

Project ID N°: 101036449

Call: **H2020-LC-GD-2020-3**

Topic: LC-GD-8-1-2020 - Innovative, systemic zero-pollution solutions to protect health,

environment, and natural resources from persistent and mobile chemicals



Preventing Recalcitrant Organic Mobile Industrial chemicalS for Circular Economy in the soil-sediment-water System

Start date of the project: 1st November 2021

Duration: 42 months

D6.1 – Strategic Communication Plan (SCP) and Plan for Exploitation and Dissemination of Results (PEDR) – Update M30

Authors: Aleksandra Jurewicz, Millaray Sierra Olea, Lara Bagheri and Nicole Heine

(DECHEMA)

Lead Beneficiary: **DECHEMA**

Type of delivery: **R**Dissemination Level: **PU**

Filename and version: D6.1 – Strategic Communication Plan (SCP) and Plan for Exploitation

and Dissemination of Results (PEDR) - Update M30

Website: www.promisces.eu

Due date: 30 April 2024





© European Union, 2022

No third-party textual or artistic material included on the publication without the copyright holder's prior consent to further dissemination by other third parties.

Reproduction is authorized provided the source is acknowledged.

Disclaimer

The information and views set out in this report are those of the author(s) and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.



Document History

This document has been through the following revisions:

Authorisation

Distribution

This document has been distributed to:

| Name | Title | Version issued | Date of issue |
|------------|-------|----------------|---------------|
| Project | | V. 1 | 31.05.2024 |
| Management | | | |
| Board | | | |
| | | | |



Executive Summary

The PROMISCES project, "Preventing Recalcitrant Organic Mobile Industrial chemicals for Circular Economy in the Soil-sediment-water system" is funded by European Commission under the Horizon 2020 Framework Programme. The *Strategic Communication Plan (SCP)* and *Plan for Exploitation and Dissemination (PEDR)* are part of Work Package 6: Communication, Dissemination and Exploitation. Both plans together outline the project's *Communication, Dissemination and Exploitation Strategy*, ensuring that the project consortium has a clear guideline for how to communicate and interact with external stakeholder groups.

Specifically, the SCP and PEDR present:

- The process used to identify and analyse relevant stakeholder groups
- Communication and Dissemination channels, including online and social media presence
- Relevant journals, events, and related projects
- The individual exploitation strategies of each partner
- The role of the European Committee for Standardisation (CEN) Workshop Agreement and the Associated Partners in furthering the transfer and application of results

Both the SCP and PEDR will be updated every six months.



Table of Contents

| 1 | | Stra | tegic | Communication Plan | 7 |
|---|-----|-------|-------|---|------|
| | 1. | 1 | The | context of the project | 7 |
| | 1.2 | 2 | Com | nmunication objectives | 7 |
| | 1.3 | 3 | Ider | ntification and analysis of target and stakeholder groups | 9 |
| | | 1.3.2 | l | Procedure | . 10 |
| | | 1.3.2 | | Communication aimed at strategic/ technical managers and practitioners fr | |
| | | relat | ed i | ndustries | |
| | | 1.3.3 | 3 | Communication aimed at policy makers and regulators | |
| | | 1.3.4 | 1 | Communication aimed at the general public | |
| | | 1.3.5 | 5 | Communication aimed at the scientific community | |
| | | 1.3.6 | 5 | Communication aimed at associations and networks | . 16 |
| | 1.4 | 4 | Dev | eloping PROMISCES' key messages | . 17 |
| | 1.5 | 5 | Com | nmunication and networking activities | . 19 |
| | | 1.5.2 | l | Visual Identity | . 19 |
| | | 1.5.2 | 2 | Website | . 20 |
| | | 1.5.3 | 3 | Social media | . 20 |
| | | 1.5.4 | 1 | Project releases and materials | . 21 |
| | | 1.5.5 | 5 | Online seminars | . 21 |
| | | 1.5.6 | õ | Publications | . 21 |
| | | 1.5.7 | 7 | Face-to-face and online events | . 23 |
| | | 1.5.8 | 3 | Additional opportunities for networking | . 24 |
| | 1.0 | 6 | Mor | nitoring and assessment | . 26 |
| 2 | | Plan | for | Exploitation and Dissemination of Results | . 29 |
| | 2.: | 1 | Intro | oduction and key concepts | . 29 |
| | 2.2 | 2 | Diss | emination and Exploitation objectives | . 30 |
| | 2.3 | 3 | Diss | emination strategy | . 31 |
| | | 2.3.2 | l | Target audience | . 31 |
| | | 2.3.2 | 2 | Dissemination channels | . 32 |
| | 2.4 | 4 | Expl | oitation strategy | . 32 |
| | | 2.4.2 | l | Exploitation of innovative technologies and up-scaling roadmaps | . 32 |
| | | 2.4.2 | 2 | Individual exploitation strategy for each partner | . 34 |
| | | 2.4.3 | 3 | Key Exploitable Results | . 35 |
| | | 2.4.4 | 1 | Transfer and application of results via the CEN Workshop Agreement | . 35 |



| 2.4.5 | Close cooperation with associated partners | · · |
|-------|---|-----|
| 1/15 | I INCA COONATATION WITH ACCOCIATAN NATTUARS | |
| | | |



1 Strategic Communication Plan

1.1 The context of the project

The PROMISCES project - Preventing Recalcitrant Organic Mobile Industrial chemicalS for Circular Economy in the Soil-sediment-water system – is funded by the European Union under the Horizon 2020 Framework Programme to support Europe's Green Deal. PROMISCES will identify how industrial pollution, specifically industrial persistent, mobile and potentially toxic (iPM(T)) substances prevent the deployment of the circular economy and which strategies help overcome key bottlenecks. This will directly contribute to the targets of the Sustainable Chemicals Strategy and the Zero Pollution Action Plan. Part of work package 6 (Communication, Dissemination and Exploitation) is a Strategic Communication Plan (SCP). Complemented by the Plan for Exploitation and Dissemination (PEDR), the SCP will ensure that the project consortium has a clear communication guideline and mission. The plan will be updated every six months. It includes:

- defining the communication objectives;
- 2. identifying the target audience;
- establishing and engaging in communication channels to consistently deliver the key messages, i.e. online and social media presence, publications, thematic initiatives and events;
- 4. defining roles and responsibilities for the core communication activities; and
- 5. outlining an assessment and monitoring plan

1.2 Communication objectives

The overall objective of the communication, dissemination and exploitation activities is to reach the greatest possible impact from the PROMISCES project and to uptake the research results by increasing the outreach and visibility of the project activities and its results. The term impact refers not only to economic or commercial aspects, but includes scientific, technical, and especially societal areas. In line with the concept of open research, open access to results will be provided for more transparency and efficiency.

Figure 1 shows which role communication and dissemination activities play in reaching the overall objective, mainly through the establishment of targeted communication channels (see 1.5 Communication and networking activities). This means raising public awareness, engaging stakeholders, and providing transparent solutions (Figure 2).



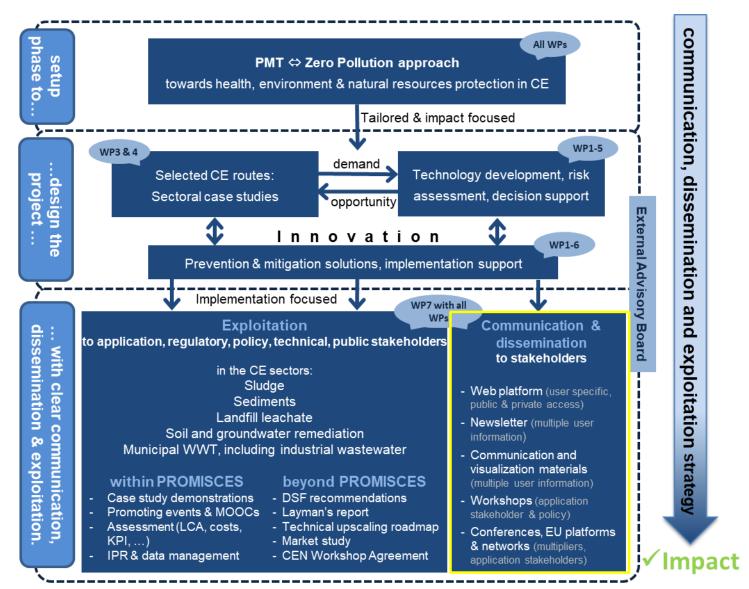


Figure 1: Overall strategy to maximize the impact (Communication & dissemination)



Raise public awareness Engage stakeholders - Tell the story of the Transparent solutions PROMISCES project Keep target about PM(T) audiences updated -Clearly communicate Exploit innovations & - Involve multisectoral the objectives to target remediation technologies partners & audiences - Commit citizens to a stakeholders in zero pollution ambition **PROMISCES** for a non-toxic activities environment

Figure 2: Communication Strategy

The communication strategy includes the dissemination and exploitation of results (e.g. transparent solutions) and will be further elaborated in the PEDR. Here, raising public awareness and engaging stakeholders are the focus, leading to the following communication objectives:

- building smart communication channels (website, social media, publications, events) to inform about the activities, benefits, and results of the project;
- interacting with stakeholder groups to identify needs and possibilities for the further dissemination and exploitation of results; and
- creating synergies with related projects and initiatives.

The SCP explains how we intend to reach these objectives by:

- presenting the core communication activities;
- defining roles and responsibilities for the communication activities;
- defining the target groups;
- providing examples for key messages regarding different stakeholders;
- creating and providing communication materials to support stakeholder engagement (logo, templates, presentations, etc.); and
- outlining monitoring and assessment of the communication activities throughout the project.

Since the boundary between communication and dissemination activities is fluid, the communication and dissemination objectives and strategies presented in the SCP and PEDR will partially overlap and complement each other.

1.3 Identification and analysis of target and stakeholder groups

A close exchange with stakeholders right from the beginning and throughout the lifetime of the project plays a crucial role in the project's success. This requires a comprehensive identification and analysis of potential stakeholders, which is an important component of the project. In PROMISCES, three stakeholder categories are defined:



- 1. PROMISCES participants (the whole consortium consisting of 27 partners);
- 2. Stakeholders attached to the project (External Advisory Board EAB and associated partners); and
- 3. External stakeholders

The knowledge and individual networks of the PROMISCES participants are very valuable for PROMISCES' communication activities. Their networks can be used to contact relevant external stakeholders, e.g. for sending out targeted questionnaires to explore the demands and views of stakeholders (subtask 5.1.1). To give an overview of the networks of each partner, several steps have been/will be taken. As mentioned below, the general public is also considered an important target group. PROMISCES will therefore reach out to society, especially to explain the health risks of PFAS.

1.3.1 Procedure

The first step was to hold a stakeholder identification activity, which took place during the PROMISCES Kick-off meeting in November 2021. The participants were divided into five groups according to the five circular economy routes and they discussed the stakeholders relevant for their route. Table 1 shows the results from these discussions and forms a preliminary identification for relevant stakeholder groups.

All groups agreed that regulators and authorities at the European, national and local scales belong to the focus group, especially considering PROMISCES' aim to provide policy advice and to contribute to regulations. Strategic/technical managers and practitioners in the industries related to the circular economy route were identified. The scientific community was also identified as relevant, as it can take up findings for further research and problem solving. In addition, several networks were brought up in the groups, since they can act as a multiplier for communication and dissemination activities. General society as a water consumer was also identified as another key stakeholder.

The second step was to further elaborate upon these initial findings by sending out **communication questionnaires** to the entire consortium with the request for the following information:

- Each partner's contact information including communication channels (website, social media, newsletters, and press department), asking whether these channels can be used for PROMISCES' dissemination purposes;
- Relevant events and publications for targeting stakeholders the involvement of each partner throughout the project will be recorded in a "Dissemination monitoring table"; and
- Relevant networks, which will be used for stakeholder outreach.

The third step was to summarise the information collected on potential stakeholders in a "stakeholder list" which the consortium can access internally, where every partner can add additional institutions and contacts. Based on this inventory, suitable stakeholders for planned activities can be selected and contacted in a coordinated approach which respects data protection rights. This procedure avoids overlaps in communication which could result in stakeholder fatigue and helps identify gaps in the stakeholder networks of the consortium



partners. Personal data of potential stakeholders will be handled according to the principles laid out in the Protection of Personal Data Plan (D.8.1).

Checking the pertinence of the defined target groups and refining the target-group specific communication is a constant process that requires the involvement of the PROMISCES partners with their input from their Work Packages and Case Studies. Communication topics are discussed in the monthly TMC meetings with all Work Package leaders and the feedback from the technical WPs is integrated in the communication planning.

If important stakeholder groups are missing, existing events and conferences will be used to reach out to these groups. Additionally, associated partners and their networks are very important, therefore a close exchange with them will be maintained throughout the project, as well as for the uptake of results (see PEDR 2.4.5 Close cooperation with associated partners).

1.3.2 Communication aimed at strategic/ technical managers and practitioners from related industries

The term 'related industries' distinguishes between industries which discharge PM(T) chemicals into the environment, such as pharmaceutical firms and textile manufacturers (polluters), and industries which must deal with PFAS (control, remediate) since they rely on non-contaminated raw materials (problem owners). Most polluters are simultaneously also problem owners because they must manage the pollution they cause. Problem owners include, for example, drinking and wastewater utilities using technical processes to remove PFAS from water, dredging and soil remediation companies, building and road construction companies, and the energy sector.

Strategic managers are responsible for the long-term planning of the companies, overseeing the entire business processes and aiming to find new, effective management techniques and business designs. Technical managers deal with the application of technical solutions and are interested in new research results. Especially for the specific recommendations of the decision support framework (DSF) concerning implementation, a close exchange with both managers to get information about existing needs, problems, and solutions is indispensable.

Communication activities aimed at strategic/technical managers will include measures such as:

- Presentations and the integration of stakeholder workshops into technical and zero pollution-oriented conferences and events;
- Technical and business-oriented articles in relevant magazines;
- Organizing workshops and stakeholder meetings; and
- Sending out targeted questionnaires to explore the demands and views of stakeholders.



Table 1: Key stakeholders per CE route

| CE route | Semi-closed water cycle (A) | Wastewater reuse (B) | Nutrient recovery (C) | Material recovery (D) | Soil & groundwater remediation (E) |
|--|--|---|---|---|---|
| Strategic and technical managers / practitioners from related industries | Wastewater utilities Drinking water companies Waterboards Chemical/pharma producers Industry producing/using PFAS/PMT Technology sector that provides remediation technologies Soil remediation companies Industry using groundwater/surface water Dredging companies/sludge treatment | Designers of new chemicals (source of pb) = Manufacturing plants, pharmaceutical firms National WWTP operators Water utilities (e.g. Veolia) | Waste utilities Water utilities Waterboards Chemical industry R&D/ design departments of chemical industries Organisations within a particular industry (e.g. fertilizer europe) | Waterboard authorities Water utilities associations Public waste management Wastewater utilities managers Building and road construction companies Managers of public infrastructures Companies involved in dredging sediments Energy sector | Public water managers Drinking water companies Water agencies PFAS industries Surrounding industries Public health managers remediation specialized service companies Real estate developers Land developers Firemen Farmers Green growers Problem owners Environmental consulting companies |
| Policy makers & regulators | local policymakers Regulators, drinking water regulators, emissions (PMT) | Authorities Water/Health Regional Health Agencies, Catalonian | Local policymakers Politicians and ministries of finance EU regulators safety food/products | Local authorities Public authorities managing sediments | Local administrations Public authorities Environmental protection agencies |



| | environmental agencies | Health Department National Health Agencies Water Administration (EU, national, river basin, local) | EU regulators safety fertilizers EU regulators water/soil/sediment Life cycle EU regulation | Port authorities Health agencies Environmental protection agencies Other public agencies | |
|--------------------------------------|---|---|---|--|--|
| General public | Water consumers | Community members (enduser)NGOs | NGOs and consumers | • | Citizens/civil societyconsumers |
| Scientific community | | Universities | UniversitiesR&D institutes | • | • researchers |
| Networks Include associated partners | Nicole International Commissions for Rivers EC PMT (working group) STOWA (dutch water authorities) SEDNET IWA (micro pollutants special group meeting) Universities/research institutes H2020 Water Europe | ECETOC (Centre for chemical safety assessment) EUREAU (European Federation of National Associations of Water Services) Perfluoro Council Water Europe Catalan Water Partnership (CWP) | Sustainable Product Initiative (SPI) Roundtable Sutainable Chemicals ECBPI initiative SETAC IWA | Norman Network NonHazCity VEWIN - Dutch National association of water companies ESPP - European Sustainable Phosphorus Platform | Dechema working groups Nicole Network EUROGEOSURVEYS European Geological surveys DBU - German association of clinical environmental medicine COMMON FORUM on Contaminated Land in Europe |



| • | Bank Filtration Community European Commission (working group) WHO European network drinking water | ANSES (France) RECORD (France) EU Phosphorus Platform | |
|---|---|---|--|
| | regulators (EndWare) | | |



1.3.3 Communication aimed at policy makers and regulators

PROMISCES aims to translate its zero pollution strategies into policy recommendations for relevant EU directives, strategies, and action plans. For instance, developing and testing the Decision Support Framework (DSF) within WP5 based on input from different stakeholder groups will results in insights and thus recommendations relevant for EU regulation stakeholders. Communication with policy makers and regulators is very important for maximum impact of the research results. On a regional and local scale, PROMISCES will benefit from the regional networks of the partners from 9 different European countries. At the same time, some key policy actors on a regional scale, such as the Umweltbundesamt in Germany, are part of the consortium.

Communication activities aimed at policy makers and regulators will include:

- Presentations or sessions at high-level European water/circular economy events;
- Policy oriented articles in relevant magazines;
- Provide a policy brief on PM(T) concerns and actions in EU; and
- Taking part in the CEN Workshop (CWS) procedure and establishing a close exchange with the "Joint Group on Circular Economy (JG-CE)".

Until now PROMISCES is involved in the development of two policy briefs. One as a part of the Green Deal Health Cluster together with project's sister projects (Joint Policy Brief), which is currently under the review for the publication and the second one as an initiative from the project itself (D5.3).

1.3.4 Communication aimed at the general public

The general public is considered to be all citizens that are interested in the project and affected by chemical pollution (e.g. through drinking water or the food chain). Raising public awareness by explaining the wider societal relevance of the results, including the health risks of PM(T), is a core objective of PROMISCES.

Therefore, PROMISCES will develop a risk communication item for the general public (D6.3) under the leadership of partner BWB (Berliner Wasserbetriebe). This item will be a video or related online communication tool which translates the results of the project into language and terms intelligible to the general public, especially concerning risks related to drinking water consumption.

The project website is one important platform for reaching the general public and special attention will be paid to ensuring an appealing web design and use of simple language. Another communication channel targeted at the general public is social media (LinkedIn, Twitter) as described in 1.5 Communication and networking activities.

1.3.5 Communication aimed at the scientific community

The scientific community is an important target group since it can uptake PROMISCES' results for further research and problem solving. The communication of detailed information, the quality and accuracy of the data is in the foreground.

Communication activities aimed at the scientific community will include:

Publication of articles in relevant scientific journals;



- Organizing workshops and seminars; and
- Close collaboration with the topically related projects, especially with the sister projects
 ZeroPM and SCENARIOS, has been successfully established (e.g. joint organisation of events,
 aligning project communication channels, cooperation in the frame of the CWA). To date, two
 cluster meetings with the five sister projects from Green Deal topics 8.1 and 8.2 have taken
 place. Synergies between the projects have been assessed. The projects are in regular contact
 regarding the dissemination activities and several joint actions have been already realized or
 are in planning

1.3.6 Communication aimed at associations and networks

Close communication with relevant associations and networks is an important aspect of the communication strategy to transfer information and multiply impact. PROMISCES will use the connections of the consortium to reach out to these target groups. Table 2 summarizes an initial list of networks which the consortium has deemed to be relevant. These networks can provide advice on regulatory and technical needs and act as multipliers. For instance, the Norman network will include a section promoting the Green Deal Projects on their website.

A closer collaboration has been established with the NICOLE Network (e.g., PROMISCES final roll out event) and Water Europe (e.g., Water Knowledge Europe) for the purpose of organising sessions. Moreover, PROMISCES was also invited to participate at CWP event "Water Innovation Day" and UFZ PFAS-related event.

Table 2: Networks and associations considered to be relevant for PROMISCES

| Name of the network/association | Target audience |
|--|--|
| AFES – French association of International Union of Soil Sciences (IUSS) | Soil management, researchers and academia |
| ALLENVI - alliance nationale de recherche pour l'environnement | Environmental sciences, French researchers and academia (food, water, climate) |
| Asociación Española de Abastecimientos de Agua y Saneamiento (AEAS) | Industry, researchers and academia in the water sector |
| Asociación Española de Reutilización Sostenible del Agua (ASERSA) | Professionals and water authorities |
| ASTEE | Industry, researchers and academia |
| Austrian Association for Water and Wastewater Management (ÖWAV) | Industry, researchers and academia |
| Catalan Water Partnership (CWP) | Industry, academia, service providers in water sector |
| CLAIRE Research Network | Industry |
| Comité Français d'Hydrogéologie (CFH) | Groundwater management, researchers and academia |
| Deutscher Verein des Gas- und Wasserfaches (DVGW) | Industry, researchers and academia |
| Eurogeosurveys | European geological survey association |
| European Geosciences Union (EGU) | Researchers and academia |
| European Sustainable Phosphorus Platform (ESPP) | Industry, researchers |
| France Water Team | Water management, industry |



| German Association for Water, Wastewater and Waste (DWA) | Industry, researchers and academia | | |
|---|--|--|--|
| German Drinking Water Commission | Public health agencies, water suppliers, government institutions, academia | | |
| German Water Partnership (GWP) | industry | | |
| International Association of Hydrogeologists (IAH) | Groundwater management, researchers and academia | | |
| International Water Association (IWA) | Industry, researchers and academia | | |
| NICOLE Network | Industry, academia, service providers in soil remediation management | | |
| Norman Network | Authorities, research centers, industry stakeholders, standardization bodies, etc. | | |
| OECD working parties on chemical safety | Public authorities, etc. | | |
| Société francophone de santé environnement (SFSE) | Health Environment researchers and Environmental managers and industry | | |
| Société Hydrotechnique de France (SFH) | Water management, industry | | |
| Sustainable Remediation Forum (SurF) | Industry | | |
| Wasserchemische Gesellschaft /Water Chemistry Society (Fachgruppe der GdCh) | Researchers, water and wastewater companies and authorities | | |
| Water Europe | Industry, R&D | | |
| WATER JPI/WATER4ALL | Water research | | |
| Water Reuse Europe | Water utilities, industry, tech providers, academia, etc. | | |
| Watershare | Researchers | | |

1.4 Developing PROMISCES' key messages

For clear and effective communication, it is necessary to formulate key messages. The content and language of the messages should be matched to the respective target group. For instance, when addressing the general public, it makes sense to avoid technical terms and to create links between the project goals and people's daily habits. This will help raise awareness and ensures that the goals of the project are better received. Examples for key messages targeted at the general public are importance of the circular economy, risks of PFAS in water cycles and for human health, and how small changes in behaviour can mitigate risks.

The consortium will jointly discuss and agree on key messages to be used throughout the project for communication, dissemination, and other purposes.

This process already started at the PROMISCES kick-off meeting in November 2021, where project partners brainstormed potential key messages in groups. This resulted in a collection of ideas that was used as a basis for further clustering of the messages in certain topics. These are depicted in table 3.

Table 3: Key messages

| Topic/Position Key message (example) | Target group |
|--------------------------------------|--------------|
|--------------------------------------|--------------|



| Circular Economy | "Have a holistic view across environmental | General Public |
|--|---|---|
| • | compartments" | General Public |
| It is of utmost importance to build up a Circular Economy. However, PFAS can delay/prevent this. | "Proposed technology trains for each CE route" "New pathways allowed for sediments reuse, boost for new material recovery options" "The project should have helped to know if we can reuse those recovery materials safely" | Strategic/ technical managers and practitioners Policy Makers, regulators, Authorities |
| High risks | "PFAS safe ground water and drinking water / | General Public |
| PFAS are a serious threat to human health and the environment. | your water is safe to use" | |
| Minimize and avoid dangers | "Promisces will help you to prevent new PMTs becoming a problem" | General Public |
| Even small actions can help reduce or eliminate the dangers from PFAS. | "Combined efforts are needed in reducing PMT emissions, EVERYBODY can do something to make things better (everybody is part of the solution, establishing trust)" | Strategic/ technical managers and practitioners |
| | "Every decision causes costs. Prevention is usually less expensive than regaining" | |
| | "Changing habits can avoid contamination" | |
| New solutions and | "Use of improved QSPR, QSAR and grouping | Scientific Community |
| technologies | method in a strategical way in R&D have high | |
| In order to be able to | potential to prevent use of "dangerous" PMs by | Strategic/ technical |
| remove PFAS from the environment or avoid | "Innovative green and cost-effective (PFAS) | managers and practitioners |
| them in the first place, new solutions and | remediation technologies exist for soil, water," | General Public |
| technologies must be researched and tested. | "New pathways allowed for sediments reuse, boost for new material recovery options" | |
| | "New insights on measuring the extent of the PFAS issue (identification, quantification)" | |
| | "Safer umbrella developed for known and unknown (i)PM(T)s" | |
| | "New ways to gain insight in source - pollution pathways help to define smart solutions, examples for case studies" | |



| | "New insights on how to manage legacy contaminations" "New insights on how to prevent future potential legacy contaminations" "Tools to help decision making on best remediation solutions available." | |
|--|--|---|
| Containing the problem By regulating and assessing in advance, as well as by monitoring, risks can be identified and measures can be developed in a timely manner. | | Policy Makers, regulators, Authorities Strategic/ technical managers and practitioners Scientific community |

1.5 Communication and networking activities

After outlining the objectives, the target audience and potential key messages, the initial plan of core activities is outlined below, which consists of setting up a visual identity and several communication and dissemination channels. Information about the communication channels of all PROMISCES partners was gathered via the Communication and Dissemination Questionnaire. The input will be used for more detailed planning. The following section presents the relevance of each communication activity, its specific target audience, and its goals.

1.5.1 Visual Identity

A visual identity of PROMISCES is very important for homogenisation and branding of the communication. Presentation templates, Microsoft Word templates for internal use, flyers and leaflets will always include the funding acknowledgement (Figure 3) and the PROMISCES logo (Figure 4) which is shown below. This will be made available for and deployed by the entire PROMISCES consortium via different channels and languages. Next to communication, PROMISCES' visual identity will be applied in all dissemination and exploitation activities.



Figure 3: Funding acknowledgement



1.5.2 Website

The PROMISCES website (<u>www.promisces.eu</u>) will serve as a focal point for all the project's communication activities, and targets both the general public and an expert audience. It is a public platform for visitors to learn about the added value of PROMISCES, and to support dissemination and exploitation activities by providing the full range of information (non- and technical) related to PROMISCES and PFAS/PM(T) substances.

The website will be continuously updated with input from all partners and will raise public awareness about the risks of iPM(T)s in the environment. The section "Media Kits" provides the project's documents (e.g. flyers, logo pack, fact sheets), while the sections "Results" offers the possibility to download project results (e.g. public reports, communication item) and links to Zenodo. The section "News" provides announcements such as information about dissemination activities (seminars, meetings and conferences), the PROMISCES Blog and the recent newsletters. In the blog, the website users can read the articles from the newsletters, the interviews from the "Meet the Team" series and other interesting articles from the project. Under "Events", upcoming events are showed. The section "About us" gives information concerning the partners, external stakeholders (e.g. EAB), the sister projects and related projects. Information on the project's work packages, objectives and case studies are presented in the "Project" section. Here, also the Circular Economy Routes with their respective graphics and the Online Survey Results can be viewed. In addition, there is a registration area for engaged stakeholders to become part of the PROMISCES community by subscribing to a newsletter. Through the contact form on the website, questions and requests will directly reach the project team.

For high visibility and dissemination, the website link and a QR-Code will be included in all communication materials.

1.5.3 Social media

Apart from the PROMISCES website, social media is a crucial and powerful tool for reaching a wider audience and disseminating project updates and important events in an easy and creative way. To this end, PROMISCES has already established a LinkedIn account https://www.linkedin.com/company/promisces/ as it is the most widely used international professional network covering many different sectors. In addition, DECHEMA has set up a X account for also reaching citizens and non-experts. https://twitter.com/Promisces EU DECHEMA will be responsible for creating posts and obtaining the required input from project partners.

A social media editorial plan has been set up in order to plan posts for LinkedIn and X and to get an overview of upcoming events which are relevant for PROMISCES social media channels. It is planned to post two to three times per week. In addition, a Social Media template was developed and sent to the project partners from the work packages and case studies so that the partners could name possible topics for social media posts. Among other things, it was asked for successes, milestones (past and future), goals or the motivation of the partners. Moreover, to highlight young researchers from the PROMISCES project, a new series "Young Professionals" (e.g., PhD students and post-docs) is being developed. The questions will circle around the personal interest, which young professionals bring into the project and how the conducted research and new knowledge about PFAS may change their personal life and choices.



PROMISCES and the other projects from the Green Deal Health Cluster (ZeroPM, ALTERNATIVE, SCEANRIOS, LifeSaver and PANORAMIX) support each other on social media via liking and sharing posts. Once a month, all projects send links to the other projects with the request of liking and sharing them.

1.5.4 Project releases and materials

Dedicated materials for creating awareness and promoting project events will be created. A project flyer is currently under preparation. This should be distributed or displayed at events and the aim is to draw attention to the project and arouse curiosity. At this stage, the following materials are planned:

- A PROMISCES project poster and a short presentation slide deck introducing the project;
- Layman's report, fact sheets; a project flyer and
- Materials provided by the massive open online course (MOOC) (Need for further materials will be determined during the lifetime of the project).
- Dedicated materials are developed for specific occasions

1.5.5 Online seminars

Online seminars include a MOOC and will be targeted at young professionals and future end-users with the goal of making the scientific and regulatory community aware of PROMISCES' main findings and results. Lectures for professionals will focus on PFAS/iPM(T) substances in the water, soil, and sediment cycles. Course content will range from PFAS characteristics, fate and transport in the environment, to PROMISCES technologies and management solutions. PROMISCES will provide material (PowerPoint presentations, videos of the case studies, and self-assessment study) with the project's results. The self-study online course (6 weeks), examination and self-assessment tests will be held in English and will be available even after the project concludes. It will be shared via the TUDelft MOOC platform and will thus remain available after the project concludes.

1.5.6 Publications

Technical and scientific publications are an important channel to raise awareness about the project, foster public acceptance and disseminate information for the uptake of solutions. Table 4 and 5 show a selection of scientific journals and journals targeted at experts from policy and industry as well as magazines for the general public, which could form a channel for diffusion of PROMISCES results. The KPI targeted at the end of the project are \geq 10 publications in peer-reviewed journals and \geq 8 publications in technical magazines (Table 8).

Table 4: Scientific journals

| Name of the scientific journal |
|--------------------------------------|
| Chemical Engineering Journal |
| Earth System Governance |
| Environment International |
| Environmental Pollution |
| Environmental Science and Technology |



| ES&T Water |
|-------------------------------------|
| Green Chemistry |
| Hydrogeology Journal |
| Journal of cleaner production |
| Journal of Environmental Management |
| Journal of Hazardous Materials |
| Journal of Hydrology |
| Urban Water Journal |
| Waste Management |
| Water |
| Water International |
| Water Policy |
| Water Research |

Table 5: Technical magazines

| Name of the magazine | Target audience | Language |
|---------------------------------------|---|---------------------|
| Vallès Visió | General public | Catalan |
| Vallès Oriental TV | General public | Catalan |
| Diari SOM | General public | Catalan |
| Nació Digital | General public | Catalan |
| Fundació Rivus | General public | Catalan |
| El Periódico Digital | General public | Catalan, Spanish |
| Speciality Chemicals Magazine | Fine and speciality chemicals industry | English |
| Freshwater Blog | General public | English |
| Danube Watch | Management in water pollution control | English |
| Le Moniteur | Construction magazine | French |
| Journal du Geek | New technology magazine | French |
| Géosciences or Géorama | Earth sciences magazine | French |
| Techniques Sciences et Méthodes (TSM) | Environment technology magazine | French |
| Actu-Environnement | Global environmental concerns (cross target) | French |
| Environnement Magazine | Global environmental concerns (cross target) | French |
| L'Usine nouvelle | Industrial, energy and chemical scopes for decision maker | French |
| Science et Avenir | Popular science – cross target | French |
| Environnement, Risques & Santé | All disciplines converging between environment and health | French |
| L'actualité chimique | Chemical sciences, and its relations with other sciences, industry, society and education | French |
| Revue Techniques Sciences Méthodes | Water and wastewater stakeholders | French |
| DECISIONS DURABLES | Environment | French |
| AEF DEVELOPPEMENT DURABLE | Environment | French |
| L'eau l'industrie les nuisances | Environment | French |



| Green Univers | Environment | French |
|---|---|---------------------|
| KA (German magazine of DWA) | Management in waste and water industry | German |
| wwt Wasserwirtschaft Wassertechnik | Management in waste and water industry | German |
| GWF Wasser Abwasser | Management in waste and water industry | German |
| Vom Wasser | Testing laboratories; authorities; water supply and disposal companies; environmental monitoring in industry and for applied research | German |
| Wasserspiegel | Employees of Berliner Wasserbetriebe | German |
| Der Standard | Non-scientific community | German |
| Die Presse | Non-scientific community | German |
| Analytik News | Analytical laboratories | German |
| HyWa – Hydrologie und Wasserbewirtschaftung | Hydrology and water resources management | German |
| ÖWAW Fachzeitschrift | Management in waste and water industry | German, English |
| Ilsole24ore.com | Professionals in the technological and environmental sectors | Italian |
| Recycling demolizioni&riciclaggio (Edizioni PEI S.r.l.) | Industry | Italian |
| Servizi a rete | Professionals | Italian |
| Ingegneria dell'ambiente | Professionals | Italian |
| RETEMA | Management in environment | Spanish |
| La Vanguardia Digital | General public | Spanish |
| Aguasresiduales.info | Management in waste and water industry | Spanish |
| Tecnoaqua | Management in waste and water industry | Spanish |
| FUTURENVIRO | Environmental technologies | Spanish, English |

1.5.7 Face-to-face and online events

Face-to-face, online or hybrid events are an important communication channel to reach experts, build trust, and encourage technology providers, utilities, and decision-makers to trust, promote and use PROMISCES' results. The partners of the PROMISCES consortium have already and aim at participating in several events for networking activities to give presentations and distribute material. A summary of planned and potential events is depicted in table 6.

Table 6: Planned Events

| Name | Date | Location | Potential Participating partner | Potential activity |
|------------------------|------------|----------|---------------------------------------|--------------------|
| Intersol | 2023-2024? | France | BRGM, IPGP | Presentation (WP3) |
| AQUAREF annual meeting | ? | | BRGM | |



| AGU – fall meeting | 2024? | USA | BRGM | Presentation - material distribution |
|---|------------------------|---------------------------|---|--|
| ISMAR | 2023-2024 | Long Beach, CA, USA | KWB, others | Held annually or biannually (2023-2024) |
| Fachsektion Hydrogeologie e.V. in der DGGV (e.V.) | 2024 | Jena, Germany | KWB, other German partners | Held bi-annually (next in 2024) |
| SETAC 2024 | 5.05 - 09.05.24 | Sevilla, Spain | CSIC, others | presentation |
| Battelle 2024 Chlorinated Conference | 2.06- 6.06.2024 | USA | Colas Environnement / BRGM / IPGP | Poster, networking |
| IWA International Conference on Urban Drainage | 1923. 06.2024 | Delft, the Netherlands | KWB, others | Presentation, attendance, networking |
| Danube River Basins Conference 2024 | 04/06/24 - 05/06/24 | Budapest, Hungary | TUWien, others | Presentation, attendance, networking |
| REMTECH Europe 2024 | 18 20.09.2024 | Ferrara, Italy | BRGM, IPGP | Session organisation |
| Water Project Europe | Autumn/Win ter 2024 | Brussels, Belgium | | Networking, presentation on various events |
| Models on Toxicology webinar – part 3 | End of the year | online | | Presentation |
| PROMISCES final roll out event | March 2025 | Frankfurt, Germany | all | |

1.5.8 Additional opportunities for networking

In addition to the topics named above and the collaboration with associations and networks as important target group (see Table 2), connections the consortium has established through related projects are also an important communication channel. Related projects and the respective contacts of each partner are depicted in table 7.

Table 7: Related Projects

| Name of the project | Coordinator | Possible synergies & opportunities for cooperation | Contact partner within PROMISCES |
|---------------------|---------------------------|--|----------------------------------|
| ZeroPM | NGI (Stiftelsen Norges | Cluster meetings, invitations to workshops/events, CENWorkshop agreement | |



| | Geotekniske | | |
|---|---|---|---|
| SCENARIOS | Institutt) UPO | Cluster meetings, invitations to workshops/events, CEN Workshop agreement | |
| PFASTwin | HORIZON-CSA | Invitation to events | Julie Lions (BRGM) |
| ULTIMATE | KWR | Valorising resources within the water cycle, water and industry, joint communicating events | Ulf Miehe (KWB) Francesco Fatone (UNIVPM) (Nicole Heine, DECHEMA) |
| NextGen | KWR | Circular water solutions | Ulf Miehe (KWB) |
| IMPETUS | EURECAT | Climate change, circular economy | Hella Schwarzmüller (KWB) |
| FlexTreat | RWTH Aachen | Agricultural water reuse (German project) | Michael Stapf (KWB) |
| Life AskReach | UBA | Raising consumer awareness about substances of high concern (SVHC) in articles; improving supply chain communication processes with the aim of substituting SVHC with safer alternatives; etc. | Sandrine Andres (Ineris) |
| PARC (Partnership for the Assessment of Risks from Chemicals) | Anses | Task 4.2 on « Environmental and multisource monitoring » est very relevant. One aim is to "Set up the overall process of environmental and multisource monitoring in PARC with the help of a pilot study on PFAS and endocrine disrupting chemicals (EDCs)" | Valeria Dulio, Sandrine Andres (Ineris) |
| Life VERMEER | Istituto di Ricerche Farmacologiche Mario Negri IRCCS | VERMEER developed software which integrates hazard evaluation with exposure assessment for human and environment | - |
| PROTECT | UFZ | Persistent mobile organic chemicals in the aquatic environment: Sources, occurrence and technical processes for their removal in the drinking water supply | Jochen Kuckelkorn (UBA) |
| TrinkWave | TU München | | Dr. Thomas Track (DECHMA) |
| AquaNES | FH Nordwestschweiz | | Dr. Alexander Sperlich (BWB) Dr. Ulf Miehe (KWB) |
| SOuRCE | EURECAT | Invitation to events, use of project website for communication, etc. Share of results about tech performance in PFAS removal. | Carme Bosch (EURECAT) |



| USETOX | UNEP/SETAC | Global consensus tool for using output for Life Cycle Impact Assessments of products and product systems | Leo Posthuma (RIVM) | |
|-----------------------------------|---|--|---|--|
| Life cycle Initiative | UNEP/SETAC | Global consensus process to develop methods foroutput for Life Cycle Impact Assessments of products and product systems | Leo Posthuma (RIVM) | |
| Sunshine | | Work together on case study (e.g. alternatives for PFAS coatings) | Willie Peijnenburg (RIVM) | |
| MAGO | CETAQUA | Invitation to events, sharing of information | Miren López de Alda (IDAEA-CSIC) | |
| NATURE | CSIC | Invitation to events, sharing of information | Víctor Matamoros (IDAEA-CSIC) | |
| FATERISK Aqua | TU Wien | Joint stakeholder workshops | Matthias Zessner / Julia Derx (TU Wien) | |
| Danube Hazard m3c | | | Matthias Zessner | |
| WATERUN | AIMEN | Invitation to events | FRANCESCO FATONE (UNIVPM) | |
| ECOSEDRA | SOGEIN | Invitation to events, joined research activities | FRANCESCO FATONE (UNIVPM) | |
| BLUE LAKES | LEGAMBIENTE | Invitation to events | FRANCESCO FATONE (UNIVPM) | |
| DIGITAL WATER CITY | KWB | Invitation to events | FRANCESCO FATONE (UNIVPM) | |
| Emerging contaminants project | СВТ | Knowledge /results sharing | Josep Pascual (CBT) | |
| Microplastics project | СВТ | Knowledge / results sharing | Josep Pascual (CBT) | |
| WATER- MINING | DELFT University of Technology | Invitation to events, results sharing, networking | Nicole Heine (DECHEMA) Josep Pascual (CBT) | |
| Center of Competence Clean&Circle | Sofia University St. Kliment Ohridski | Use of website and social networks for communication, invitation to events, etc. | Albena Varsano (Sofia University) | |
| BioICEP | Technical University of the Shannon, Ireland | Invitation to events | Tjalf de Boer (MLS) | |
| LIFE Capture | ABO | CEN Workshop agreement | Nicole Heine (DECHEMA) | |
| LIFE Pristine | E Pristine ACCIONA AGUA SA Communication purposes to maximise Aleksandra Jurev the outreach (DECHEMA) | | Aleksandra Jurewicz (DECHEMA) | |

1.6 Monitoring and assessment

Monitoring and assessment of the communication, dissemination and exploitation activities is an important aspect for the communication strategy. It requires a structured procedure to ensure that the right messages have reached the right stakeholders and to measure the effectiveness of the



communication activities. Key performance indicators (KPIs) will be used to compare the original goals with what has been achieved in the end. Suitable procedures for project-internal monitoring will be applied. PROMISCES will use the following categories to measure performance:

- Number of conferences/workshops/exhibitions organized and number of attendees
- Number of publications in peer reviewed journals with high impact factors
- Number of publications in technical magazines
- Number of reference documents produced
- Number of project newsletters/ contribution to newsletters of the partners/contribution to external newsletters
- Number of participants in project-linked seminars
- Number of lectures linked to PROMISCES
- Number of followers in social media channels/ social media statistics

Concrete numbers for most categories are summarized in Table 8.

Table 8: Overview of PROMISCES communication and dissemination activities and the respective KPIs

| Type of dissemination (Target Audience) | Examples of targeted dissemination channels | What we want to achieve | KPI (targeted at the end of the project) |
|--|--|--|--|
| Conference / workshop / exhibitions (Policy makers, industry, public organisations & associations, utilities, researchers) Conferences | Conferences: AquaConSoil, IWA DWA, SedNet, EGU and AGU, SETAC, Aqua Urbanica, Water World Forum, World CE Forum, World Resource Forum Workshops by NICOLE, Micropol, JRC, ICPDR Exhibitions: Remtech Expo, Pollutec National expert groups: ÖWAV, French AQUAREF Parallel session at AquaConSoil | Dissemination of schemes and of PROMISCES scientific results among technical experts. Spread knowledge about novel RA approaches. Contribute to best practice documents on various topic (via ESPP, DWA, JRC). Connect local decision makers in water management with PFAS topic. | ≥ 10 (by academic/research partners) workshops sessions organised by partners with minimum 20-80 participants ≥ 15 by R&I partners) proceedings / communications accepted at international conferences |
| Scientific journals (Researchers, industry) | Environmental Science and Technology, Environmental Pollution, Water Research, Journal of Hydrology, Journal of Cleaner, Production and others, | Diffusion of PROMISCES' scientific results. Acceptance of PROMISCES' results as part of the State of the Art | ≥ 10 publications in peer reviewed journals with high impact factors |



| Technical | Environment International, Water Policy, Water International, Earth System Governance Bodem, Retema, | Diffusion of PROMISCES | ≥ 8 publications in |
|---|--|---|--|
| magazines (Industry, researchers, general public) | Futurenviro, KA (German magazine of DWA), Danube watch, Servizi a rete, Ingegneria dell'Ambiente, Géologues, Techniques Sciences et Méthodes, Pour la science, Industria Ambiente, Industria Química | scientific results. Update design guidelines for advanced WW treatment. Acceptance of PROMISCES' results as part of the State of the Art | technical magazines |
| Reference documents (Researchers, industry, public organisations & associations) | Enhancement of existing guidelines (e.g. UBA guidelines) Contributions to national reference documents | Highlight the potential to included PFAS removal in utility planning Raise Awareness on the usage of new methods for assessment | ≥ 2 reference documents |
| PROMISCES partners & newsletter (Researchers, public organisations and associations, industry, utilities) | Dissemination on partners' websites and newsletters. Webpage dedicated to PROMISCES (in French and English) on the institutional website of partners with pertinent links (PROMISCES website, more info, etc.) | Present PROMISCES challenges and innovations, raise awareness around the project, extend the reach of the project | Project descriptions on each partner's website ≥ 3 project newsletters ≥ 5 contribution to partners newsletters ≥ 5 contribution on external newsletters |
| Online webinars (Researchers, universities, industry, public organisations & associations) | MOOC on the partners' website & PROMISCES webpage Webinars PROMISCES related guestlectures at universities Young Researcher's Forum | Outreach to young professionals and future end-users to present and promote PROMISCES innovative technologies, analytical methods, monitoring | ≥ 150 participants in project-linked webinars by academic/research partner At least 1 MOOC organised by DELFLAND ≥ 5 lectures linked to PROMISCES |



| concepts and advances, | |
|------------------------|--|
| raise | |
| awareness of iPM(T) | |
| substances | |
| and their fate | |

2 Plan for Exploitation and Dissemination of Results

2.1 Introduction and key concepts

The Plan for Exploitation and Dissemination of Results (PEDR) complements the Strategic Communication Plan (SCP) and will be updated every six months. The PEDR outlines the dissemination and exploitation objectives and strategies to ensure the greatest possible impact from the project results.

The three key concepts of this deliverable are communication, dissemination, and exploitation. While the meaning of communication is self-explanatory and its role for the project is elaborated on in the SCP, it is worth clarifying the concepts of dissemination and exploitation in terms of what they refer to and how they can be differentiated. Both terms refer to a project's results, and are defined by the Horizon 2020 programme as:

"Any tangible or intangible output of the action, such as data, knowledge and information whatever their form or nature, whether or not they can be protected, which are generated in the action as well as any attached rights, including intellectual property rights."

(Source: EC Research & Innovation Participant Portal Glossary/Reference Terms)

In contrast to the communication strategy, the goal of which is to reach out to and inform all identified stakeholders about the activities, benefits and impact of the project, the dissemination and exploitation strategies refer solely to the disclosure and transfer (dissemination) and uptake (exploitation) of the project results. While the dissemination channels are part of the communication channels and are therefore only briefly mentioned here, the focus of the PEDR lies on the exploitation strategy. More concretely, the EU defines exploitation as:

".. to make use of the results produced in an EU project in further activities (other than those covered by the project, e.g., in other research activities; in developing, creating and marketing a product, process or service; in standardisation activities)"

(Source: EC Research & Innovation Participant Portal Glossary/Reference Terms)



This requires specific exploitation routes, which form an important part of the exploitation strategy (see 1.5 Communication and networking activities).

2.2 Dissemination and Exploitation objectives

As mentioned in the SCP, the overall objectives of all the communication, dissemination and exploitation activities are to achieve the greatest possible societal impact from the PROMISCES project and to expand the uptake of the research results, by increasing the outreach and visibility of the project.

The close relationship between the project's communication and dissemination activities and their objectives can be seen in Figure 5, which specifically addresses the objectives of the three components. The communication and dissemination activities both aim to transfer knowledge and results. The defined objectives can be found in the SCP (see 1.2 Communication objectives).

Meanwhile, the exploitation objectives are more specific, aiming to:

- Foster the transfer of research results within the circular economy routes (sludge, sediments, landfill leachate, soil and groundwater remediation, municipal and industrial wastewater treatment, drinking water)
- Support the uptake of results within PROMISCES
- Ensure the uptake of results beyond PROMISCES



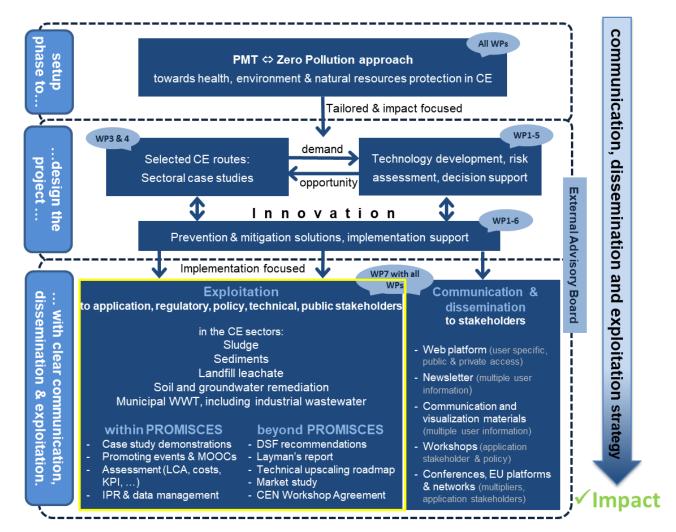


Figure 5: Overall strategy to maximise the impact (Exploitation)

The following two chapters outline the specific dissemination and exploitation strategies. Since the dissemination strategy overlaps with the communication strategy (see SCP), the focus of this report lies on the exploitation strategy.

2.3 Dissemination strategy

2.3.1 Target audience

A crucial part of the dissemination strategy is to identify the right audience and determine the appropriate key messages. Both the language and the content of the message have to be considered. The SCP describes the stakeholder identification process and presents five different target audiences (see 1.3 Identification and analysis of target and stakeholder groups):

- 1) Technical and strategic managers and practitioners
- 2) Policy makers and regulators
- 3) General public
- 4) Scientific community



5) Associations and networks

The dissemination of results will be targeted at these same groups with a special focus on practitioners, policy makers, the scientific community and networks. These groups will be reached through different communication and dissemination channels.

2.3.2 Dissemination channels

Most of the same channels used for PROMISCES' communication activities will also be used for the dissemination activities. Important channels for distributing results include:

- Conferences, workshops and exhibitions
- Scientific journals
- Technical magazines
- Reference documents
- PROMISCES newsletter
- Online seminars

Moreover, to boost the project result's dissemination on the EU-level, PROMISCES foresees using the dissemination tools provided by the European Commission, such as Horizon Results Booster (HRB), Innovation Radar, Research an Innovation success stories, CORDIS, Horizon Results Platform and Horizon Dashboard.

Collaboration with HRB and Green Deal Support Office is already established.

2.4 Exploitation strategy

PROMISCES' exploitation strategy includes five pillars which will be used to achieve the desired objectives:

- 1) Exploitation of PROMISCES' innovative technologies and up-scaling roadmaps
- 2) Individual exploitation strategies for each partner
- 3) Identifying Key Exploitable Results per partner
- 4) Transfer and application of the project results via the CEN Workshop Agreement
- 5) Close cooperation with associated partners

These pillars will be elaborated in the following sections.

2.4.1 Exploitation of innovative technologies and up-scaling roadmaps

PROMISCES aims to provide smart solutions for dealing with PM(T) substances in the environment, including remediation technologies and other tools for reducing PFAS contamination. A market screening during the proposal phase identified three main markets for technologies and consulting services developed by PROMISCES: 1) water, 2) soil and groundwater remediation, and 3) recycled fertiliser. The exploitation strategy will help ease the entry of PROMISCES' developments into these markets.



Specifically, the rapid market deployment of PROMISCES' outputs will be facilitated via work on two levels:

- 1) Implementation by project partners
- 2) Replication outside the consortium

Some project partners can directly implement PROMISCES' results (internal end-users), although the final goal is to provide technologies and solutions for the entire EU market. The External Advisory Board will support the exploitation of results, as will the more than 34 associated partners (see 2.4.5 Close cooperation with associated partners).

2.4.1.1 Implementation by project partners

The project consortium includes all relevant actors along the innovation chain for innovative zero pollution solutions, which facilitates the fast transfer from R&D institutions to end-users. Figure 6 shows the role of each partner in the innovation chain, from technology design and development over validation/verification and integration, to solutions, and to exploitation support. As seen in the figure, several PROMISCES partners are located in the end-user phase, providing opportunities to implement the project results directly within their organisations.

Several case studies have already identified clear implementation demands for the innovative technologies they will develop. For example, some case studies include the utility responsible for follow-up investments as a partner (BWB, CBT, DELFLAND). Since the utilities are involved from the beginning, they will be able to include the project's results into their investment strategies before the project is completed.

2.4.1.2 Replication outside the consortium

The involvement of PROMISCES' commercial partners, who act as technology suppliers on the market (BDS, ESOLVE, ACEA, COLAS, SIMAM, MLS and some associated partners), will strengthen the commercial exploitation of the developed technologies. Tailored exploitation plans will be generated to replicate the results outside of the consortium. Specifically, the exploitation plans will highlight the following:

- (i) Project targets
- (ii) Developed technologies/products
- (iii) Market potential
- (iv) Expected key areas of application
- (v) Customers

These plans will feed into the final up-scaling roadmaps for the commercialisation of each technology (D6.8). After the case studies successfully demonstrate and validate the results of each treatment technology, including benchmarking the costs, the roadmaps will provide the basis for the up-scaling of the technologies. The roadmaps will include pre-feasibility studies and outline plans for implementation in future commercial projects.

In addition, a market analysis (D6.9) will be conducted to focus specifically on the attractiveness, feasibility, and competitiveness of the technologies. The market study will determine the main



parameters and criteria and will contribute to a macro-analysis of the whole market. The most valuable and detrimental aspects for the replicability of the technologies in other EU locations will be identified.

2.4.2 Individual exploitation strategy for each partner

Through their research activities, each partner plans to increase their knowledge of iPM(T)s and their properties, fate and removal, and this information then needs to be transferred and capitalised upon. Therefore, each PROMISCES partner has developed their own exploitation strategy, with some outlining quantifiable targets to be reached by 2030.

Furthermore, to keep track on the innovation potential created within the project, a table "Innovation and Exploitation by WP" is being continuously updated.



2.4.3 Key Exploitable Results

To help with the individual exploitation for each partner an Exploitation Strategy is under development. First step is to define possible Key Exploitable Results (KER), which have to be submitted to the EU participant's portal. To give assistance to the PROMISCES partners, WP6 (DECHEMA) developed a possible KER table (s. table 9) which consists a title for the possible KER, a description, how results can be used, potential risks/barriers for exploitation, potential users, lead partner, contributors and associated WP. This table enables the partners to narrow down the possible KER, which can be used after the project comes to an end.

Table 9: Possible Key Exploitable Results

| Poter Key Explo Resul | itable | Description | How results can be used | Potential risks/barriers for exploitation | Potential Users | Lead Partner | Contributors | Associated WP |
|--------------------------------|--------|-------------|----------------------------------|--|--------------------|-----------------|--------------|------------------|
| | | | | | | | | |

Moreover, it is necessary to identify barriers and risks for exploitation and undertake appropriate measures. The barriers and risks are a topic for the discussions during the PMB meetings.

2.4.4 Transfer and application of results via the CEN Workshop Agreement

To ensure the exploitation, transfer and replication of PROMISCES' results and to maximise the impact beyond the project's lifetime, the CEN Workshop Agreement (CWA) on "Soil-sediment-water system - Solutions to deal with PMT/vPvM substances" is under development (D6.11). This offers a great platform to discuss project results with different stakeholders (including the sister projects), synthesize results and formulate key messages for future standardisation. This supports the overall exploitation of PROMISCES' results and increases the impact beyond the project duration.

The CEN WS is open for the direct participation of all parties interested in the development of the agreement. Hence, both relevant stakeholders (e.g., decision makers, academics, municipal and industrial actors) and civil society within and beyond Europe were encouraged to contribute to the CWA. Furthermore, two sister projects; ZeroPM and SCENARIOS were invited to participate and present their aims and topics of concern and are included in the draft process.

The resulting CWA will represent the consensus of the involved stakeholders, as the document will be prepared collaboratively. The integrative approach will support broad acceptance in civil society and expert communities. Once completed, the CWA will be made accessible (open access) via the CEN and the EU standardisation bodies and will be valid for three years.



Although the CWA does not have the status of a European Standard, future standardisation needs will be included in the PROMISCES CWA. Future standardisation of zero pollution CE strategies is crucial for ensuring transferability, as well as application, interoperability, and replication both within Europe and internationally.

The CWA document is collaborative work, therefore there are six online meetings planned till December 2024. The kick off meeting for this task took place on 15th February 2024 and outlined the workshop's aim: defining optimal practices, solutions, and guidelines for managing PMT/vPvM substances. These solutions were categorized into areas of Prevention/Substitution, Monitoring, Risk-assessment, Measures/Remediation, and Prioritization for Remediation Goals. As part of the categorized solutions, a special focus is placed on the following five circular economy routes: semi-closed water cycle for drinking water supply, wastewater reuse for agricultural irrigation, nutrient and energy recovery from treated sludge for fertilisers, material recovery from dredged sediment for eco-materials, and groundwater and soil remediation to protect water cycle.

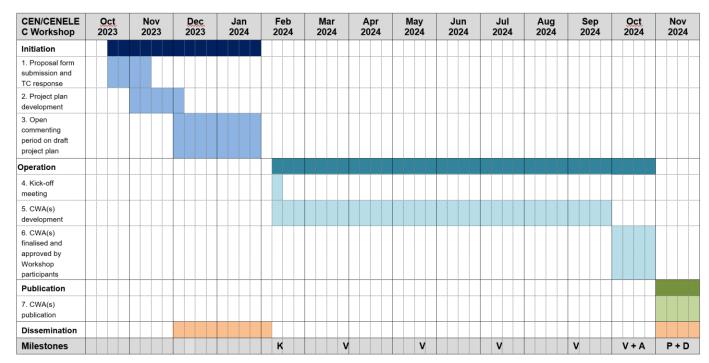
Leadership roles for the CWA were confirmed, with Dr. Thomas Track (DECHEMA) as Chair, Dr. Veronika Zhiteneva (KWB) as Vice-Chair, and Dr. Madlen Schmudde (DIN) as Secretary. An online survey was made available so that participating members identified their categories of interest within the CWA and registered in core teams for each solution category (SC). Finally, the Chair appointed team leaders for each SC: Sarah Hale (TZW) for Prevention/Substitution, Veronika Zhiteneva (KWB) for Measures/Remediation, Hans Peter Arp (NGI) for Prioritization for Remediation Goals, Anne Togola (BRGM) for Monitoring, and Martine Bakker (RIVM) for Risk-Assessment.

By the second meeting on March 7, 2024, the teams leaders were confirmed, and participants chose the core teams in which they wanted to contribute. At the beginning of April, all officially registered participants (40) were granted access to a Sharepoint folder where they can work on the CWA document in parallel. Finally, at least 10 of the participants are external to the PROMISCES project, fulfilling KPI 6.4 (KPI 6.4: Number of project external stakeholders included in the CEN workshop agreement for the co-creation of the DS. Target: 5-15).

The third meeting has been scheduled for the 21st of May 2024. Afterwards, three more meetings will take place.



Table 10: Overview of the timeline for the development of the CEN Workshop Agreement



- K Kick-off
- V Virtual Workshop meeting
- A Adoption of CWA
- P Publication of CWA
- Online distribution of CWA

2.4.5 Close cooperation with associated partners

Not only will PROMISCES improve the innovation capabilities of its partners and introduce them to new or larger markets, but numerous other entities (listed below) interested in high performance and competitive innovations also support and will benefit from PROMISCES. These associated partners (APs) have already stated their interest either via a letter of support (LoS) or by accepting an External Advisory Board position. Table 11 outlines how PROMISCES will capitalise on its extensive AP network to broaden the exploitation of its innovations.

Table 11: Overview of associated partners and exploitation ambitions

| Category | Associated partners (AP) | Exploitation destination & timeline |
|--------------------------------------|--|---|
| Technical and industrial innovations | VEOLIA, MEWT, WAPULEC LTD, GRAFORCE, GCI, VIVA SERVIZI, WITTEVEEN+BOS, MAWV, DANONE | During: Consultation on upscaling potential and market entry After: Potential market entry of technologies, application in industry |



| Water utilities and agencies | CATALAN WATER AGENCY, VIENNA, WATER, ASPMA, PORT OF DUNKIRK, Alto trevigiano servizi spa | During: Provisional installation/experiments with PROMISCES' innovations, testing F&T models, referral of other water utilities After: Subsequent research collaboration or implementation of PROMICES' innovations |
|------------------------------|--|---|
| Research and development | BGS, CRCCARE, TU DELFT | During: Technical advice on technology development, connection with academia After: Subsequent research collaboration |
| Public authorities | L'Agence de la transition écologique (ADEME) (FR), L'Office français de la biodiversité (OFB) (FR), Senatsverwaltung für Umwelt, Verkehr und Klimaschutz - Berlin (Sen UVK) (DE) | During: Advice on uptake of regulatory tools, lobbying for new (national) policies After: Uptake of regulatory and decision-support tools, new national policies, referral of other public authorities for subsequent collaboration |
| NGOs | CAN, ICPRD, BUND | During: Deeper understanding of CE considerations After: Subsequent collaboration |
| Sectors and networks | NICOLE Network, NORMAN, WATER EUROPE, WATER REUSE EUROPE, SEDNET, IAWD, VEWIN, ESPP, EUROGEOSURVEYS, DBU, COMMON FORUM | During: Advise on technical, market, lobbying, regulatory needs and considerations After: Subsequent research collaboration |

The APs will assist via the following activities during the project lifetime:

- Consult on up-scaling potential and market entry;
- Provisional installation/experiments with innovations, model testing and referral of other water utilities;
- Advise on technology development, uptake of regulatory tools, market, regulatory needs and considerations:
- Foster connection with academia;
- Advise on uptake of regulatory tools;
- Lobby for (new) national policies; and
- Provide deeper understanding of circular economy considerations

After the project is completed, the continued support of the exploitation activities by the APs is foreseen, such as:

- Supporting the potential market entry of technologies;
- Applying the solutions within industry;
- Conducting subsequent research collaborations;



- Supporting the uptake of regulatory and decision-support tools and new national policies; and
- Recommending other public authorities for subsequent collaborations.