadmap, with key topics and a time planning, has been developed, see Figure 1. The key topics of the three MSF meetings are:

- 1. Setting the scene
- 2. Exploring opportunities and barriers
- 3. Implementation support

For these three MSFs meetings, information on the planning, the participants, the aim(s), related WP, method and central questions are provided in Section $\Sigma \phi \dot{\alpha} \lambda \mu \alpha$! Το αρχείο προέλευσης της αναφοράς δεν βρέθηκε. Outline for MSF.

WATERVERSE D2.2 – Stakeholder engagement activities and feedback





Figure 1: Overview of key topics and timeline of the suggested MSF meetings.

Although this general roadmap has been developed, the guideline allows for flexibility to align to the unique locality specifics and tailor the MSF meetings to the nature and needs of each case study.

Next Steps

This interim deliverable (D.2.2) provides the framework for stakeholder engagement and feedback for WATERVERSE. The assessment of this framework and analysis of the engagement will be key for the conclusions on achieved engagement in the WATERVERSE. Therefore, the evaluation form completed by stakeholders, will provide insights on how proper organisation of MSFs (based on social learning) contributes to knowledge co-production. This will be expanded upon in the final report in the deliverable D.2.4.

```
{\sf WATERVERSE}\ {\sf D2.2-Stakeholder}\ {\sf engagement}\ {\sf activities}\ {\sf and}\ {\sf feedback}
```



TABLE OF CONTENTS

REVISION HISTORY	4
QUALITY CONTROL	4
XECUTIVE SUMMARY	5
ABLE OF CONTENTS	7
IST OF FIGURES	9
IST OF TABLES	9
ACRONYMS	10
.0 INTRODUCTION	11
 Stakeholder in WATERVERSE. Aims of this document Impact on WATERVERSE. 	11 11 12
.0 MSF FACILITATION GUIDELINES	13
2.1 Introduction to MSFs2.2 Setting up the MSFs	13 15
2.2.1 Planning and Organising	15
2.2.2 Designing the operating practice	17
2.2.3 Managing the MSFs	17
2.2.3.1 Moderating MSF meetings	17
2.2.3.2 Monitoring outcomes	18
.0 MSF ROADMAP	20
0 OUTLINE FOR MSF	23
0.0 REPORTS FROM MSFS	25
5.1 Introduction5.2 Pilot 1: Netherlands	25 25
5.2.1 MSF 1	25
5.2.2 MSF 2	30
5.2.3 MSF 3	30
5.3 Pilot 2: Germany	30
5.3.1 MSF 1	30
5.3.2 MSF 2	32
5.3.3 MSF 3	32
5.4 Pilot 3: Cyprus	32
5.4.1 MSF 1	32

 ${\sf WATERVERSE}\ {\sf D2.2-Stakeholder}\ {\sf engagement}\ {\sf activities}\ {\sf and}\ {\sf feedback}$



5.4.2 MSF 2	34
5.4.3 MSF 3	34
5.5 Pilot 4: United Kingdom	
5.5.1 MSF 1	34
5.5.2 MSF 2	38
5.5.3 MSF 3	
5.6 Pilot 5: Spain	
5.6.1 MSF 1	38
5.6.2 MSF 2	42
5.6.3 MSF 3	42
5.7 Pilot 6: Finland	
5.7.1 MSF 1	42
5.7.2 MSF 2	44
5.7.3 MSF 3	44
6.0 CONCLUSION AND NEXT STEPS	
6.1 Conclusion	45
6.2 Next Steps	45
7.0 REFERENCES	
ANNEX A: STAKEHOLDER MAPPING EXCEL TOOL	
ANNEX B: MODERATION TECHNIQUES.	
ANNEX C: MSF MEETING EVALUATION FORM	
ANNEX D: PARTICIPANT INFORMATION SHEET & STATEMENT OF INFORMED CONSENT	60



9

LIST OF FIGURES

Figure 1: Overview of key topics and timeline of the suggested MSF meetings	6
Figure 2: Support diagram for MSF set-up, launch, manage and support; adapted from the World Bar	۱k
Group 2017, p. 20 1	.5
Figure 3: Overview of key topics and timeline of the suggested MSF meetings	1
Figure 4: Stakeholder engagement table example4	7

LIST OF TABLES

 ${\sf WATERVERSE}\ {\sf D2.2-Stakeholder}\ {\sf engagement}\ {\sf activities}\ {\sf and}\ {\sf feedback}$



ACRONYMS

AI	Artificial Intelligence
СОР	Community of Practice
CS	Case Study
СҮ	Cyprus
DE	Germany
DMP	Data Management Plan
DPO	Data Protection Officer
ES	Spain
EU	European Union
FAIR	Findability, Accessibility, Interoperability, and Reuse
FI	Finland
GDPR	General Data Protection Regulation
HIDR	Hidralia
HST	Hydro-System Technik
IM	Innovation Manager
KEY	KeyPro
КРІ	Key Performance Indicator
KWR	KWR Water Research Institute
MA	Mitigation Action
MSF	Multi-Stakeholder Forum
NL	Netherlands
РС	Project Coordinator
PM	Proposed Mitigation
PWN	Puur Water & Natuur
RIWA	Association of River Water Companies (Netherlands)
RWS	Rijkswaterstaat
SWW	South West Water
TNO	Netherlands Organisation for Applied Scientific Research
UC	Use Case
UK	United Kingdom
UNEXE	University of Exeter
WBL	Water Board of Lemesos
WDME	Water Data Management Ecosystem
ZZP	Freelancing organizations (Netherlands)

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



1.0 Introduction

1.1 Stakeholder in WATERVERSE

WATERVERSE will demonstrate innovative technological, business and governance solutions for digital spaces in water in six demonstration cases across Europe. Work Package (WP) 2 focuses on stakeholder involvement and outreach. The involvement of stakeholders in the development of water technology and management solutions for digital water spaces is deemed important for three reasons. First, the complexity of water-related data spaces leads to inadequate use of data which hinders decision making. Second, involving stakeholders can lead to multiple value creation as new types of knowledge can lead to new and broader perspectives on digital solutions. Third, stakeholder involvement can secure the (long-term) implementation of water solutions. In particular, this is important for digital water solutions which rely on stakeholder engagement for data sharing, cybersecurity, and data management.

WP2 aims at actively involving and engaging stakeholders from the water sectors involved with data spaces and data management. WP2 will:

- Identify and engage stakeholder groups in the case studies focusing on those involved in data spaces and data manage. Engage with these stakeholder groups through the use of MSFs to derive changes strategies relevant to water-related data spaces (Task 2.1)
- Analyse the water domain water spaces and identify the requirements and need to design the overall WDME (Task 2.2).
- Prepare the data quality framework which is aimed at assurance of data quality as part of the WDME (Task 2.3).
- Identify, extend and integrate a set of data management tools for designing the WATERVERSE WDME (Task 2.4).
- Examine the regulatory & policy frameworks that impact water data spaces, with a special focus on FAIR data sharing and data exchange, also creating related business models and services (Task 2.5).

Working towards these aims, in WATERVERSE, stakeholders are involved through Multi-Stakeholder Forums, organised in three stakeholder meetings at each case study during the lifecycle of the project (3 years). These MSF meetings will be organised and moderated by a local project partner at the different case study. As the Task 2.1 leader, KWR will provide a general structure for these meetings to enable cross-site information sharing and lesson learning.

1.2 Aims of this document

This document outlines general guidelines for the WATERVERSE MSF meetings (Task 2.1). These guidelines have two aims. First, they aim to develop a synchronized approach for stakeholder involvement at all case study that allows for cross-site sharing and learning. Second, the guidelines aim to promote multi-stakeholder collaboration in the design and evaluation of digital water technologies at and across case study that allow stakeholders to jointly reflect on the technologies and maximise their potential.

The guidelines came about in close cooperation with the case study coordinators and other WATERVERSE work packages, to consider site-specific conditions, activities and plans. The guidelines have been developed taking into account the work and related requirements of other WPs in WATERVERSE as well.

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



The result is a general structure which is similar for all case study to ensure that similar methods are used for stakeholder involvement at each case study, that is attuned to on-going work in WATERVERSE and generates comparable outcomes regarding stakeholder involvement in digital water solutions. At the same time, the guidelines allow for flexibility to align stakeholder involvement to existing conditions and future plans at the different case studies.

This document is set up as follows. Section 2.0 provides general guidelines for MSFs. Section 3.0 sets out the WATERVERSE MSF roadmap. Section 4.0 provides the outline description for each of the MSFs. Section 5.0 lists the reports for MSF1 which has already been conducted at the time of this report. This document also includes various appendices, providing, among others, information on moderation techniques and the reporting format.

This document builds on previous work on MSFs done by KWR and partners in H2020-projects such as <u>NextGen</u>, <u>Ultimate</u>, <u>BINGO</u>, and <u>StopIT</u>.

1.3 Impact on WATERVERSE

Proper stakeholder engagement provides significant impact to the success of the development of the WDME. As seen in deliverable D2.1, stakeholder engagement can lead to an improved understanding of their requirements, expectations, and concerns. The MSFs take engagement a step further by enhancing the collaboration between the project team and stakeholders. Stakeholders who share their expertise can contribute to a smoother project execution.

The later stage MSFs (2 & 3) provide a platform for each case study to discuss the results of each pilot iteration as implanted in WP 5. The expertise and experiences of the stakeholders will assist is risk reduction and project sustainability.

Finally, in the final assessment of stakeholder engagement (D2.4) the best practices and barriers will be discussed on both a project level and the fundamental value of MSFs. This assessment will help assist in the development of stakeholder engagement methods for future projects both at a local and EU level.



2.0 MSF Facilitation Guidelines

This section describes the approach of setting up and managing MSFs. It serves as a guideline how to organise and moderate MSFs meetings in general. The key topics of the WATERVERSE MSF meetings are not part of this chapter and can be found in Section 4.0. Along with additional roadmap information, this will be discussed in the next chapter. The facilitation guidelines for MSFs have been built upon the standards of Community of Practice (COP) from the EU-Horizon Project NextGen, Ultimate, BINGO, and StopIT.

2.1 Introduction to MSFs

Multi-Stakeholder forums (MSF) provide a platform for sharing perspective and knowledge between stakeholders for knowledge dissemination, transfer, and learning. MSF are rooted in the concept of Communities of Practice. The concept was first introduced in 1991 by the cognitive anthropologist Jean Lave and the educational theorist Etienne Wenger in their book "Situated Learning. Legitimate Peripheral Participation" (Lave & Wenger 1991). COP are defined as follows (Wenger et al. 2002):

"Groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis."

Like in the theory of COPs, MSFs have three elements are fundamental: the domain, the community and the practice. To cultivate an MSF, the combination of the three must be developed in parallel (Wenger-Trayner 2015):

- **Domain**: A MSF distinguishes from other networks since its members identify themselves by a shared domain of interest. Membership involves a commitment to the domain and a shared competence.
- **Community**: While showing their interest in their domain, community members develop and share information, help each other and join activities and discussions. In this form of interaction, members build relationships in order to learn from each other and to support each other.
- **Practice**: Members of a MSF do not only share a common interest, but they are also engaged in common practice, as an iterative social process, where they develop and utilise a shared repertoire of resources that builds together toward a common goal. These can be experiences, stories, tools or ways of addressing recurring problems. To develop this kind of a shared practice it takes time and continuous interaction.

Unlike in COPS, a MSF is deliberately created with the goal of gaining knowledge related to a particular domain (i.e. water data domain). When applied intentionally as a learning concept, the overall goal of an MSF is to maintain the already existing knowledge about a specific topic and use it to create new ideas through an ongoing exchange of information. Through the process of sharing information and experiences with the group, members learn from each other and have an opportunity to develop personally and professionally (Lave & Wenger 1991). The forum offers the opportunity to discover new techniques and approaches while meeting the demands and expectations of the stakeholders.

Organisations and MSF members benefit differently by the implementation of an MSF. Depending on a short-term and long-term view, the benefits to organisations, as well as MSF members, are listed in Table 1:

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



	Short-term value	Long-term value
	Improve business outcomes	Develop organisational capabilities
Benefits to organisation	 Arena for problem solving. Quick answers to questions. Time and cost saving Improved quality of decisions. More perspectives on problems Coordination, standardization and synergies across stakeholders. Resources for implementing strategies. Strengthened quality assurance. Ability to take risk with backing of the community. Standardized messages. 	 Ability to execute a strategic plan. Authority with clients. Increased retention of talent. Capacity for knowledge-development projects. Forum for "benchmarking" against rest of industry. Knowledge-based alliances. Emergence of unplanned capabilities. Capacity to develop new strategic options. Ability to foresee technological developments. Ability to take advantage of emerging market opportunities.
Benefits to stakeholders	 Help with challenges. Access to expertise. Better able to contribute to team. Confidence in one's approach to problems. Fun of being with colleagues. More meaningful participation. Sense of belonging. Trust in technology. 	 Ability to execute a strategic plan. Authority with clients. Increased retention of talent. Capacity for knowledge-development projects. Forum for "benchmarking" against rest of industry. Knowledge-based alliances. Emergence of unplanned capabilities. Capacity to develop new strategic options. Ability to foresee technological developments. Ability to take advantage of emerging market opportunities.

Table 1: Benefits to organisation and MSF members (adapted from Wenger et al. 2002 and World Bank Group, 2018)

The overall approach for setting up MSFs is structured along three phases:

1. Phase 1 Creation of the Forum:

- Obtaining support from leadership (i.e. organisational, project, community, etc.).
- Design the practices and procedures which will be followed.
- Launching the MSF.
- 2. Phase 2 Managing the Forum:
 - Moderate and document the MSF meetings.
 - Establishing roles and responsibilities of members.
- 3. Phase 3 Preparation for future development
 - Utilize diverse Stakeholder of perspectives to overcome barriers.
 - Monitor outcomes.
 - Develop recommendations for future development and collaboration.

WATERVERSE D2.2 – Stakeholder engagement activities and feedback

WATERVERSE

Figure 2 shows a support diagram containing the different elements of MSF set-up and management and examples of questions that should be considered when designing the MSF, as well as during the operation of the MSF.

Set-up and launch Key topics What are the focus areas? Who are the relevant	Background and purpose What is the local, regional and global context that this CoP is developed under? What is the ambition and goal of this CoP? What is the primary scope of the CoP? – e.g. learning, support, communication What is the value (benefits) it brings to its members? To the sector?	
bodies of knowledge? What are the key issues/ challenges the CoP will address? How will the flexibility of topics be ensured once the CoP is active? What type of knowledge	Membership Which are the organizations to be invited? Who are the key stakeholders? What is the professional experience and position in the organization of attendees? What is needed to ensure the interest of key stakeholders?	Operating model How will the CoP meetings be organized? Online/face-to-face? What is the (required/desired) duration of a meeting? How much time should members dedicate? Who takes the roles of facilitator
do the members bring?	Behaviours What are the desired behaviours of the	coordinator, and recorder?
Support and manage	CoP? (trust, collaboration, network, idea exchange, goal alignment, etc)	Measurement and ROI What are the outcomes of the
Resources What are the IT and support resources	What strategy will be used to generate these behaviours? (e.g. tools, incentives)	workshops/meetings? What are the outcomes of the CoP? What is the impact of materials produced / meetings (workshops?
required? What is the available budget for the meetings? Which WP supports the expenses? How will information be channeled from the WPs to the CoPs?	Platforms and venues How many participants are envisaged/ desired in the meetings? What are the online capabilities required?	Have there been any actions taken by members of the CoP in their organizations, as result of the CoP? What is the relation between the CoP's outcomes and the outcomes of the organizations represented? What are the small wins of the CoP?

Figure 2: Support diagram for MSF set-up, launch, manage and support; adapted from the World Bank Group 2017, p. 20

2.2 Setting up the MSFs

2.2.1 Planning and Organising

An important role in setting up and running the MSFs is given to the organiser (coordinator) who is responsible for managing the MSF. In particular, MSF organiser is responsible for the preparation and facilitation of the meetings. In the case of WATERVERSE, the MSF organiser is, unless otherwise agreed, the formal contact person of the case study, i.e. either a representative of the case study or of the related research organisation. The MSF organiser will be supported by WATERVERSE WP2 staff and activities. It is recommended that the MSF organiser remains the same person across all three MSFs.

Next to the MSF organiser, with their crucial role of managing the meetings, a second role can be defined as the MSF moderator. The moderator should be given the authority to lead, imposing clear rules and roles with the aim of generating an environment of trust and acting as a 'neutral' mirror when necessary. For the WATERVERSE MSFs, the MSF organiser is responsible for selecting a moderator, or if possessing

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



the right skills, may choose to fulfil this task by himself/herself. It is advised that next to the organiser, also the moderator remains the same person throughout all 3 MSF.

Initiating a MSF requires that the overall goals and ambitions are decided. Based on these ambitions the relevant stakeholders will be invited to join the MSF. Importantly, these members should then agree on the common goals and shared values of their MSF key topic and overall WATERVERSE project. As MSFs are designed to be flexible, the scopes and goals may adapt over the duration of the project due to the needs identified by the forum.

The MSF organiser is responsible for mapping all the potential stakeholders involved, ideally prior to organising the first MSF meeting – starting at organisation (target group) level and zooming in to selected individual level. The MSF members will be invited to join the MSF based on stakeholder networks and relationships. It is recommended that the stakeholder involved remains consistent throughout the entire lifespan of the MSF. In WATERVERSE the relevant stakeholders differ for each case study. In general, these will include operators & local authorities dealing with the water cycle, enterprises working in AI and data science, research centres and universities, innovation (hubs, networks, and clusters), emergency response services, citizen initiatives and policy makers and government. In particular, it is important to ensure the active involvement of policy representatives and decision-makers, at least when exploring themes directly relevant to policymaking. Such opportunities to explore the involvement of policymakers are given at multiple instances, for example in MSF #3 which will address the behavioural changes (for consumers) at municipality level, (in the case studies that citizens are involved), policy development, and governance framework.

Again, in general, the WATERVERSE MSFs do not target the general public, unless they are directly involved as end-users.

Given that not all MSF organisers may we familiar with stakeholder mapping, MSF #1 provides room for collectively mapping the most important stakeholders to engage, meaning that prior to the first MSF, the organiser is only responsible for inviting all stakeholders already involved in the case study. If needed, the MSF organiser will be supported by the WATERVERSE WP2 staff. In any case, the WP2 staff will throughout the entire project remain in touch with the MSF organisers on the continuous involvement of all relevant stakeholders in upcoming MSF meetings at the case studies.

As a result of the first MSF meeting, the ambition and desired goals are refined together with the members of the MSF, to ensure that these are in line with members' expectations. Working towards a shared objective is critical to community development. Questions that have to be answered by the forum are: *What are the main challenges we face? What is the desired outcome of the MSF and WATERVERSE overall? What topics and issues do we really care about?* The answers to these questions will help a forum to develop a shared understanding of its objective, find its legitimacy in the organisation and engage the passion of its members.

All participants in the MSF meetings (and other participatory events) will be given information about the project, together with a consent form informing them of how the data collected will be used, of their right to withdraw at any time as well as the follow up anonymization procedures. To this effect, a template of an informed consent form for participating in WATERVERSE meetings/interviews was developed and provided by CERTH, it is included here in **Annex D: Participant Information Sheet & Statement of Informed Consent**.

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



2.2.2 Designing the operating practice

Within MSFs, conditions must be created to facilitate knowledge transfer/exchange. The MSF, therefore, has to operate in specific ways which will assist in building relationships. It is necessary to organise activities that promote energy and confidence.

To capture and exchange the (mostly tacit) knowledge that is shared in the MSFs, a knowledge management model is proposed. WATERVERSE aims to go beyond informing and rather use the MSFs for active consultation and collaboration with stakeholders. The proposed knowledge management model is based on social learning and open dialogue whereas individuals collectively develop new knowledge by making use of the diversity of perspectives and understandings at hand. This model is only presented as a generic guideline, which can be tailored to local conditions and needs.

To engage MSF-members in an open dialogue, the following principles can be applied (Medema et al. 2014):

- listening and speaking without judgement
- identification of underlying assumptions
- acknowledgement and respect for all contributions and ideas
- recognition of differences in perspectives and positions
- flexibility towards discussion topics

MSF meetings should be designed in such way that participants are willing to collaborate and learn together. To create such conditions aimed at social learning, Medema et al. (2014) emphasize the importance of building trust and mutual understanding, facilitating ongoing reflection by embracing an intentional learning approach, and creating an enabling environment for informal and open discourse and dialogue.

Transparency needs to be maximised so that the different stakeholders can take advantage of their differences and mutual dependence. The size of the learning group facilitates ongoing feedback, and the subject matter must be as concrete as possible. Those involved should be stimulated to think and to critically analyse their own norms, values, and assumptions explicitly. The moderator should support creativity, critical reflection and thinking outside the box. The role of the moderator is further described below.

2.2.3 Managing the MSFs

2.2.3.1 Moderating MSF meetings

The MSF meetings have to be organised: arrange venue and facilities, prepare an agenda, invite the members, etc. If the WATERVERSE MSFs will have face-to-face meetings, suitable venues need to be chosen that match both the resources needed (e.g. IT) and available budget. It is also acceptable to have meetings digitally, although not preferred, when there exists environmental, health, or safety concerns. The duration of the MSF meetings is to be determined by the organiser. Experience implies that the optimal duration of such meetings is different for different projects and cultural contexts. Having said that, it is advised to schedule at least a morning or afternoon, in order to discuss all topics and questions in such a manner that all stakeholders are heard and that there is room for mutual learning. Furthermore, it is advised to link the MSF meetings with regular stakeholder meetings or additional WATERVERSE activities, including the technical workshops. Regardless, it's important to remember that stakeholders are investing their valuable time – make this time as constructive and productive as possible and provide a fruitful atmosphere with some snacks and beverages if appropriate.



During the meetings, the main task of the MSF moderator is to provide structure, and to create a conducive environment for the learning process. Regarding the structure, the moderator has to help define common work goals and clarify working methods. The conducive environment for learning should ensure that values and assumptions can be discussed amongst the participants.

An open dialogue requires that participants are willing to discuss their diverging views and norms as equals. The moderator's task is to explicate such differences, as this is an important element of shared learning and a collaborative response. The moderator can guide this process by diverting from defensive reasoning and advocating appreciative inquiry. An appreciative approach can be facilitated by reframing problems to a focus on strengths and successes, e.g. by asking participants to identify what might work well and could contribute to the challenge discussed. Likewise, the participants can be asked to question the validity of the existing situations and underlying principles and use this for the identification of potential alternatives.

Thus, the moderator of a MSF should encourage the participants to articulate the reasoning and meaning underlying their thinking. This is done by stimulating self-generated explanations, self-evaluation, reflection and interaction between participants. Moreover, the moderator can model constructive behaviour by thinking and vocalizing reflections as well as summarizing progress. A suitable methodology, both for the moderator and in group assignments, is listening, summarising and elaborating (further questioning).

Depending on the purpose of the MSF meeting, i.e. problem definition, brainstorming, translating tacit knowledge into explicit knowledge, discussing complex issues, and decision making, the moderator can apply different moderation techniques. **Annex B: Moderation Techniques** provides an overview of moderation techniques.

2.2.3.2 Monitoring outcomes

In order to ensure that the MSF meetings bring value, both for individuals attending and the organisations they represent, success measurement is defined as the collection and display of outcomes deriving from the MSFs. Therefore, a qualitative measurement system is established to evaluate the MSF's achievements and results, as well as reporting on the value of the outcomes for the MSF members.

While MSFs are normally designed tackle potentially long-term challenges brought up by their members, it is also important to look at the short term. Outcomes are typically determining the long-term value, while short term value is brought to its members by "small wins" achievable in a short time. These small wins have the benefit of adding enthusiasm to the MSF members and help them see the immediate value that the MSF participation brings. A small win for example can be the increased awareness about a topic that participants had limited knowledge of, and thus encouraging them to learn more about the topic and bring new questions to the MSF.

While MSF meetings are known to be engaging and energising for the members, it is important to be aware that the actions that members take towards outcomes are carried out between meetings. As they can be set months apart, the MSF organiser should aim to engage the MSF members in these activities and maintain a constant contact with them. Specific activities can be set at the end of the meetings for the members to act on in the period before the next MSF meeting. The activities have both the role of channelling lessons learned from the MSF in the day-to-day operations of members and to keep them engaged.

A way of measuring the outcomes of the MSF is defined by Wenger and Snyder (2000) as systematic anecdotal evidence. As there is no realistic way to quantitatively measure a forum's outcomes, systematic anecdotal evidence captures elements from the MSF members' stories that connect community activities



and their outputs with outcomes. Anecdotal evidence should be collected in a systematic way: on regular basis and covering the entire spectrum of members and their activities. Any quantitative measures should be added, such as *"increase of efficiency by x%"* or *"improvement of operations leading to y% increase in customer satisfaction"*. It is recommended that the MSF meeting agendas include a slot for participants to share their stories and capture these as part of the MSF reports or minutes. Importantly, the anecdotal evidence collected should capture both successes and failures, as the latter provides a basis to discuss and improve the actions MSF members take.

Minutes, evaluation evidence and a meeting report need to be generated following each MSF meetings. These documents form a crucial building block for the work carried out in WATERVERSE WP2, and therefore is of high importance to the entire consortium. *In WATERVERSE, the MSF organisers are responsible for the facilitation of the evaluation and reporting of the meetings.* The MSF reports will be collected by the WP2 staff. The MSF reports also serve as valuable input for cross-fertilization and reflective learning across the different MSFs. The reporting format for WATERVERSE MSF meetings and the evaluation form are provided in **Annex C: MSF Meeting Evaluation Form**.



3.0 MSF Roadmap

The objective of the WATERVERSE MSFs is to discuss water data management solutions in the institutional context of the case studies, i.e. taking into consideration strategic discussion elements such as technical feasibility, economic aspects (societal cost-benefits), environmental impacts, as well as policy and governance frameworks, bottlenecks and barriers. To facilitate this and link these elements with the overall theme of WDME, a general roadmap, with key topics and a time planning, has been developed. This section outlines the topics of the three MSF meetings. Based on the WATERVERSE objectives and activities at the case studies, the following key topics have been identified and are offered as a suggestion to the MSF facilitators:

1) **Setting the scene**: during this stage, each case study sets the framework for the MSFs that will follow and gets all participants acquainted with the case, its vision and links with the concept of a water data management ecosystem. Basic tasks are suggested for this stage, such as stakeholder mapping, visualising the current situation and setting a future vision on water data management.

2) **Exploring opportunities & barriers**: in this stage, the MSF may first identify opportunities for further development and of water data management. Moreover, case study may identify technical feasibility bottlenecks and governance barriers (policy & regulations, governance) that might inhibit the vision set in MSF #1. Additionally, the MSF may conduct discussions of risk perception and the interventions measures possible to ensure end-user acceptance.

3) **Implementation**: this stage comes at a later phase of the case study, where WDME developments are more likely to have been (partly) realised. It thus offers the opportunity of reflection on project implementation so far. Depending on the nature and context of each case, more specific reflection exercises may take place, such as assessing the behavioural changes of consumers at a municipality level (if the case studies involve citizens). Additionally, the MSF may analyse the policy development and governance framework that is required for the realization of WDMEs.

Figure 3 presents the sequence and key topics (with further details) of the three MSF meetings:

 ${\sf WATERVERSE}\ {\sf D2.2-Stakeholder}\ {\sf engagement}\ {\sf activities}\ {\sf and}\ {\sf feedback}$







Figure 3: Overview of key topics and timeline of the suggested MSF meetings.

For these three MSF meetings, information on the planning, the participants, the aim(s), related WP, method, and central questions are presented in Section 4 Outline for MSF All elements are elaborated on below:

- **Planning**: the three WATERVERSE MSFs are scheduled between February 2023 and August 2025. Each MSF is to be organised within a specific period, allowing the MSF organiser to adapt to the planning of the case study, as well as to align with other regular and/or WATERVERSE stakeholder meetings, including the technical workshops.
- **Participants**: In WATERVERSE the relevant stakeholders differ for each case study. In general, these will include the operators & local authorities dealing with the water cycle, enterprises working in Al and data science, research centres and universities, innovation (hubs, networks, and clusters), emergency response services, citizen initiatives and policy makers and government. Prior to MSF #1, the organiser is responsible for inviting all stakeholders already involved in the case study. During this first meeting, the group will collectively map the most important stakeholders to engage when further closing the loop. All these additional mapped stakeholders will be invited for MSFs #2 #3. It is in particular important to ensure the active involvement of all the target groups, and the WP2 staff will remain in touch with the MSF organisers on the continuous involvement of all relevant stakeholders in upcoming MSF meetings at the case study. For additional inspiration of whom to invite, the MSF organisers are encouraged to read the reports of the other WATERVERSE MSFs (available on the WATERVERSE SharePoint).
- **Aim(s)**: All MSFs are dedicated to a central theme and accompanied by a number of aims aligned to the overall WATERVERSE project. In addition to these overall WATERVERSE aims, the organisers are encouraged to include additional aims, considering the needs and wishes of participating stakeholders, as well as case study specific characteristics.

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



- **Related WP**: in the case of an MSF meeting relates to one or two WATERVERSE WPs. In preparation of the meeting, the organiser is recommended to be informed about these relating work packages and/or to involve the relevant task leader in the preparation of the meeting.
- *Method*: To support the MSF moderators in their role, **Annex B: Moderation Techniques** of this guidance provides for a manual for moderation techniques, allowing them to pick the moderation technique best fitted to the specific situation and topic. In addition to this general guidance, in each table methodological guidance is provided for the specific MSF.
- **Central questions**: The central topic and the aims of each MSF are operationalized in several central questions. In addition to items like minutes, agendas, and stakeholder perspectives (i.e., stories as anecdotal evidence), the responses to these questions are a central element of the MSF reports (Section 5.0).



4.0 Outline for MSF

This section provides the three proposed outlines for each of the MSFs throughout WATERVERSE. At the time of this report MSF#1 has been completed for all case studies. MSF#2 & MSF#3 will be completed in 2024 and 2025, respectively.

MSF #1	Setting the Scene: objectives & roles, digital water spaces challenges, future vision
Planning:	February 2023 (M5) - September 2023 (M12)
Participants:	All stakeholders already involved in the case study.
	Direct stakeholders (technology providers, data owners etc.) are prioritized.
	REQUIRED attendance: 8 + stakeholders
Aims:	1. Mapping out the current case study situation, along with a future vision.
	2. Inquiry of important stakeholders to engage.
	3. Identification of the key issues and defining the common objectives and benefits for all the stakeholders.
	4. Discussion/identification of requirements and functionalities needed for water data management.
Related WP:	WP2
Method:	Round table discussion, appreciative inquiry, Consent Form, Reporting Format & Evaluation Form, Methods provided in Annex: Moderation Techniques.
Central questions:	1. How do the different stakeholders value the case study current situation, and how do they envision the future?
	2. Who are the most important stakeholders to engage when developing a Water Data Management Ecosystem (WDME)?
	3. What are the key issues and goals of the MSF for all stakeholders? What roles and responsibilities do they have?
	Technology Questions:
	4. What requirements and functionalities needed for data water management? Validation and gaps analysis.
	5. What are you concerns of security, data management, and governance?

Table 2: Proposed outline and goals of MSF#1

MSF #2	Exploring Opportunities & Barriers: intervention measures, risk perception, end- user acceptance
Planning:	March 2024 – December 2024
Participants:	All stakeholders already involved in the case study. Target Group members identified in previous MSF and Stakeholder mapping. Direct stakeholders (technology providers, data owners etc.) are prioritized.



	REQUIRED attendance: 8+ stakeholders					
Aims:	1. Update stakeholders of project and pilot progress.					
	2. Evaluate the barriers encountered and intervention measures possible.					
	3. Identify current and future risks encountered and intervention measures possible.					
	. Explore possible opportunities created.					
	5. Evaluate end-user acceptance.					
Related WP:	WP2, WP5					
Method:	Round table discussion, appreciative inquiry, Consent Form, Reporting Format & Evaluation Form, Methods provided in Annex: Moderation Techniques.					
Central questions:	 What are the barriers and risks so far identified in the pilot? What are the possible intervention measures that can/have be implemented? Does this meet the needs of the end-users? If not, then what needs to be altered in the next iteration? What other market opportunities exist? Should they be explored? 					

Note: MSF #3 is set to be completed in 2025. The aims and central questions guideline below may change as a result of feedback from the 2^{nd} MSF. Changes will be noted in the WATERVERSE Deliverable D2.4.

MSF #3	Implementation Support: behavioural change (for consumers) at municipality level (in the case studies that citizens are involved), policy development, governance framework.			
Planning:	2025			
Participants:	All stakeholders already involved in the case study. Target Group members identified in previous MSF and Stakeholder mapping. Direct stakeholders (technology providers, data owners etc.) are prioritized.			
	REQUIRED attendance: 8+ stakeholders			
Aims:	 Evaluate overall implementation of WATERVERSE. Evaluate stakeholder requirements for future. Identify challenges and opportunities. 			
Related WP:	WP2, WP5			
Method:	Round table discussion, appreciative inquiry, Consent Form, Reporting Format & Evaluation Form, Methods provided in Annex: Moderation Techniques.			
Central questions:	 What challenges could hinder the further implementation? What behavioural changes have been noted throughout this project? Does the WDME effectively meet the needs of the End-users? 			

Table 4: Proposed outline and goals of MSF#3

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



5.0 Reports from MSFS

5.1 Introduction

In 2023, all six case studies conducted their first MSF based on the above guidelines in this document. The following sections report the information gathered during the MSF for each case study as reported in the MSF Meeting Evaluation Form. A blank copy of this form can be found in **Annex C: MSF Meeting Evaluation Form.** Edits have been made to each of the reports below in order to remove the personally identifiable information.

MSF#2 and MSF#3 will be completed in 2024 and 2025, respectively. The reports for these MSFs will be available in the WATERVERSE deliverable D2.4.

5.2 Pilot 1: Netherlands

5.2.1 MSF 1

Title of MSF Meeting (key topic): Setting the Scene: objectives & roles, digital water spaces challenges, future vision

Organizational Partner	PWN and KWR
Organiser	PWN
Moderator	PWN
Meeting Plance	PWN Head Office- Velserbroek, Netherlands
Date	March 24, 2023 (M6)

Agenda:

- 12.15 & 13.00 Walk-in with the possibility for lunch and experience the PWN Climate Buffer and current prediction model IJsselmeer water quality
- 13.00 Kick-off
- 13.05 Who is who
- 13.20 Dreaming: Insight into dream prediction model IJsselmeer water quality PWN
- 13.35 Dreaming together: Insight into the dreams of all stakeholders involved
- 13.50 Sharing: Sharing visions and current situation
- 14.30 Break
- 14.45 Collaboration: Insight into project WATERVERSE, Use case NL
- 15.00 Building together; Investigate opportunities/risks/challenges/requirements to work together work on a prediction model
- 15.45 Summarizing
- 16.15 Closing
- 16.30 Home

Objectives

• Providing insight into the developments, challenges and joint opportunities surrounding a prediction model IJsselmeer water quality.

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



- Providing insight into the developments in the Water Data Management Ecosystem based on various building blocks from FIWARE and IDSA, among others.
- Sharing dreams, goals, challenges, opportunities, wishes, knowledge in the field of Wate Data Management.
- Start of creating a stakeholder ecosystem around Water Data Management Ecosystem.

Participant characterization

All stakeholders are closely involved in the use case model for predicting chloride concentrations in the Ijsselmeer. About 80% of the stakeholders know each other from other research and innovation projects. The stakeholders are willing to contribute to make this project a success. They do need more guidance on how they can contribute and what it means in terms of knowledge, skills, time effort.

Target	arget Group No. of participants		ts		
		Total	Male	Female	Other
TG1	Water Utilities	2	3	2	
TG1	Local authorities dealing with the water cycle	2	2		
TG2	Enterprises working in AI and Data Science	1	1		
TG3	Research Centres and Universities	3	3	2	
TG4	Innovation Hubs Networks, Clusters	2	2		
TG5	Emergency Response Services	0			
TG6	Citizen Initiatives	1		1	
TG7	Policy makers and government	1	1		
	Other: ZZP	2	2		

Table 5: Target groups breakdown of stakeholder Participation for MSF#1 in The Netherlands

Description of meeting activities

Time	What	Objective	How	Tools / means
12.15 – 13.00	Walk in	Familiarize, step into the world of PWN (water production company)	 Welcome, badge, introduction sheet Fill in introduction sheet Stick the sheet on the whiteboard Opportunity to have lunch 3D / VR presentation "klimaatbuffer" Presentation dashboard 	Name badge, introduction sheet Whiteboard with canvas Lunch, VR Poster "klimaatbuffer" Digiboard for dashboard
13.00 - 13.05	Kick-off	Welcome, explanation of the programme	 Everyone sits in a circle Organiser introduces the programme 	Flip over with programme





13.05 –	Personal	Insights in the	- Participants introduce	Whiteboard
13.20	introduction	background of the	themselves in 30 sec.	
12.20	Duce we and	participants	Cituatian 2010 aumont	2 montore
13.20 -	Dreams and	PWN VISION and	- Situation 2018, current	3 posters
15.55	VISIOII	data managoment	situation, ruture state,	
		uata management	management	
12.25	Porsonal	W/bat are the	- Individual reflection of	Post its
14.00	dreams and	nersonal views on	- Individual reflection of	A2: shared ambition
14.00	vision	the future of water	minutes nost its (5	description current
	VISION	data management	min)	situation
		What is the current	- Create 4 groups, share	
		assessment of the	the various views	
		present situation	about the current	
		around water data	situation and the	
		management.	dream vison (15 min)	
14.00 -	Shared vision	What is the shared	- Each group presents	
14.30		vision about the	the result in 5 minutes	
		current situation	- Moderator:	
			summarize	
14.45 –	Explanation	What is the objective	- Poster presentation	Poster WATERVERSE + Flip
15.00	WATERVERSE	of the WATERVERSE	(10 minutes)	over to draw
		programme.	- 5 min Q&A	
		What is the		
		approach.		
15.00-	Building	World café:	5 min explanation	4 tables, with prints /
16.00	togethers	Table 1:	10 min per table	canvasses and pens
		Identification of	5 min per table	
		stakeholders		
		Table 2: Level of		
		knowledge		
		development		
		Opportunities / risks		
		Table 4:		
		Requirements		
16.00-	Summary	Defining the next	Collect the actions and	Post -its
16. 15		steps	action holders on post its	
			Moderator: summarization	
		Summary of the	of this afternoon	
		session		
16.15 -	End of the	Completion of an	QR code	
16.30	meeting	evaluation form		
		Drinks and bites		



Main achievements

1. Mapping the current case study situation, together with a vision for the future

Current Situation:	Shared ambitions
• Limited open data available	One source of true
• Limited overview of available data so	• Insight into each other's interests and the need
Data silo's per organisation	for water data
• Lots of fear, uncertainty, distrust	Data available to enable prediction
 Currently there are a lot of models as challenge is to get them together and a comprehensive overall model Challenge data illiteracy of staff Lack of data uniformity and definition Challenge technology maturity 	 wailable, the Water/soil controlled should be more centrally illuminated Stakeholders working together Faster from idea to implementation with data-driven solutions Water data really 'open', reliable, Uniform,
DATA IS NO FUN	 Validated Ecosystem in which data and tools are shared Easy collaboration and exchange of data Citizen involvement, more understanding
DATA IS NO FUN	DATA IS IMPORTANT FOR I AM CONTRIBUTING

2. Research on key stakeholders (target groups) to engage

Nr	Stakeholder group	MSF#1 - 2023	MSF#2 - 2024	MSF#3 - 2025
1	Waterboards, water production companies and regional governmental bodies	Water Board Hollands Noorderkwartier, Waternet, Provincie Noord Holland	Vitens? Waterschappen	Dunea, Evides, NV Waterleiding Maatschappij Limburg
2	AI & Data science companies	Royal haskoningDHV	AMteam?	
3	Research institutes and universities	KWR, PWNT, Het Waterlaboratorium	Delft? Deltates? Labaratoria Waterschap	τνο
4	Innovation hubs, clusters	3DmakersZone	Deltaplan IJsselmeer Deltaprogramma Zoetwater	Agricultural sector, shipping industry, commercial vessels, locks, Scheeps/beroepsvaart i.r.t. sluizen, KPZSS (Kennispprogramma Zeespiegel stijging), Ambtelijk overleg Zoetwaterregio Noord- Nederland
5	Safety			
6	Civic initiatives	Sailors		



7	Law makers and government	RWS	RIWA, Ministry of Infrastructure and Water Management	Human Environment and Transport Inspectorate
8	Others	ZZP	Ferry connection Enkhuizen – Stavoren	River Voers Upstream (Germany/Switzerland) Natuurorganisaties CBHN, Lozers

Stakeholders to invite to the next MSF

- Industriewater NH water
- Visserij
- Zandwinning
- PWN klanten
- Recreatie IJsselmeer
- Natuurorganisaties
- Alle drinkwaterbedrijven

3. Identification of key issues and definition of common objectives and benefits for all stakeholders

Key issues	 Lots of fear, uncertainty, distrust No insight into each other's interests and the need for water data Too little knowledge and skills Too little collaboration
Benefits	 Faster, cheaper and with higher quality from idea to implementation of data- driven solutions for the big challenges. The right (uniform) data and models are openly available to make prediction models
Functional	Security by design
requirements	Easy to expand with new data
	Easy user-interface
	Predictions + uncertainty
	Data processing
	Traceability
	Handle high-frequency data volumes
	Data box for received data
	 Sensor measurement + smart passive sensing + time
	Explainability
	Service/APIs
Data requirements	Quality label
	Data standards (smart data models)
	Anonymization (GDPR compliance)
	Data Rhine River (upstream)
	Availability
	Exchange format



- Validation/real-time
- Metadata/Context

Reflective notes

- All stakeholders present want to remain involved.
- The stakeholders still consider it an abstract story. They need practical examples.
- The stakeholders need to be kept informed of progress on a regular basis (every quarter).
- This is a learning process for all stakeholders. They need to be included in this learning journey by using microlearning content.
- From the core project team, we must facilitate discussions about the key issues (for example, who owns an IJsselmeer forecasting model, why certain data is not shared, etc.)

5.2.2 MSF 2

To be completed after first iteration in 2024.

5.2.3 MSF 3

To be completed in 2025.

5.3 Pilot 2: Germany

5.3.1 MSF 1

Title of MSF Meeting (key topic): Setting the Scene: objectives & roles, digital water spaces challenges, future vision

Organizational Partner	HST Systemtechnik, FIWARE
Organiser	HST
Moderator	FIWARE
Meeting Plance	Etteln, Germany
Date	April 25, 2023 (M7)

Agenda:

- Welcome and short round of introductions of the participants
- Greetings from the Mayor
- Presentation of the WATERVERSE project and the Etteln use case
 - o Initial situation and challenges in Etteln
 - o Objectives of the village of Etteln
 - What is the WATERVERSE project?
 - How can WATERVERSE contribute to the fulfilment of the goals in Etteln?
- Questions about the project

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



- Pause
- Discussion
 - What do the stakeholders want from the WATERVERSE project?
 - Are there any concerns or reservations from stakeholders, such as data security?
 - Are there overlaps with other projects and other synergies?
 - What requirements do stakeholders have for a platform for managing data in the water industry?
- Pause
- View
 - Where is WATERVERSE heading?
 - Are there any suggestions from stakeholders that should be taken into account in the further course of the project?
- Multi Stakeholder Forum Meeting Evaluation

Objectives

- Get to know the stakeholders and the companies they are working for.
- Inform the stakeholders about the project, it's objectives and challenges.
- Get to know the wishes, concerns and synergies of the stakeholders or other projects.

Participant characterization

Target	rget Target Group		No. of participants			
		Total	Male	Female	Other	
TG1	Water Utilities	3	3			
TG1	Local authorities dealing with the water cycle	3	3			
TG2	Enterprises working in AI and Data Science	4	3	1		
TG3	Research Centers and Universities					
TG4	Innovation Hubs Networks, Clusters	2	1	1		
TG5	Emergency Response Services	1	1			
TG6	Citizen Initiatives					
TG7	Policy makers and government		3	2		
	Other:					

Table 6: Target groups breakdown of stakeholder participation for MSF#1 in Germany

Description of meeting activities

- Provide a summary of activities carried out. Were there plenary or working group sessions? Presentations by whom on what? (Provide presentations as appendices).
 - \circ Introduction
 - o Presentation of the water situation (Wasserverband Obere Lippe)
 - Presentation of the Use Case and the WATERVERSE project (HST, FIWARE)
 - Discussion (Brainstorming) about wishes, concerns, synergies and requirements the stakeholders have.
- Describe the moderation technique and method for open dialogue applied.
 - Brainstorming with pinboards

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



Main achievements

- Describe briefly the main outcomes and results from the meeting, including the answers on the central questions such as outlined in Section 4.0 Outline for MSF, as well as any actions to be taken by members, as agreed upon.
 - All participants have acceptance for the project
 - Everyone is informed
 - \circ $\;$ Stakeholders were engaged and challenged to take part in the process of the project
 - \circ Everyone is keen to support each other with the new findings the project brings
- Summarize the perspectives of the stakeholders (i.e. stories as anecdotal evidence).
 - Stakeholders were at first concerned because the pilot deals with a very sensitive topic but understood and took part in the ongoing meeting to produce the bet output for everyone.
 - Stakeholders welcomed the opportunity the project brings for Etteln.

Reflective notes

- Describe your observations on stakeholder engagement (e.g. do we need to add others?)
 - It is very important to have a clear and stringent communication with the stakeholders and the citizens because of the sensitive topic.
 - \circ $\,$ The next MSF should include citizen initiatives, but it was completely correct to not include them in the first forum.

5.3.2 MSF 2

To be completed after first iteration in 2024.

5.3.3 MSF 3

To be completed in 2025.

5.4 Pilot 3: Cyprus

5.4.1 MSF 1

Title of MSF Meeting (key topic): Setting the Scene: objectives & roles, digital water spaces challenges, future vision

Organizational Partner	WBL & PHOEBE
Organiser	WBL
Moderator	Phoebe
Meeting Plance	Water Museum of WBL, Lemesos, Cyprus
Date	June 2, 2023 (M9)





Agenda:

- 10:00 introduction and welcome by WBL
- 10:10 Presentation: PHOEBE Research and Innovation Ltd
- 10:40 Presentation: KOIOS Research Center of Excellence
- 11:10 Introduction to topics for discussion and/or scenarios to trigger the discussion
- 11:20 Break and Networking
- 11:40 Discussion
- 13:00 End of meeting

Objectives

- Inform the participants about WATERVERSE Project.
- Identify the key Stakeholders.
- Engage all stakeholders to assess the main gaps and challenges.
- Engage all stakeholders to effectively be part of and contribute to the Project.

Participant characterization

Target	Target Group	No. of participants						
		Total	Male	Female	Other			
TG1	Water Utilities	22	13	9				
TG1	Local authorities dealing with the water cycle	2	2					
TG2	Enterprises working in AI and Data Science	6	4	2				
TG3	Research Centres and Universities							
TG4	Innovation Hubs Networks, Clusters							
TG5	Emergency Response Services							
TG6	Citizen Initiatives	1	1					
TG7	Policy makers and government							
	Other: name							

Table 7: Target groups breakdown of stakeholder participation for MSF#1 in Cyprus

Description of meeting activities

- Welcome each participant (signing of the Participants list and Consent Form and provide information material).
- Small introduction to the Project by WBL, Head of the Technical Services of the Water Board of Lemesos.
- Presentation by PHOEBE Research and Innovation Ltd, 'Building the foundations for the water systems' metaverse'
- Questions and answers session about WATERVERSE aims and goals.
- Presentation by KOIOS Research Center of Excellence, 'Data sharing in the era of Smart Water Networks'
- Questions and answers

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



- Short personal introduction of each participant
- Open discussion (moderated by Asking the Right Questions)
- Closing of the meeting by Head of the Technical Services of the Water Board of Lemesos.
- Meeting report

Main achievements

The main achievement of the meeting is to inform the Stakeholders about the Project and listen to their problems on the subject.

All the participants expressed that face the same problems (a lot of different data of different formats in different locations, cyber security concerns, need for easy and secure data sharing).

Reflective notes

All the participants expressed their perspectives for:

- Collection of all their data sets in a single platform.
- Big Data collection, processing, archiving, and secure sharing.
- Need for an ecosystem for easy and secure data sharing among different Organizations.

5.4.2 MSF 2

To be completed after first iteration in 2024.

5.4.3 MSF 3

To be completed in 2025.

5.5 Pilot 4: United Kingdom

5.5.1 MSF 1

Title of MSF Meeting (key topic): Setting the Scene: objectives & roles, digital water spaces challenges, future vision

Organizational Partner	SWW & UNEXE
Organiser	SWW
Moderator	SWW
Meeting Plance	Totnes, UK
Date	May 2, 2023 (M8)

Agenda:

10:00 Welcome and Introductions

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



- 10:10 Overall Project Overview and SWW's Case Study
- 10:20 Background Information

10:30 Discussion

- What resources do you currently use to obtain data and information about the water system.
- How do you use the data and information these resources provide? Are you a consumer of data, a data provider, a knowledge broker, wider audience...?
- Do these provide you with all the information you need? Are there specific questions that you are not able to answer with what's available now?
- What are the barriers preventing you from accessing the information you need? What are the barriers preventing you from using this information?
- Are there specific datasets (evidence or information) that you would like to have access to?

11:30 BREAK

11:45 Discussion

- Review of data assets held by SWW including SWOT analysis
- Brainstorming ideas (opportunities) around how these data assets could be used to meet the requirements of different user- or audience-types
- Risk assessment for key data assets being shared/used in different ways
- What are the enabling conditions required to unlock the potential of these datasets and deliver value to different stakeholder/user groups?

13:00 Close and Lunch

Objectives:

- To better understand what information our stakeholders, want to know from our data and the ways in which they would use this information. This will help us decide what data and contextual information to include in the WATERVERSE project.
- To introduce stakeholders to the WATERVERSE project and gather insights on our Case Study.

Participant characterization:

The table below shows the number of participants, the respective sector of activity and the level of governance each stakeholder is active in.

Target	Target Group	No. of participants					
		Total	Male	Female	Other		
TG1	Water Utilities	2	2				
TG1	Local authorities dealing with the water cycle	2	2				
TG2	Enterprises working in AI and Data Science		1	1			
TG3	Research Centres and Universities	1		1			
TG4	Innovation Hubs Networks, Clusters	2	1	1			
TG5	Emergency Response Services						
TG6	Citizen Initiatives	4		4			
TG7	Policy makers and government						





Other:

Table 8: Target groups breakdown of stakeholder participation for MSF#1 in the UK.

Description of meeting activities

• Summary of activities

The South West Water's Stakeholder and Engagement Manager and the event facilitator, introduced the project and the aims of the day before going round the room and asking for individuals to introduce themselves.

The tasks and questions asked in each part of the forum are listed below:

Task 1: What information do you want to know?

Attendees were asked to ignore the data aspect for this task and instead just focus on what information they would like to know, or what questions they would like answers to. As a result, there was a discussion with stakeholders on why these are their needs and what they would use this information for. This will enable the case study to better understand what data to include in the WATERVERSE project.

Task 2: Where do you go to get information on water/the natural water cycle/the social water cycle?

What became clear in this discussion is that currently, people have to visit multiple websites in order to access the data they are after. In this, we also discussed what role the WATERVERSE project can play in this, and we understood from stakeholders that the WDME would be a welcome way of helping solve this problem if we can bring together data from a number of different sources.

Task 3: SWOT analysis

Individuals were asked to define a question that they would like to have information about. Then participants were asked to carry out a SWOT analysis on this, looking at the positives, negatives, and vision of getting information to answer this question. Finally, participants were asked to consider other points of view and to carefully consider the problems associated with this information being available.

• Moderation technique and method used for open dialogue

Attendees were asked to introduce themselves in an 'elevator pitch' style, where we wanted to find out who they were, where they were from, and why they have an interest in the project. This enabled people to understand who they were working and discussing ideas with.

Main achievements

- The main discussion outcomes and results from the discussion held in the first MSF can be seen in the list below.
 - 1. How do the different stakeholders value the case study current situation, and how do they envision the future?
 - All value the chosen case study pilot, given the increased focus on water quality in UK rivers and seas.
 - The stakeholders see the future as one where data is more freely available, not just from SWW, but other companies with vast data bases too.
 - It was raised that there is no single point of contact for water related information as data is held on different organisations websites e.g. SWW Waterfit Live, Defra Hydrology



Explorer, River's Trust Sewage Map and there was discussion over whether one day in the future, there may be one database for all of this information.

- Stakeholders hope that making data more open is the first step SWW take in stopping the use of CSOs.
- 2. Who are the most important stakeholders to engage when developing a Water Data Management Ecosystem (WDME)?
 - Those in attendance
 - Key individuals who either live or work locally to the catchment which is the focus for the pilot case study and therefore, have a keen interest in CSO data in the area.
- 3. What are the key issues and goals of the MSF for all stakeholders? What roles and responsibilities do they have?
 - Better understand the state of the river for various reasons e.g. wanting to understand if it is safe to swim there or whether there has been a recent active CSO; wanting to know the impact of pollution/climate change/discharges on the ecology of the river.
- 4. What requirements and functionalities needed for data water management? Validation and gaps analysis.
 - Desire for data to be made available in real time, with minimal lag, but for this not to affect the quality of data.
 - Discussions over possible need for third party validation of SWW data in order for it to be trusted and accepted as fact.
 - Identified lack of 'one single source of truth' as currently, data is held on a number of different organisations' websites, which puts onus on the user to know what data is available and where they can get it from.
- Summarized the perspectives of the stakeholders. All stakeholders agreed that SWW providing open data would be beneficial to them as stakeholders and end users of the data. Each would use it for a slightly different purpose, some of which are summarized below:
- To know if it is safe to swim in the water as an individual
- To ensure water quality is improving in the local environment
- To better understand the ecology of the local environment
- To conduct research

While many stakeholders appreciated the step towards opening up data in real time, many highlighted that their real hope was for SWW to stop the use of CSOs.

There was also discussion of the issue of trust. Many highlighted that it is great for SWW to release their data in real time, but there may be the need for this data to be interpreted and validated by a Third Party, for example Surfers Against Sewage, before the information can be accepted as fact.

Reflective notes

Overall, the forum went well. There was good engagement from all stakeholders in attendance, who represented a broad range of organisations (6 of the target groups were represented). We had a few key stakeholders who were unable to attend, and we would aim to have them attend the next session.

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



The session ran well, facilitated by SWW Stakeholder and Engagement Manager and the activities organised resulted in deep discussions and conversations about the topics.

The discussions and outputs raised highlighted that our Case Study is well received by local stakeholders and meets their needs. It has also helped us at SWW understand what data we should be including in WATERVERSE, to ensure that stakeholders receive the information that they need.

After meeting with external stakeholders, there is now a need to engage with internal stakeholders who also may be end users of the WATERVERSE project and who's work may benefit from using the WDME.

5.5.2 MSF 2

To be completed after first iteration in 2024

5.5.3 MSF 3

To be completed in 2025.

5.6 Pilot 5: Spain

5.6.1 MSF 1

Title of MSF Meeting (key topic): Setting the Scene: objectives & roles, digital water spaces challenges, future vision

Organizational Partner	HIDRALIA and CETAQUA
Organiser	HIDRALIA
Moderator	HIDRALIA
Meeting Plance	Torremolinos, Spain
Date	October 25, 2023 (M13)

Agenda:

- 10:00 Reception of attendees
- 10:30 Welcome Message
- 10:35 Waterverse Project Overview
- 10:45 Data lakes discussion
- 11:00 Presentation of the Challenge and Objectives
- 11:10 Attendee Presentation Round
- 11:30 Ideation Session: Asking the right questions Phase 1
- 12:15 Coffee break
- 12:35 Ideation Session: Asking the right questions Phase 2
- 13:20 Conclusions and next steps

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



Objectives

The primary objective of the MSF is to create a collaborative environment to discuss the development of a water and city data management ecosystem. More specifically, the aim is to make data management practices and resources in the water sector and potential links to citizen management accessible, affordable, secure, fair and user-friendly, improving data usability and interoperability of data-intensive processes, thereby lowering the barrier to entry into data spaces, improving the resilience of businesses and increasing the perceived value of data and therefore the market opportunities behind it.

This first MSF plan sought to present the WATERVERSE project and envision possible, future use cases that could arise around the proposed data ecosystem. For them, an ideation session was held among the attendees with the aim of identifying the stakeholders that should be involved in the initiative, identifying the common problems and objectives, and defining the requirements and functionalities that should be implemented in the platform to address those objectives. In conclusion, the aim was to form a working group around data and the city to promote open innovation on the Costa del Sol.

Participant characterization

Target	Target Group		ts		
		Total	Male	Female	Other
TG1	Water Utilities	7	7		
TG1	Local authorities dealing with the water cycle	3	3		
TG2	Enterprises working in AI and Data Science	2	1	1	
TG3	Research Centres and Universities	7	4	3	
TG4	Innovation Hubs Networks, Clusters	4	2	2	
TG5	Emergency Response Services				
TG6	Citizen Initiatives				
TG7	Policy makers and government				
	Other:				

Table 9: Target groups breakdown of stakeholder participation for MSF#1 in Spain

Description of meeting activities

• Summary of activities

The meeting started with the reception of attendees and a welcome message. Following this was a project overview for WATERVERSE given by HIDR and CET.

Next the MSF held a Data lakes discussion, to help answer the questions: *What are Data Lakes? Why are they important? What do we need them to do?* Attendees then participated in a presentation of the challenges, aims, and objectives for the Spanish case study.

After a short break there were two ideation sessions, using the moderation technique Asking the Right questions. Some questions discussed where: *What stakeholders are missing? What are we trying to do with the data used in the WATERVERSE pilot? What data do we need and what do want to use it for? Can we use the data for more? What other relevant use cases exist?*

Finally, the day culminated with a conclusions and next steps discussion.

• Moderation technique and method used for open dialogue.

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



Stakeholders participated in multiple moderation techniques. Participants first used the technique Interview, to get to know the stakeholders in the room, in a fun interactive way. Participants also had two different ideation sessions using the method Asking the right questions.

Main achievements

After the completion of the MSF, HIDR developed a report for their stakeholders, and it was agreed upon that stakeholders would like to meet more frequently than once a year for the MSF. In this report three different sections discussed: Stakeholder identification, Identification of 'Data of Interest', and Identification of use cases.

Stakeholder identification covers the entities that have been identified as necessary and useful to the project. Some entities were not able to attend due to scheduling but will attend the next meeting. New stakeholders from public administration, water utilities, and tourism/citizen groups were identified.

Identification of 'Data of interest' lists the data that were identified as being of interest by the attendees of the first MSF. It should be noted that, like the actors involved or the use cases of interest, the list of data of interest is dynamic and will be updated in the event that new data of interest is identified. Table 10, provides an assessment of the data interests and the type of entity that could provide it.

DATUM	Interest for the working group	SUPPLIER
	(1 interesting – 5 essential)	
Water consumption (aggregate, by sector,		
by use,)	5	Water Utilities
Water Quality	3	Water Utilities
Energy consumption	3	All
Hydraulic Performance (broken down by		
sector)	2	Water Utilities
Volume of water by source	2	Water Utilities
		Town halls, water
Beach Occupancy	3	companies,
Tourist tracking with Telco data	4	Dinapsis & others
Satellite indicators (light pollution, soil		
moisture index, etc,)	2	Dinapsis & others
Consumption tariffs	3	Water Utilities
Pluviometry	4	Open & private data
Temperature	4	Open & private data
Amount of purified water volume	4	Water Utilities
		Water Companies, Waste
Waste revaluation	2	Companies
Volume of reclaimed water	3	Water Utilities
Diversity and quantity of marine flora and		
fauna	2	Oceanographic Institute
Bottled Water Vs Tap Water Sale Indicators	2	Water Company / ??
Water Actions (cost, repairs, incidents,)	3	Water Utilities

Table 10- Spain Case Study- Assessment of data interests and stakeholders which could provide the data

Finally, the participants assisted in identifying the use cases that are of interest to the attendees of the first MSF program. It should be noted that, just like the actors involved or the data of interest, the list of use cases is dynamic and will be updated in the event that new use cases of interest are identified.



The list includes an assessment of the interest that these use cases have aroused in the MSF and the type of entity that could be interested in the results. In addition, a first estimate of the data needed to carry out the use cases has been made:

Table 11 Spanish Case study- Stakeholder use case interests

USE CASE	Interest for the working group (1 interesting – 5 essential)	SOURCE DATA	CONSUMER
Housing occupancy / Seasonal population (% by area)	4	Water consumption, volume of treated water, volume of waste,	Tourism companies, AAPPs, local police,
Consumption indicators by profile, area, city	4	Water consumption by sector, by use	Citizens, Public Administrations, Water Companies
Estimate of average consumption per use	4	Water consumption by sector, by use	Citizens, Public Administrations, Water Companies
Costes and impacts	4	Water consumption, RTH, Water actions (costs,)	Citizens, Public Administrations, Water Companies
Waste indicators (percentage/impacts)	3	Water actions (costs, etc,)	Ciudadanos, AAPPs
Water Footprint	3	Water Consumption, RTH, Water Volume by Source,	Administrations, Tourism, Water Companies
Carbon footprint	3	Power consumption,	AAPPs, Tourism

Reflective notes

In this preliminary analysis, the necessary data identified during ideation has been taken into account, however, it is necessary to deepen the analysis in order to be able to identify all the necessary data sources before prioritizing. It is necessary to emphasize that the objective of these results of the ideation and that, therefore, the omission of possible use cases, data sources or actors involved does not indicate that they are not of interest for the formation of a working group around data and city.

The objective of creating a working group around data and city is by definition very broad. During the development of the first MSF program, the need to specify objectives was observed in order to narrow down both the entities that should be involved and the possible use cases to be developed, so that the group's work dynamics are agile enough to achieve results that provide real value.

In the preliminary evaluation of the use cases (or in its absence, the evaluation of the data) has been prioritized, enhanced by the number of data required and consumers of the output information. The typologies of data provider entities, linked to the identified data and the use cases that consume them, and the end recipients of the use cases or directly of the source data. This assessment is strongly dependent on the evaluation of the use cases that should be reviewed to incorporate the assessment of the entities involved. However, it can serve as a basis for a first prioritization that will be refined during the second MSF measure.

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



42

In general, it can be observed how water companies stand out as the main source of data, being complemented by other types of entities. This is an example of the typology of companies present in the first MSF and the type of use cases that were being discussed. On the other hand, it is observed how public administrations (Public Administrations) would be the main direct beneficiaries of the proposed data ecosystem, followed by water management companies themselves and companies in the tourism sector. It should be noted that, indirectly, there are other types of entities that would benefit from this working group, such as research organisations and companies in the area's innovative fabric.

5.6.2 MSF 2

To be completed after first iteration in 2024.

5.6.3 MSF 3

To be completed in 2025.

5.7 Pilot 6: Finland

5.7.1 MSF 1

Title of MSF Meeting (key topic): Setting the Scene: objectives & roles, digital water spaces challenges, future vision

Organizational Partner	Кеурго
Organiser	Кеурго
Moderator	VVT
Meeting Plance	VTT premises, Finland
Date	March 15, 2023 (M6)

Agenda:

- 12.15 Project introduction + discussion (VTT)
- 12.45 Data management tools (VTT)
- 13.00 NIS / data management and project use cases (Keypro)
- 13.20 break
- 13.30 Ideation workshop
 - \circ $\;$ Data management needs and aims in the water utility sector $\;$
 - o Project data management tools: ideation of possibilities

Objectives

Inform about the project (aims, use cases, ...)

Engage stakeholders

Ideate with stakeholders about use cases and tools



Participant characterization

Target	Target Group	No. of participants					
		Total	Male	Female	Other		
TG1	Water Utilities	6	5	1			
TG1	Local authorities dealing with the water cycle						
TG2	Enterprises working in AI and Data Science	8	5	3			
TG3	Research Centres and Universities	2	1	1			
TG4	Innovation Hubs Networks, Clusters						
TG5	Emergency Response Services						
TG6	Citizen Initiatives						
TG7	Policy makers and government						
	Other:						

Table 12: Target group breakdown of stakeholder participation for MSF#1 in Finland

Description of meeting activities

• Summary of activities carried out

Stakeholders started the MSF with an introduction to the WATERVERSE project, provided by VVT, and a discussion around the overall project aims. Following this a presentation on the data management tools being developed through WATERVERSE- allowed stakeholders to get a better understanding of what will be available in the future. Keypro then informed stakeholders on NIS/data management and project use cases proposed for the case study. After a short break the stakeholders participated in an ideation workshop, using the worlds café method, to discuss data management needs and aims in the water utility sector and the possibilities for project data management tools.

Moderation technique and method for open dialogue applied

Stakeholder used the Worlds café method to organise the complex dialogue around the approach, aims, and goals for WATERVERSE.

Main achievements

The case study has now initial ideas about the tools that water utilities, end users, would benefit from. The case study also developed a list of concerns that users have about sharing the data with external stakeholders.

The goal of the meeting was to inform stakeholders about the project and its goals. This goal is now achieved.

Reflective notes

When working with the stakeholders it was observed that when the project proceeds, we might need more technologically oriented people from water utilities. The same people who were already invited but could not join. Also, we might need a couple more stakeholders from other target groups.

Additionally, stakeholders were interested to hear about the other pilots (from other countries).

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



Finally, stakeholders asked multiple times about the practical benefits and use cases for water utilities. This means that tools should be presented at a more general level for those stakeholders who are not so technically or data oriented.

5.7.2 MSF 2

MSF for the Finland case study was held on March 21, 2024. The results will be published in the final Deliverable D2.4.

5.7.3 MSF 3

To be completed in 2025.

6.0 Conclusion and Next Steps

6.1 Conclusion

In conclusion, for WATERVERSE it is important and necessary to have a unified approach for stakeholder engagement and management, which is defined through the use of multi-stakeholder forums. By actively involving stakeholders, particularly those from the seven target groups, they provide their expertise and allow for knowledge transfer within the water sector. By encouraging them to share their experiences, the challenges and barriers for data management can be accounted for. This, in turn, will contribute to the long-term sustainability of WATERVERSE.

By following the above guidelines, all six case studies successfully mapped the associated stakeholders for WATERVERSE and completed the first MSF focusing on setting the scene.

A common trend seen throughout the case studies is the inclusion of new stakeholders. The MSFs gave view to the gaps within the needed data, knowledge, and expertise to fully understand and implement the WDME. Additionally, they provided feedback to the case studies on data requirements (D2.1) and use cases desires/requirements (WP5).

6.2 Next Steps

As planned in WATERVERSE, the first pilot iterations are to be completed in 2024. Upon completion of the first pilot iteration the second MSF will be hosted by the pilots to show the results to the stakeholders. Additionally, this MSF will serve as an opportunity for the pilots to explore the opportunities and barriers that are affecting the pilot progress. End-user acceptance will be assessed, with MSF providing the platform for stakeholders to express their ideas.

The third MSF, which will focus on the Implementation Support, will be scheduled for the year 2025. Stakeholders will be asked to reflect on the project implementation and identify the challengers which hinder further implantation. Additionally, the topic of data governance will be discussed.

As this is the interim report on the methods of stakeholder engagement, the results of stakeholder engagement and feedback will be addressed in the follow up deliverable of D2.4. In this report, the lessons learned and comparisons between the different case studies will be addressed. This assessment will include the number of stakeholders (i.e. individuals, companies, sector) involved as well as the quality of interaction between the case study and the stakeholders.

An analysis of the MSF organisational methods will be conducted; this will provide insights into better stakeholder engagement for similar projects in the future. Additionally, suggestions will be made on ways to improve MSFs as a method of stakeholder engagement. Finally, a summarisation of the benefits and drawbacks of MSFs will be completed on how it contributed to the overall project. Stakeholders will be invited to share their experiences preferences regarding further communication on WATERVERSE or similar projects in the future.



7.0 References

Bijanju, A., Bulancea, P., Matthes, J., Mudbhary-Sitaula, D., Mullerbeck, E., Storchi, P., et al. (2015). Knowledge Exchange Toolbox - Group methods for sharing, discovery and co-creation. New York: UNICEF.

Dirkse-Hulscher, S. and Talen, A. (2007). Het groot werkvormen boek. Den Haag: Academic service.

Dosière, A. and Willems, I. (2016). Samen leren creëren - Gids voor coördinatoren van communities of practice. Brussel: Alfons Boon.

Frijns, J., Glotzbach, R., Munaretto, S., (2023). COP Guidance Document. KWR Internal document.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge university press.

Medema, W., Wals, A., & Adamowski, J., (2014). *Multi-Loop Social Learning for Sustainable Land and Water Governance: Towards a Research Agenda on the Potential of Virtual Learning Platforms*. NJAS: Wageningen Journal of Life Sciences, 69:1, 23-38. DOI: 10.1016/j.njas.2014.03.003.

Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Seven principles for cultivating communities of practice*. Cultivating Communities of Practice: a guide to managing knowledge, 4, 1-19.

Wenger, E. and Snyder, W. (2000). *Communities of practice: the organizational frontier*. Harvard Business Review, 139-145.

Wenger-Trayner, E., & Wenger-Trayner, B. (2015). *Introduction to communities of practice*. Available from authors at https://www.wenger-trayner.com/introduction-to-communities-of-practice.

World Bank Group (2017). Building Community, A Primer (Update) – public document

World Bank Group (2018). Building Community, A Primer (Update) - public document

WATERVERSE

ANNEX A: Stakeholder Mapping Excel Tool

Table 13 is an example of the Stakeholder making tool for each of the case studies. This tool is used to assess who the stakeholders are and what interest of influence and interest they have in the project. The stakeholder's level of influence and interest is then mapped to Figure 4 to show the level of communication desired by the stakeholders.

Stakehol der Number	Stakehol der Name	Internal or External	Category (i.e., end- user, policy maker, etc.)	Primary contact of Stakehol der (Name and Title)	Method of commun ication	Who (internall y) will contact Stakehol der	Influenc e level (low 1 - high 5)	Interest level (low 1 - high 5)	Commun ication Level required (check Chart tab)	Have you worked with the stakehol der before? (Yes or No)	Known Risks	Known stakehol der concerns	Known Stakehol der Desires
1													
2													
3													
4													



Table 13: Stakeholder mapping tool

Figure 4: Stakeholder engagement table example



WATERVERSE

Annex B: Moderation Techniques

This annex is designed to support the moderators of the MSF's by providing them with a manual for the moderation techniques allowing them to pick the moderation technique best fitted to the specific situation and topic.

Depending on the purpose of the MSF meeting, i.e. problem definition, brainstorming, translating tacit knowledge into explicit knowledge, discussing complex issues, and decision making, different moderation techniques are applicable, see Table 14 (Frijns et. al 2023).

Moderation Technique	Introduction	Problem Definition	Brainstorming	Explicit knowledge	Complex discussion	Decision making
Interview	Х					
Elevator pitch	Х					
Asking the right questions		Х				
The other way around			Х			
Expert knowledge				Х		
World café method					Х	
Perspectives						Х
Scenarios						Х

Table 14: Overview moderation techniques and purpose





Interview

What is it?

The interview technique is an active introduction technique for larger groups (Dirkse-Hulscher & Talen, 2007). In the interview exercise, the participants are split in several couples. Both participants have to interview each other. Afterwards the participants have to introduce the person they interviewed. This exercise allows the participants to really listen to each other in comparison to a traditional introduction round where the participants are usually preoccupied with how to introduce themselves when it is their turn. Moreover, it forces the interviewer to actively listen as they have to introduce the interviewee later on.

When to use it?

This technique is useful during the introduction phase of an MSF when the participants do not know each other yet. It is suitable for large groups.

How does it work?

• Preparing questions

The moderator can prepare interview questions before hand and write them on a white board or flip over before the session starts.

- Forming couples The moderator the participants the instruction to find a participant who they have not met before and form pairs.
- Assignment explanation

The moderator explains that the pairs have to interview each other based on the given questions.

• Start and stop.

It must be clearly explained how much time the participants have for each interview. The moderator has the responsibility of time management. After the time for the interview has passed, the participants are asked to return to their places.

• Introduction round

When all the participants have returned to their places everyone is asked, one by one, to introduce the person they interviewed. The described person has the opportunity to adjust the introduction if something is incorrect.

Requirements

• White board/ flip over, chairs, questions, paper, pens.





Elevator pitch

What is it?

The elevator pitch is a method for participants to briefly introduce themselves (Dosière & Willems, 2016). In the elevator pitch exercise every participant introduces him/herself in one minute, who they are, what they do and the reason why they are participating in the MSF.

This exercise is slightly more formal, but it has the advantage of getting to know each other fast in a larger group. It gives everyone some insight in the people surrounding them and their main problem related to the project. Moreover, it leads the way for more informal conversation later on and can serve as an ice breaker at the start of the MSF.

When to use it?

This technique is useful during the introduction phase of a MSF when the participants do not know each other yet. It is suitable for large groups.

How does it work?

• Preparing questions

The moderator can prepare questions before hand and write them on a white board or flip over before the session starts.

• Explanation and preparation time

The moderator explains the participant's assignment: introduce yourself in one minute to the group based on the questions the moderator has prepared. The participants get five minutes to prepare their answers.

Introduction round

One by one the participants are asked to step in front of the group and introduce themselves in one minute. The moderator in responsible for the time management and signals the beginning and end of the minute.

Requirements

• White board/flip over, microphone (depending on group size), paper, pens.



Asking the right questions

What is it?

Asking the right questions is a method to identify the concrete problem that needs to be tackled (Dosière & Willems, 2016). This exercise helps to formulate a concrete problem definition through asking several questions. This exercise is selected as it forces the participants to explicitly formulate what they want to know and thereby defining the problem. This method helps to structure complex problems and allows for a more concrete discussion.

When to use it?

This method is suitable in the early stages of the MSF's when the problem definition is not yet concrete. Especially when tackling complex issues this method helps to clarify the main issue.

How does it work?

- Preparing an issue and set of questions
 Either the moderator prepares an issue or the moderator asks one of the participants to prepare a current issue and a set of questions concerning the issue that would help them solve the problem.
- Explaining the question

The participant is asked to present their issue to the group followed by questions to which they need to be answered. The other participants come up with questions of which they think are necessary to tackle the problem adequately. At the same time the moderator writes these questions down on the flip over. The moderator serves as a discussion leader.

• Group discussion

The group is asked to discuss the presented issues and questions. The moderator is responsible for time management.

Reflection

The reflection will also serve as a brief summary. The moderator will help the group reflect on their discussion by asking them to define the main conclusion from the discussion, what they have learned from the discussion, what new insights they acquired and which aspects are still unclear.

Looking ahead

The group is asked to think ahead about the requirements for solving the problem. Who and what would you need? Where do you need to start? What obstacles can be expected? How can the participants help each other? The moderator writes the answers down.

Requirements

• White board/ flip over, pen/ marker, chairs.





The other way around

What is it?

After the problem definition is clear it is necessary to gather as many different approaches as possible before selecting an approach. Brainstorming often leads to new insights.

The other way around is an exercise where the participants are asked to think of ways to worsen the problem instead of fixing it. The aim of the assignment is to break free of fixed thinking patterns and brings out new perspectives (Dirkse-Hulscher & Talen, 2007).

When to use it?

This method is suitable as a brainstorming technique. It is likely to bring new insights.

How does it work?

- Reformulating the problem and assignment Instead of asking the participants to come up with a solution they are asked to think what should happen to worsen the problem.
- Writing down ideas

The participants have two minutes to write down their ideas. This could be done in pairs of two.

• Gathering ideas

The moderator will ask everyone to present their ideas. At the same time the moderator divides the flip over in two sides. On the left side the moderator writes down the ideas.

• Translate ideas into solutions. After all the ideas are written down, the group will try to translate the ideas into solutions for the original problem. All the solutions should be written down on the right side of the paper.

Requirements

• Flip over/whiteboard, pen for flip over/whiteboard, pens for the participants, paper for the participants, chairs and tables.



Expert knowledge

What is it?

In order to make knowledge available to a broader audience, it must be made explicit. Experts often do not realize they have a lot of tacit knowledge and make decisions automatically. The expert knowledge method is an active way to elicit tacit knowledge. The room is divided into two separate areas (yes or no). The moderator will pose questions which can be answered by yes or no. The experts have to stand in the area corresponding with their answer. Their answers can be discussed (Dirkse-Hulscher & Talen, 2007).

This method allows for the generation of new ideas and offers more insight in thinking patters. The participants can learn why certain decisions are made by experts and this can lead to questioning their own thinking patterns.

When to use it?

It is a method best used for knowledge exchange of tacit knowledge.

How does it work?

Preparation

In order to have a detailed discussion, the participants have to be familiar with the subject. If the moderator deems it necessary for the participant to prepare he/she has to provide reading materials. The moderator has to prepare questions tailored to the knowledge level of the participants.

• Introducing the theme

The moderator has to provide the participants with basic knowledge of the subject.

• Asking everybody to stand

The moderator divides the room in two areas, true or false in advance of the MSF. During the session the moderator asks the participants to stand.

Asking questions

When everyone is standing the moderator will pose a question and will explain the answer areas. The participants get few minutes to think about their answer and will walk to the area matching their answer.

Explanation

The moderator will ask one person to explain their answer.

• Pay attention.

The moderator has to stop the participant from explaining when he/she notices the explanation is incorrect. The assignment is not about the discussion, but about the reasoning behind the answer. This should be made clear to the participants.

Requirements

• Tape to divide the room in separate areas, reading materials.



The world café

What is it?

The world café setting is a method for relatively larger groups to discuss complex issues (Bijanju, et al., 2015). The overall theme and topic of the MSF is defined before the MSF starts. Several questions are prepared in advance. Each question is assigned to a table. The group is divided into smaller groups and are assigned to a table where they can discuss the posed question. After a certain amount of time, the groups switch tables and pick up the discussion at the new table where the previous group left off. The process will repeat itself until each group has visited every table and the session will end with a plenary conclusion.

When to use it?

The world café method is a useful method to facilitate knowledge exchange. By creating an informal atmosphere, and small groups contribution is likely to be higher than in larger groups. Moreover, it allows gathering a lot of information in a short period of time and gathering more in-depth insights by building on the insights of the previous groups. Lastly, by dividing the topic in smaller sub questions, multiple issues can be discussed at once.

How does it work?

• Before the session

The moderator selects a theme and designs 3-5 easily explained questions. The moderator selects 3-5 hosts (depending on the number of tables) and explains their responsibilities:

- Hosts should give a 2–3-minute explanation at the beginning of each discussion.
- Encourage discussion in the group.
- \circ Stay at their table and recap the findings from the previous group for the new one.
- During the plenary discussion they provide a brief summary of the key findings.
- Select the participants (not necessary in this case).
- The moderator has to set up the room by putting 3-5 tables in the room and surround them by chairs. Each table needs to have a flipchart or a paper cloth on which ideas can be written down.
- Introduction and discussion

At the start of the session, the participants are assigned to a table and the moderator briefly explains the session:

- Each table has to choose a reporter who will stay behind with the host. This is to ensure consistent reporting.
- \circ The host will give a 2–3-minute explanation and the discussion can begin.
- During the discussion participants should write down their ideas on the flip over or the paper tablecloth. They are only allowed to write their ideas down after they've expressed it out loud. This allows the reporter to write it down as well.
- The discussion can begin, and each round will last around 20 minutes. The moderator is responsible for time management and will let the participants know when it is time to switch tables. The participants have to move clockwise to the new table. Only the host and reporter will stay behind. When the new group arrives, the host will give a 3–4-minute summary of the discussion of the previous group.



Reflection

After three rounds of conversations, the group should come back together again for a plenary reflection and conclusion. The host of each table will be asked to give a 5-minute summary of key points from their table. In case the host hasn't written the findings down, this should be done by the organiser.

• The world café will last approximately 75-90 minutes; this includes the plenary concluding of the session.

Requirements

• A host and reporter per table, participants (12-30), 3-5 tables and chairs for all the participants, one flipchart per table, marker and pens per table, timers.

 ${\sf WATERVERSE}\ {\sf D2.2-Stakeholder}\ engagement\ activities\ and\ feedback$



56



Perspectives

What is it?

In the perspectives method every participant is assigned a perspective which they have to adopt in the following discussion. A decision is made on the provided perspectives (Dirkse-Hulscher & Talen, 2007). The different possible solutions will be discussed, and everyone has to come up with arguments against and in favour of the solutions based on their assigned perspective. The moderator writes down all the arguments. Everyone switches back into their own role and based on the arguments mentioned before, a decision is made.

When to use it?

This method is useful in the final phases of a project or MSF when decisions have to be made and hence consensus has to be reached between a wide range of actors. By being forced to take up someone else perspective, more understanding is created between the actors of the MSF. This in turn can lead to better communication between the participants and possibly lead to less pushing of personal agenda's.

How does it work?

• Repeating the options

The moderator repeats all the options and writes them down on a flip over.

- Mapping the parties The moderator makes an inventory of all the parties of interest and writes them down on cards.
- Changing perspectives

The moderator hands out the cards with the different roles to the participants and makes sure no one receives his own role. The participants are allowed to discuss their arguments concerning the decision with participants who are assigned the same perspective. The moderator can provide questions to help them form an opinion.

Discussion

The moderator leads the discussion and writes down all mentioned arguments. At the same time the moderator makes sure that the participants offer arguments from their assigned perspective.

- Changing back perspectives After the first discussion it is time to change back perspectives. Everyone can now bring up arguments from their own perspective.
- Decision making

The moderator lists the arguments that have been made during the discussion and will ask the participants to vote for their preferred solution.

Requirements

• Flip over/whiteboard, pen/marker, cards



Scenario's

What is it?

In the scenario's method the moderator and the group create scenarios based on the consequences of possible approaches. This allows for a comparison between different approaches (Dirkse-Hulscher & Talen, 2007). The scenario's method helps to make a well thought decision by looking at all the possible outcomes of choosing a certain path.

When to use it?

This method is useful in the final faces of a project or MSF when decisions have to be made and hence consensus has to be reached between a wide range of actors. Listing the possible outcomes of several options allows the participants to make a well-informed decision.

How does it work?

• Discussion summary

This technique is usually applied after a discussion to gather possible solutions. The moderator summarizes all the proposed solutions and suggests together with the group concept decisions and writes them down on a flip over.

• Explaining the method

The moderator explains to the group that he wants to gather as many consequences as possible for each decision. The focus should be on possible negative consequences, and they should also list the effects on every actor group to create an outcome scenario for each decision.

Scenario outcomes

The group is divided in smaller groups. Each group is assigned a concept decision for which they should create a scenario. In order to make a fair comparison, the moderator can hand out a standard form to write down the consequences.

Scenario discussion

The groups discuss the scenarios while focusing on the consequences that have the biggest impact. The other participants are asked to come up with ideas to lower the impact of these consequences.

Summary and decision making

The created scenario's form the basis of the decision. The moderator summarizes the consequences of each scenario and writes them down on a flip over. There are two possible options to make a decision. Either the moderator decides based on the scenarios and consequences, or the groups votes for one.

Requirements

• Flip over, pen/marker, paper, pens, tables, chairs.

WATERVERSE

www.waterverse.eu

Annex C: MSF Meeting Evaluation Form

Place: _____ Date: _____

It was a pleasure to have you in this meeting. We would like to know your opinion, so that we can improve future events and meet your expectations. Thank you for your collaboration!

Name (optional):_____

Organization (optional):

Please rate the extent to which you agree with each of the following statements: (1=strongly disagree; 2=disagree 3=neutral; 4=agree; 5=strongly agree; N.A=not applicable)

1. Meeting logistics and interactions	
1.1 I received the information about the meeting and materials well in advance	
1.2 The venue was adequate for the purpose of the meeting	
1.3 The meeting had the right duration in time	
1.4 During the meeting I improved or made new connections for my professional network	
1.5 The presentations and speakers were clear and understandable	
1.6 During the meeting, I felt save to behave spontaneous and unfiltered	
1.7 I believe others were communicating openly with me	
Comments: (optional)	

2. Engagement and increased understanding
2.1 I believe that all relevant stakeholders were present at the meeting
2.2 I had sufficient opportunities to provide input to the discussion
2.3 Differences and (potential) conflicts among us were addressed in a constructive manner
2.4 All relevant ideas/perspectives were included and respected during the discussion
2.5 I feel that the right topics were discussed during the meeting
2.6 I now have a better understanding of the perspective of the stakeholders

2.7 The way the discussion was facilitated and moderated supported the meeting objectives

Comments: (optional)



3. Outcomes and conclusions

3.1 There was sufficient time to reflect on our collective experience and functioning as a group

3.2 I believe that clear conclusions were formulated at the end of the meeting

3.3 I believe that clear actions were formulated to improve Water Data Management Solutions

3.4 The meeting inspired me to take follow-up actions in my own organisation

3.5 Participating in the meeting increased my knowledge on Water Data Management Solutions

3.6 My expectations on the outcomes of the meeting were met

3.7 I am aware of my own and others role and how we can contribute to the projects goals

Comments: (optional)

Pros and Cons of the MSF

What is your overall rating of the MSF meeting (1 to 5)?

In your opinion, what were the most positive aspects of the meeting?

In your opinion, what were the less positive aspects of the meeting?

Suggestions for improvement

What suggestions for improvement do you have for future meetings?

Thank you!



Annex D: Participant Information Sheet & Statement of Informed Consent



PARTICIPANT INFORMATION SHEET



Co-funded by the European Union



PARTICIPANT INFORMATION SHEET¹

General Information

You have been invited to participate in a research activity conducted by Water Data Management Ecosystem for Water Data Spaces - Waterverse coordinated by the Centre For Research and Technology Hellas - CERTH. Waterverse is an EU funded project Grand Agreement No.: 101070262, Call: HORIZON-CL4-2021-DATA-01, Topic: HORIZON-CL4-2021-DATA-01-03 concerning the development of a Water Data Management Ecosystem (WDME) for making data management practices and resources in the water sector accessible, affordable, secure, fair, and easy to use, improving usability of data and the interoperability of data-intensive processes, thus lowering the entry barrier to data spaces, enhancing the resilience of water utilities and boosting the perceived value of data and therefore the market opportunities behind it. WATERVERSE takes a holistic, interdisciplinary approach in the water domain, blending complementary competencies of 17 partners located in 10 EU countries, representing the water domain with Research organisations (including social sciences experts), water utilities, water domain technology providers and innovation companies, as well as the technical community that is driving the development of data spaces, thus increasing the resilience of the water sector and water utilities, as a whole. The project will:

(a) Actively engage end-users and stakeholders to assess the main gaps and challenges the water sector must overcome to effectively be part of and contribute to quality European data spaces.

(b) Identify, extend, and integrate a wide set of data management tools to implement the WDME, based on FIWARE (www.fiware.org) Building Blocks and comprising tools and methods to ensure security and energy efficiency of the whole WDME.

(c) Setup and demonstrate the WATERVERSE WDME in real environment with relevant and diverse case studies involving water sector stakeholders from 6 countries (Cyprus, Spain, Germany, the Netherlands, Finland, United Kingdom).

(d) Set clear and measurable indicators for assessing FAIRness of data in water-related data spaces.

(e) Ensure the viability and sustainability of the WATERVERSE WDME, as well as its replicability, scalability and business applicability.

M4D, the participating team from CERTH, is responsible for the coordination of the project activities in order to assure the excellence of the project outcome by managing the project to time and budget, coordinating the activities, monitoring and adjusting the implementation plan if needed, and by monitoring the data management and the ethics. Moreover, the research activities of M4D group are focused on cybersecurity solutions tailored to the water sector and on the data compatibility with existing

¹ Sections highlighted in yellow are the sections that are going to be adjusted per project and activity in order to be in complete alignment with the activities that are going to take place.



data models, also including satellite data and information from social media platforms for enhanced interoperability.

The project started on the 1st of October 2022, and it will be concluded on the 30st of September 2025.

Aims of the Research Activity

In Waterverse, stakeholders are involved through Multi-Stakeholder Forums (MSFs), organised in three meetings at each demo case. The MSFs aim to create an engaging environment around the aim to develop a Water Data Management Ecosystem (WDME). More specifically, the objective is to make data management practices and resources in the water sector accessible, affordable, secure, fair and easy to use, improving usability of data and the interoperability of data -intensive processes, thus lowering the entry barrier to data spaces, enhancing the resilience of water utilities and boosting the perceived value of data and therefore the market opportunities behind it. Waterverse MSF frameworks builds off and extends from past EU Horizon projects of NextGen and Ultimate. Specifically, the NextGen framework for Communities of Practice (COPs).

• Time and Location of the Activity

[Indicate when and where the activity will take place]

• What will I be asked to do?

With each demo case, the expectations of the stakeholders will slightly differ. For exact requirements stakeholders should contact the MSF organiser for the demo case. Usual activities might include:

Prior to the activity: Review related Waterverse materials for the demo case, gather data to assist with WDME development, complete questionnaires, consult others within your network.

During the activity: Presentations agreed upon with organiser, participate in workshops, open and honest dialogue with other stakeholders, completed MSF evaluation form.

Post activity: Complete any tasks agreed upon within the MSF.

Other activities and expectations maybe requested by the MSF organiser or moderator and will be discusses with participants of the demo case MSF.

• How will the information provided/my contribution be used?

The information collected during the Multi-Stakeholder Forums will be gathered and used to contribute towards the completion of the project, its reports and a number of journal and conference publications.

• Is my participation mandatory?

It should be highlighted that your participation is completely **voluntary**, and you can **withdraw** at any time of the process without providing any reason and **without any negative consequences for you**.

For this objective, please contact person xxx, and person xxx whose contact details can be found at the end of this document. After contacting them, you might be asked whether you would like to permanently delete your data or if you consent to continue processing these data. You are also able to raise any objections or lodge a complaint to the relevant DPO/authorities. In addition, you might be asked for the reason why you would like to withdraw from the research, but you are not obliged to respond. You are free to also decide the questions you are going to answer during the feedback session.

WATERVERSE

Under no case will the participation be obligatory for any of the employees of the [data controller - pilot responsible]. The employees-data subjects are voluntarily invited to participate in the present research, and they are free to deny any participation. No negative repercussions will follow any withdrawal of the research. There will also be no preferential treatment to those agreeing to participate over those who do not. Finally, no additional monetary compensation is foreseen.

• Benefits and potential risks of my participation

Although there will be no immediate benefits from participating in this research, the outcomes will contribute to enhancing the European Union's Data Management approach in Water Data Spaces. You will also have the chance to interact with other experts on the field and exchange ideas and inputs, around important issues on Data Management approach in Water Data Spaces.

No physical harm, damage or risk is expected to be inflicted on you. In all arrangements of the Multi-Stakeholder Forums the COVID-19 restrictions and instructions will be taken into account and be fully implemented. Personal details will not be used during or after the Multi-Stakeholder Forums, other than by the organisers, to contact you in relation to your participation or if you wish to be contacted about anything after the focus group. [Please here add if and how the responses will be linked to the participant according to the pseudo-anonymization or anonymisation techniques that will be used e.g. In anonymisation : Nothing in your responses will be linked or used with your name or any other identifying information. Access to any personal information you provide, will be limited strictly to the people involved in the research directly (please check also the exact clarifications given below for the collected data and the security related to them)

• How can I get in contact to discuss my participation?

Please feel free to get in contact at any time using the contact details included below through which we would be more than happy to discuss any queries or concerns that you might possibly have.

Project Coordinator: (Ilias Gialampoukidis, Senior Researcher at CERTH, <u>heliasgj@iti.gr</u>, +30 2311 257810)

The use case leader: [Use case leader contact info]

• How can I find out about the outcomes of this activity/research?

We will publish a short summary of the findings and distribute them to all participants.

Data Protection Issues

Any personal information that we collect from you will be in accordance with the General Data Protection Regulation, under Art. 6(1)(a). We are not able to collect anything without your consent, which is the legal foundation for collecting and storing personal information in relation to this activity/event. If the event is audio recorded, this is classed as personal data and will also only be collected with consent.

What personal information will be collected and who will have access to them?

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



The Consortium is only collecting and processing personal data in connection with the research's informed consents within the project's time frame. Only information necessary to the research aims will be collected and processed, according to the Data Minimization principle, as required to achieve the purpose of this research activity. Also, you will not be subject to any decision based solely on automated processing, including profiling which produces legal effects concerning you or similarly significantly affects you.

The data collected will be:

- Full name, in order to come back to you in case any further clarification is required
- Professional affiliation, in order to identify for which components, we should contact you for feedback based on your professional background and experience.
- Gender, in order to ensure that our research is gender-balanced
- Contact information, in order to keep you updated on the research's outcomes
- Photographs, video, or audio recordings might be acquired, upon your explicit consent during your participation in this research (e.g., audio recordings, video recording of participation in the demonstration etc.)

No further use of your information will take place without your written permission. These data will be strictly retained as confidential and will not be shared outside of the Consortium UNLESS it is required to share your information with the European Commission/national authorities as a part of our obligations.

Only the use case leaders, organisers and MSF moderator of will have confidential access to your personally identifiable data. Specifically, the authorised personnel of (Name of the partners) who are directly involved in the project, along with the respective DPOs.

How is the security of my personal data being ensured?

To begin with, before the start of the Multi-Stakeholder Forums, you will be provided with this information sheet and you will be asked to sign a consent form, where all your rights are being described (Section: My Rights). All personal data are processed in accordance with the <u>EU General Data Protection</u> <u>Regulation (2016/679)</u>.

During the Multi-Stakeholder Forums, only absolutely necessary personal data will be collected (as described in Section: What personal information will be collected and who will have access to them?). Any unforeseen sensitive information, or incidental findings will be treated by us with the utmost confidentiality (please check Section: Details of any insurance indemnity for the research)

After the end of the Multi-Stakeholder Forums, all personal data will be immediately transferred to encrypted and/or secure and password protected servers or devices. If we use a mobile device to record data, we are making sure that we are transferring the collected data to secure servers or devices as soon as possible. All recordings will be deleted in five years after the end of the project in order to be able to fulfil reporting obligations to the European Commission.

The signed informed consent will be safely stored all research partners will use their own secured machines with limited user access to the network and servers, the files will be password-protected, or they will be backed up securely on the cloud and, if requested, they will use encryption techniques proposed by the EC. Signed consent forms will be kept by use cases for five more years after completion of the project in September 2025 in order to be available for demonstration in case of an inspection or

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



an audit. Then, they are going to be destroyed with paper shredders and no digital copies will be kept, in additional servers or communication channels.

Before data can be used, they will be depersonalised, unless there is an explicit agreement with the research participant that says otherwise, e.g., in the case of photos. The transcripts will delete/modify any information that would enable you to be identified (names, locations, etc.) directly, by inference or by association. This Anonymisation/pseudonymization will be complete and irreversible as the original audios will be destroyed.

Details of any insurance indemnity for the research

According to GDRP Article 23 the Union or Member States are authorised to take legislative measures to restrict the scope of certain data protection rights and obligations. During the Multi-Stakeholder Forums, there is a possibility of the following incidental findings to emerge, with the subsequential mitigating actions to be in place:

- - in case of interviews/focus group discussions etc, potential incidental findings may be:
 - unintentional disclosure of information that pose imminent danger to humans, <u>Mitigation</u> <u>plan</u>: The researcher will end the research activity, and will contact any legal and emergency services
 - unintentional disclosure of information that do not pose imminent danger to humans, but they still present ethical and legal concerns (related to criminal activities etc.). <u>Mitigation</u> <u>plan</u>: The researcher will inform the participant that they have disclosed some piece of information that may need to be further disclosed due to ethical and legal concerns. Then he/she will inform them that either the research activity can be ended (with their personal data to be erased) or can be continued. Either way the researcher will provide them with all the relevant information on where they can seek and find support, underlining that none of their personal information will be disclosed.
- In case of tools and demos etc, the incidental finding may be:
 - unintentional detection of illegal activity, <u>Mitigation plan</u>: the person will be handed over to the present national police who will carry out standard operational procedures determined by regulations on the given case, and all relevant data has to be secured/encrypted and handed over to the police as evidence.
 - unintentional capturing of personal data that may result in the identification of individuals not involved in the project <u>Mitigation plan</u>: these will be immediately isolated and erased from all storage devices,
 - illegal activity that was intentionally enacted by a person working in the project with the sole purpose of testing the system and has been detected by the system <u>Mitigation plan</u>: the local practitioner authority (e.g., National Police) will issue this person with a Letter of Commission stating that he or she has performed the action resembling an illegal act for the sole purpose of testing the system. No further action is required.

Finally, it is important to point out that the WATERVERSE research will not involve any clinical trials.

Participants' rights

WATERVERSE D2.2 – Stakeholder engagement activities and feedback



- **Right to information:** you may request information about whether we hold personal information about you, and, if so, what that information is and why we are holding it.
- Right to decline: you may decline to offer any particular information requested by the researcher
- **Right to access:** you may access your data and ask for copies of your data whenever you wish to.
- **Right to rectification**: you may ask us to rectify the information you have provided us in case you consider that something is missing or is incorrect.
- **Right to erasure**: you may ask us to erase your personal data at any given moment without a specific reason.
- **Right to object**: you may request to stop processing your personal data and withdraw from the research at any desired moment before the anonymization of your data. You may also lodge a complaint with the data protection supervisory authority.
- **Right to data portability**: you have the right to request the transfer of your personal data to another data controller in an electronic and structured form to you or to another party.
- **Right to withdraw**: you may have the opportunity to withdraw from the pilot at any time with no adverse consequences

Contact details

For more information on WATERVERSE, you should contact the Project Coordinator (Ilias Gialampoukidis, Senior Researcher at CERTH, <u>heliasgj@iti.gr</u>, +30 2311 257810)

For more information about the collection and processing of personal data in WATERVERSE you should contact the Project Coordinator (Ilias Gialampoukidis, Senior Researcher at CERTH, <u>heliasgj@iti.gr</u>, +30 2311 257810)

For more information on the processing of your personal data from the Multi-Stakeholder Forums, you should contact [Use case Leader contact info]



Statement of Informed Consent

By providing my digital signature or entering my name below, I acknowledge that I have been invited to participate in research conducted by WATERVERSE Consortium partner KWR, coordinated by CERTH, on [date] voluntarily. I confirm that I am giving consent freely and voluntarily, without feeling coerced, manipulated, or unduly induced.

With this informed consent I explicitly confirm that:

I am above 18 years old
I have been informed of the project aims and goals as well as of the Stakeholders identification & engagement
I have been provided and read the Information Sheet concerning the Stakeholders identification & engagement and I had the opportunity to ask questions for all aspects of the research, receiving in parallel clear answers before making any decision
I have been given the contact details of the research team and I have been informed that I am free to contact them with any queries about the research or the project
I have gained sufficient understanding about the Stakeholders identification & engagement, the processing of my data and the rights that I have concerning the processing of my personal data, thus agreeing to take part in this study and for my data to be used for the purpose of this study
I understand that it is completely voluntary to participate in Stakeholders identification & engagement and I consent to the processing of my personal data.
I consent to the use of the information collected for the purposes set out in the information sheet, once anonymized/pseudonymized. Any personal information will be securely stored and shared in the ways described on the accompanying Information Sheet and kept separately from the opinions I express.
I have at any time the right to withdraw my consent to any of the above without announcing any specific reason for my withdrawal and without any adverse consequences. I understand that once my data has been anonymized/pseudonymised, where needed, and aggregated it will not be possible for it to be withdrawn as it will no longer be attributable to me.
I understand that any kind of information that will be shared in Stakeholders identification & engagement is confidential, and I am not allowed to disseminate, share, or use it in any other manner outside the scope of this demonstration.



I agree that my participation may be audio/video recorded, with the recordings to be securely retained for the period needed to fulfil the purposes of the project and accompanying publications, but my personal details will never be attributable back to a specific recording.
I agree that my personal data can be used for contacting me in the context of inviting me in future events of interest, related to the WATERVERSE
I am fully aware of all my rights and, especially, of my right to withdraw this consent at any time without consequences by contacting the Data Protection Officer [Contact Details, name surname, partner, e-mail]

Name/Digital Signature (participant)

.....

Date

.....





