Deliverable 5.1

Plan for the Exploitation and Dissemination of Results (PEDR)

Grant Agreement nº: 956623

Project full title: Inventive forecasting tools for adapting water quality management to a new climate

Planned date of deliverable: 31 May 2021

Actual submission date: 31 May 2021

Target Audience: General Public

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Content

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1. Objectives of the PEDR

General

To create interest and raise awareness of inventWater outputs among stakeholders, policy makers, the general public and scientific community.

Specifics

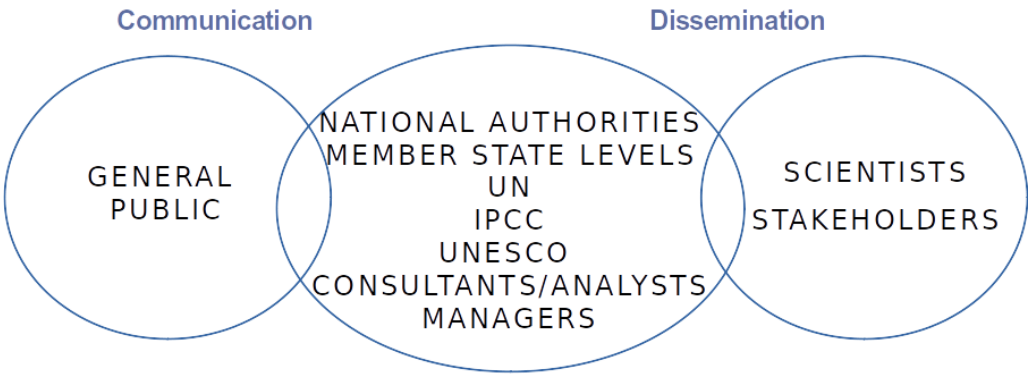
a. To communicate the inventWater activities and results to different target audiences and to get a constant feedback between the ESRs and audience that benefit from the projects.
b. To disseminate outcoming technical results among scientific community and industry experts related to the topics conducted in inventWater.
c. To promote a dialogue on future-proof solutions for water related problems.
d. To maintain a living document that will be delivered initially by the management team and then reviewed and amended over time .

2. Communication vs Dissemination

Communication and Dissemination are the base to accurately reach all our target audiences and will be also participated by the ESRs. Following the Marie Curie-ITN guidelines and the objectives of inventWater, communication and dissemination purposes will be: (i) to inform about the project and resulting outcomes to multiple audiences non-related to the project and, (ii) to spread the resulting outcomes to the audience related directly to the project using the resulting outcomes, respectively.

The communication and dissemination strategies will be directed to multiple target audiences. A way of summarizing our target audience is presented in Figure 1.

Figure1. Target audiences in inventWater



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Two important points of communication and dissemination in inventWater:

- The 15 ESRs must also produce outputs for all target audiences.
- All the participants of the project, such as ESRs and supervisors, must acknowledge the funding program according to Figure 2.

Figure 2. Acknowledgement of the funding program in all communication and dissemination activities such as results, publications or articles.

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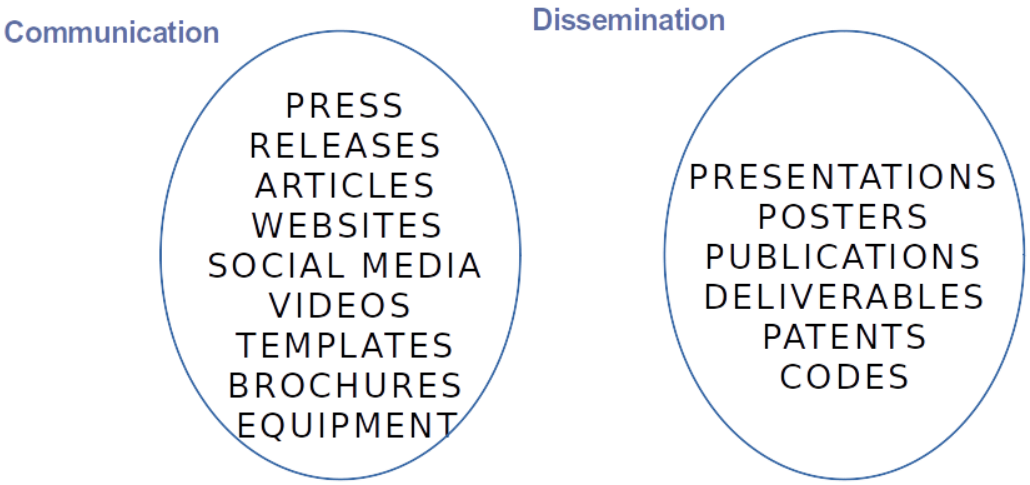
In inventWater we plan to have different formats for the outputs obtained in the project, depending on the nature of the outcome: communication or dissemination activities (Figure 3).

Figure 3. Types of results for communication ad dissemination planned for inventWater.



InventWater aims to look for excellence in communication , to be creative and innovative. This also depends on ESRs, which are in charge of outreach activities (create short articles, blogs, photos, tweets...). All beneficiaries must be involved and used an appropriate language according to audience.

2.1 Communication channels

Channel 1: inventWater will establish a strong **online and social media presence** with a consistent and **clear visual identity** (Deliverable D5.2). This will include a web-based platform to ensure a flow of information both between the inventWater training network participants and different target audiences. The **website** will also be linked to existing relevant online network activities. The International Institute for Applied Systems Analysis (IIASA), for example, has a strong link to different policymaking activities. These channels will be used as a conduit for inventWater research outputs to ensure that they reach that target audience and do contribute to future-proofing water management under climatic and socioeconomic change. Quantifiable target to measure the effectiveness of the channel: statistics of visits to website and interactions in social media in the upper range of performance.

inventWater will have a **Twitter** account (**@invent_water**), and after the recruitment process any other social media suggested by the ESRs, such as, Facebook or Instagram. There are some accounts from the funding program that must be considered for communicating results: @MSCActions, @EU_H2020, @EUScienceInnov, @REA_research in Twitter and Marie Skłodowska-Curie Actions in Facebook. Additionally, some hashtags are suggested to help in reaching an appropriate audience: #MSCA #MSCAjobalert #ResearchImpactEU #H2020. In general, any other related account or hashtag that could help in communicating should be added.

Channel 2: We will use our web and social media presence, together with **press releases and brochures/flyers to disseminate on publications, field visits and training events**. These will also target non-scientists and therefore be **published in a jargon-free manner**. As a final event, inventWater will host an event at World Water Week in Stockholm in year 4. We will measure the effectiveness of the channel by: Number of media publishing news about the network, number of policy briefs shared with non-academic partners, attendance to the final outreach event.

Channel 3: Oriented specifically towards the public engagement. All ESRs will organise **one local outreach event on the topic of climate change impacts on water and** will participate in at least o**ne Marie Skłodowska-Curie Researchers Night event** in the country of the host institution (Deliverable D5.4). The design of the local outreach event will be tailored depending on the local community (for example, this may be a school-based events or a social event such as the now popular Pint of Science). All these activities will contribute to the portfolio of transferable skills of each ESR and will benefit from the experience of inventWater members in engaging different target audiences (Fig. 4). We will measure the effectiveness of the channel by: Number of people engaged from each target group (children and young students in school, high-schools, and open days, adults).

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2.2 Dissemination channels

There are three main points expected from inventWater:

- Aim for **three peer reviewed publications** for each ESR (journals of the EGU and AGU editorials, and generalist journals such as Nature Communications and Nature Geoscience). These research outputs will be tailored to the submission deadlines of upcoming IPCC Special Reports and with the future 7th Assessment Report in mind, to ensure inventWater results are taken into account in the IPCC influential assessments.
- **One poster or oral presentation** at international meetings and conferences per year (e.g., GLEON meeting, the biannual AEMON meeting, the Symposium for European Freshwater Sciences (SEFS), the Association for the Sciences of Limnology and Oceanography (ASLO), and the AGU and EGU Assembly)
- **Organise a session** as a part of the W**orld Water Week** in Stockholm (final event of training network)

Additionally, it is expected to create tools with potential market (e.g., flare) in water quality management, to be in contact with the EU Innovation Radar methodology and the assistance of the ICRA RDi office and Innovation Committee, and to generate water quality impact indicators streamed into the ISIpedia and promote to use them in policymaking.

3. Exploitation of results and intellectual property

The objective is to bring water quality into the forefront of the topics considered when designing strategies for adaptation to climate change, offering a more integrative assessment of the impacts and adaptation options. The Consortium will exploit the results in the way it considers most appropriate to serve its purpose, ensuring in every case the widest possible access to society. Results may be exploited under several alternatives or forms including patenting, licenses, research collaborations, research services, consulting, or advice services, and we will seek support of the Technology Transfer Offices at network institutions (particularly at ICRA) to make the best-informed decisions. The inventWater Innovation Committee will oversee performing an initial review of all results and deciding on the potential for patenting and commercial exploitation. Decisions likely to affect any partner's legitimate interest in terms of protection of IPR will be discussed by the Supervisory Board. The Consortium will ensure that dissemination and publication of results will be compatible with the protection of IPR, confidentiality obligations and the legitimate interests of the owner(s) of the foreground.

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3.1 Explotation of Innovative forecasting tools.

Given the potential that innovative solutions form inventWater exhibit better performance than conventional tools, they might offer new opportunities for assisting water quality management which will be of interest to end-users, such as local water authorities, water supply companies, and the consulting sector. The development of these systems has the possibility to generate tools with market potential, as exemplified by the patent FLARE: Forecasting Lake and Reservoir Ecosystem by VT. This implies that any action addressed to contact potential stakeholders would need to be planned by the Innovation Committee to safeguard IPRs and ensure a smooth transition from the collaborative research sphere to the business opportunity. In case one of such opportunities are identified, a preliminary assessment will be performed within the network using the EU Innovation Radar methodology with the assistance of the ICRA RDi office.

3.2 Water quality impact indicators at the national level under climate change scenarios.

This product is one of the main outcomes from inventWater and will be streamed into the ISIpedia portal (Open Climate Impacts Encyclopedia), including the synthesis of national-level climate-impact projections corresponding to emissions pathways currently being discussed within the UNFCCC climate change negotiations. The access to the ISIpedia portal will be free and universal, and it is expected to impact in national and international policy making, including the achievement of the UN SDGs agenda. The potential stakeholders interested include a broad range of institutions, such as national environmental agencies and international organizations such as UN and UNESCO, that we will approach using our network of collaborators and the appropriate dissemination tools available in inventWater, with the final objective to promote the use of the new impact indicators in policymaking. However, ISIpedia will also be open to the general public, therefore all the information posted will be free of scientific jargon.

3.3 Policy briefs for adaptation.

Designing appropriate adaptation measures using forecasting techniques is at the core of inventWater research programme, and Deliverable D5.6 (“Set of policy briefs for the water sector”) will collect these results in policy oriented briefs targeting two main communities in order to inspire action: 1) national policy-making bodies and ONG’s involved in the design, implementation, and monitoring of policies against the impacts of climate change (ministries, environmental agencies, ONG’s); and 2) international organizations such as the IPCC, UNESCO IHP, the United Nations Water and Environment Programmes, the International Commission of Large Dams, and NGOs such as Global Water and Water.org, among many others. We will use the UNESCO Open Water Network as a basic vehicle for dissemination but will use our extensive network of networks as well.

4. ESRs involvement in the PEDR

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Each ESR will be asked to develop a **communication strategy,** that will **highly contribute to the PEDR** and add value to their transferable and communication skills (e.g., during training events 1 and 5). In general, the ESRs oversee **most outreach/communication activities.**

From the **dissemination** perspective, the three main points discussed in the previous subsection must be **mainly developed by the ESRs** with the support of their respective supervisors.

Additionally, they will participate in the new **European Climate Pact,** a component of the European Green Deal launched in December 2020. A "satellite events" centered on the Pact (https://europa.eu/climate-pact/events_en) could be a feasible activity to directly participate in. Potentially, inventWater ESRs could also participate as ambassadors of the Pact (https://europa.eu/climate-pact/ambassadors/become-ambassador_en)

5. Important rules for inventWater

- **Open access** to peer-reviewed publication is **mandatory.** The publications must be entered in a repository.
- Embargo allowed for up to 6 months for Green Open Access.
- Article processing charges (APCs) are eligible costs.
- "Results are owned by the beneficiary that generates them." (Article 26 from grant agreement)
- "Each beneficiary must examine the possibility of protecting its results and must adequately protect them — for an appropriate period and with appropriate territorial coverage— if: (a) the results can reasonably be expected to be commercially or industrially exploited and (b) protecting them is possible, reasonable and justified (given the circumstances)." (Article 27 from the grant agreement)
- "Each beneficiary must — up to four years after the end of the 48 months of the project — take measures aiming to ensure 'exploitation' of its results (either directly or indirectly, in particular through transfer or licensing; see Article 30) by: (a) using them in further research activities (outside the action); (b) developing, creating or marketing a product or process; (c) creating and providing a service, or (d) using them in standardisation activities" (Article 28 from the gran agreement)
- "Prior notice of any planned **publication** shall be given to the Coordinator at least **30 calendar days before** the publication. The Coordinator will inform the rest of Parties with no delay." ("8.3 Dissemination" in Consortium agreement)

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6. Calendar for inventWater dissemination and communication actions/deliverables

Management, Training, Recruitment and Dissemination Deliverables			
Deliverable	**Deliverable Title**	**Date**	**Target Audience**
D5.2	Launch of social media presence (Twitter) and website (including blog)	May 2021	General public, potential collaborators, researchers, practitioners, policy and decision makers. The public side will have pages targets at the water industry, the research community and the general public
D5.3, D5.7, D5.8, D5.9, D5.10, 5.11	ESRs blog entries on training activities	At approx. six-monthly intervals to Sep 2024	General public, researchers, potential collaborators, students
D4.3	Reports on Network-wide training events	Dec 2021, Jun 2022, Jan 2023, Aug 2023, Feb and Sep 2024	Programme officers and internal oversight for supervisory board
D4.2	Bi-annual reports on ESR training progress (acticities, impacts)	Feb and Aug 2022, Feb and Aug 2023, Feb and Aug 2024	Programme officers and internal oversight for supervisory board
D5.4	Press releases for local outreach events (DkIT, M20, M35).	Oct 2022, Jan 2024	General Public
D5.5	Press release for final international outreach event	Aug 2024	General Public
D5.6	Set of policy briefs for the water sector	Feb 2025	Water management sector, policy makers
D5.12	Press releases for second group of local outreach events	Jan 2024	General Public

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