

Management Report for the 2023 financial year

In accordance with the statutes of the EEIG EMWIS-TU registered with the trade and companies register on July 28, 1998, extended for an indefinite period by the Combined General Meeting of January 20, 2003, the twenty-sixth financial year of the group ended on the 31 December 2023.

In 2023, EMWIS activities focused on the implementation of a set of projects cofinanced by the European Union, particularly within the framework of the Research and Innovation programs (H2020 and Horizon Europe), COST and PRIMA around innovation in the environmental and agricultural sectors, for which EMWIS ensures the dissemination and exploitation of results and supports transfer processes in the Mediterranean. On the other hand, the Technical Unit continued its institutional cooperation actions in the Euromed area with the management of websites and networking within the water, environment and agriculture communities. These actions are summarized in this document.

Strengthening of national water information systems in the Mediterranean

The Mediterranean Water Knowledge Platform, who was accredited in April 2014 by the 43 member countries of the Union for the Mediterranean. This project is composed of two sub-projects, one on the strengthening and harmonization of National Water Information Systems (NWIS) in the southern Mediterranean countries and the second on the preparation of a White Paper on Water. Following activities carried out in 2018 a trilingual web portal (English, Arab and French) has been launched (http://mwkp.semide.net). It includes the product guides : implementation of National Water Information Systems - NWIS - in the Mediterranean under the patronage of UNESCO, ii) development of white papers and iii) legislative and regulatory recommendations), the state of progress of the actions at the regional level and in the pilot countries (Morocco, Tunisia, Jordan, and Lebanon), plus a geo-catalogue of publicly available data and information in the region, compatible with the recommendations of the INSPIRE directive.

The progress of the platform made in 2023 are:

Preparation of a survey for countries in order to identify their priorities for action in the water sector.

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- Preparation of a concept note on the digitalization of the water sector which was presented to the WEG (Mediterranean Water Expert Group) in Rabat in June
- Discussion with the Union for the Mediterranean for the introduction of digitalization as a new axis of the platform.
- Presentation of the platform at the webinar "Sharing knowledge on water in Morocco for better management of the resource" organized as part of the Upscale Sebou Water Fund project supported by the DIMFE initiative, which aims to improve and share the state of knowledge on the links between water security and natural freshwater ecosystems at regional, national and local scales.

Ongoing projects in 2023



HYDROUSA (Demonstration of water loops with innovative regenerative business models for the Mediterranean region https://www.hydrousa.org/) is a co-funded project under H2020 which started in July 2018 and is attracting a lot of interest. In particular, in 2021, it received the Mediterranean Prize for Adaptation to Climate Change initiated by ADEME and the Nexus Prize for Water, Energy, Food and Ecosystems from the PRIMA

Research and Innovation program. The duration of the project has been extended until the end of June 2023.

EMWIS ensures the exploitation of the results of the project and the replication in other territories in the Mediterranean. Sustainable operating models with a circular economy approach around the DFS of the project have been produced and validated by the European Commission. EMWIS is also involved in the replication of solutions demonstrated on Greek islands (rainwater harvesting, treatment and reuse of wastewater, solar desalination, agriculture with high added value and low water requirement, solidarity economy model) towards specific locations in France (Saint Honorat), Croatia (Zlarin), Malta and Tunisia (Kerkennah). Additional activities were launched with support from the Southern region on Mediterranean cooperation (AAP3E) with the water management project in the Sustainable Islands (Kerkennah and Saint Honorat) carried out with the SMILO network. The results of the replication in the Mediterrenean were presented at the Water Innovation and Circularity conference in Athens in June 2023.

AAP3E : Water management in Sustainable Mediterranean Islands

The action, co-financed by the PACA Region, allowed to exploit the results of the HYDROUSA project on St Honnorat and Kerkennah Island. Detailed feasibility studies were carried out on each site to define concrete solutions to be implemented. In

Kerkennah, the collection and storage of rainwater for irrigation was carried out in order to limit the risk of flooding. In Saint Honorat, a water storage tank has been rehabilitated and a well has been instrumented to control pumping, as well as to improve knowledge of the volumes withdrawn and the level of salinity. Two international experience exchanges were organised, one in Malta and the other in St Honorat. Those experiments also allowed the creation of a guide on sanitation in small islands published by SMILO in French and English. The action was carried out jointly by EMWIS, SMILO and the final beneficiaries: the municipality of Kerkennah (Tunisia) and the Abbey of Lérins.



EdiCitNet (<u>https://www.edicitnet.com/</u>) is a project bringing together 35 partners and co-financed by the H2020 program, which started in September 2018 (extended until February 2024). It aims to implement NBS for agriculture and urban regeneration. The project integrates 11 cities, grouped into pilot cities -Front runner- (Rotterdam, Oslo, Andernach, Berlin, Sant Feliu de Llobregat) and cities that will

develop implementation plans (Carthage, Havana, Lomé, Montevideo, Sempeter-Vrtojba). EMWIS contributes by identifying and collecting monitoring and impact indicators with pilot cities, as well as analyzing tools enabling stakeholders to implement these solutions (catalogues, databases, toolboxes). tools, decision support).

In 2022 and 2023, EMWIS carried out a case study on shared gardens in the city of Nice, encompassing a socio-economic and environmental analysis. This collaboration allowed to establish contacts with the urban agriculture department of the city of Nice, with which EMWIS signed an agreement for future collaborations. The work was presented at the EdiCitNet conference in Berlin in September.



SUSTAIN-COAST: on the Sustainable Management of Coastal Aguifers considering the quantitative aspects and the reduction of pollution risks through innovative governance in the context of climate change. The project has a duration of 4 years and was launched in May 2019. Its website was launched at the end of August (https://www.sustain-coast.tuc.gr). Four "living labs", realenvironment experimental sites are being developed in Tunisia (Wadi El Bey), Italy (Sardinia), Greece (Crete) and Turkey

(province of Mersin). EMWIS provides communication and analysis of data needs for the production of maps and indicators necessary for good participatory management. The duration of the project has been extended until the end of May 2023



SAFERS (Valorization of Copernicus satellite data for forest fire risk management, <u>https://safers-project.eu/</u>),

selected as part of a H2020-Copernicus call for projects. It aims to implement a platform integrating satellite, in situ and social network data to support all phases of crisis management, assess the impacts of fires on the environment and monitor the restoration of forest ecosystems. EMWIS is in charge of stakeholder engagement, communication and dissemination. The duration of the project has been extended until the end of March 2024

GREEMED Innovative Aquifers Governance for Resilient Water Management and Sustainable Ecosystems in Stressed Mediterranean Agricultural Areas. The project co-funded by PRIMA member countries (ANR for France) started on June 1, 2022.

The main objective of the AGREEMed project is "to improve the capacities of water stakeholders to develop integrated aquifer management plans and demonstrate their development in strategic pilot areas (watersheds) in the Mediterranean region: Souss-Med Massa in Morocco, Hammamet in Tunisia and the Jordan Valley". Targeted aquifer management plans will contribute to safeguarding groundwater resources, supporting socio-economic growth and preserving ecosystems in the context of global changes. The transfer of scientific knowledge, the exchange of successful institutional and technological innovations between partners as well as the development of solutions specific to the pilot area are the key pillars of the AGREEMed project. EMWIS is responsible for communication and operation.



Capture and Reuse Of biogenic gases for Negative-emission - sustainable biofUelS - Duration 45months (December 2022- August 2026)

CRONUS is funded by the Horizon Europe program. It aims to accelerate the development of a sustainable bioenergy sector and to play an important and constructive role in achieving the UN Sustainable Development Goals. CRONUS seeks to integrate carbon capture, use and storage (CUS) techniques into the biofuels value chain, thus promoting the decarbonisation of the economy in accordance with European standards, in line with the objectives of the Green Deal. EMWIS is responsible for operating activities and financial modelling.



<u>OurMED</u>, funded under the PRIMA program, started on June 1, 2023. In line with the challenge and scope of the PRIMA Call Theme 1.1.1, the OurMED project was

designed to highlight the urgent need for more comprehensive management of water storage and distribution in the Mediterranean region compared to existing plans, taking into account natural resources and technical infrastructure over short- and long-term horizons. OurMED represents a new vision of fair, balanced, and eco-designed management of water storage and distribution in the Mediterranean region, incorporating stakeholder perceptions and benefiting from technologically advanced monitoring techniques, intelligent forecasting models, optimization, and digitization capabilities. OurMED aims to develop integrated and holistic water management at different scales, ensuring multisectoral requirements and avoiding conflicts between domestic/industrial water use, food production, and ecosystem needs. SEMIDE is the leader of the activity group (impact, engagement, and sustainability) and is responsible for all communication, dissemination, exploitation, and networking activities. SEMIDE is also in charge of exploring innovative financing to implement Nature-Based Solutions (NBS).



The CARDIMED project, funded by the EU and CARDIMED starting on September 1, 2023, aims to establish a framework and network to enhance climate resilience in the Mediterranean region, particularly through Nature-Based Solutions (NBS). The project includes nine full-scale demonstrators, a digital infrastructure to improve data collection, valorization, and access for monitoring and impact assessment, modeling and evaluation tools for benefits and the ecosystems-waterenergy-food nexus, and decision support for integrating NBS into regional climate adaptation policies. SEMIDE is responsible for coordinating the French demonstration site (university campuses, Marseille), networking, policy analysis, exploring innovative financing, as well as replication and transferability in the southern Mediterranean.

The NIAGARA project, which began in November 2023, NIAGARA is aims to develop solutions for assessing and mitigating chemical and microbiological contamination of drinking

water and to integrate them into a pilot demonstrator. This demonstrator will enable drinking water treatment plants (DWTPs) to monitor and eliminate chemical and biological contaminations present in drinking water supply chains, as well as manage and minimize associated risks. SEMIDE is responsible for stakeholder mapping and engagement, and for preparing policy and regulatory recommendations for new risk assessment procedures. It also participates in communication and exploitation actions.



The NEXUSNET project is funded by the European Commission's COST Action. NEXUSNET is an international network of researchers collaborating with universities, research institutions, policymakers, and the private sector. Its objective is to better understand how the water-energy-food Nexus promotes policy coherence and biophysical interactions in the domains of water, energy, and food, facilitating the transition to a circular and low-carbon economy in Europe. The network emphasizes job creation, improved well-being, broad synergies, and environmental sustainability. NEXUSNET tests the Nexus concept at different scales (local, regional, national, European) and explores the international dimension through the participation of international partners. The network aims to promote Nexus-compliant practices through a knowledge/research sharing hub at the European level and beyond. Public-private initiatives play a crucial role in promoting Nexus-compliant practices, relying on the advice of network members. SEMIDE is the French member of the coordination committee.

Preparation of New Projects

In 2023, SEMIDE participated in 10 proposals for the PRIMA and Horizon Europe programs.

One project was selected for funding and will start in October 2024:

 Future Lakes under HORIZON EUROPE, whose main objective is to demonstrate innovative solutions to transform the restoration and integrated management of lakes. The specific objectives are to significantly improve the ecological and chemical status of European lakes, restore biodiversity, recover valuable resources (from pollutants), enhance the services provided by lakes, and make society more resilient to climate change. The integration of these solutions into the operational management of lakes will be demonstrated in six major European lakes (demonstration basins).

Information Dissemination and Knowledge Exchange Activities

Animation of the EMWIS online platform with the National Focal Points, mainly websites and the electronic bulletin: The EMWIS international site (www.semide.net) is continually updated (Electronic Flash distributed every two months at nearly 30,000 registered and transmitted to other international networks, site consultation >100,000 visitors per month, thematic directory, web pages). A redesign of the EMWIS website was initiated at the end of 2023 and will be implemented in the first half of 2024

In 2023, SEMIDE contributed to the following initiatives:

- Participated in the launch of the 5th Mediterranean Water Forum in Valencia on October 18, 2023.
- Attended the 21st International EURO-RIOB Conference (October 16-19, 2023) in Valencia.

- Participated in the roundtable "Water for Urban Plant Culture" during the support day for urban agriculture and sustainable local food by the Nice Côte d'Azur Metropolis on November 24.
- Participated in the Franco-Greek scientific meeting: "Water in Climate Turmoil," organized by the French Institute of Thessaloniki, as part of the 1st Science Festival on November 14, 2023.
- Participated and presented a regulatory analysis on the feasibility of naturebased solutions in the Mediterranean region at the regional conference on "Efficient Urban Water" in Sfax, Tunisia, organized by MedCities/MedCités for the ValeurGabes project on November 7-8.
- Chaired the session "Harnessing Nature's Potential: Exploring Nature-Based Solutions Adoption by Businesses in Coastal and Freshwater Ecosystems" at the European Business & Nature Summit 2023 held on October 12 in Milan.
- Participated in the high-level roundtable on scaling synergies between projects for better influence on financing and policies in the MED region, organized as part of the final Medwaycap conference on July 7-8.
- Attended the Union for the Mediterranean Expert Water Group Meeting, Morocco, June 7-8, 2023 (WEG13).
- Participated in WATEREX in Cairo, the largest water and wastewater technologies exhibition and conference in the MEA (Middle East and North Africa) region, from May 15-17, 2023.
- Spoke at the webinar "Pooling Knowledge on Water in Morocco for Better Resource Management" organized under the Upscale Sebou Water Fund project supported by the DIMFE initiative, on May 4.
- Served on the jury for the Mediterranean Climate Change Adaptation Trophies launched by ADEME, in April.
- Participated and presented a poster at the Edible Cities Network Conference 2023 held in Barcelona from March 15-17.
- Attended the 8th edition of the Agri Travel and Slow Travel (ATEST) fair held from March 30 to April 2, 2023, in Bergamo, Italy.

Perspectives for 2024

In order to address these missions and thanks to the work carried out in 2023, the following actions are planned:

- Organizing ad-hoc meetings with SEMIDE countries based on the Mediterranean agenda and priorities.
- Continuing actions on the Mediterranean Water Knowledge Platform in collaboration with the Union for the Mediterranean secretariat and integrating digitization.
- Continuing ongoing European projects: EdiCitNet, SAFERS, Cronus, AgreeMed, OurMed, CARDIMED, NIAGARA.

- Launching of a new project: Future Lakes starting in October 2024.
- Providing occasional support missions to the Euromed cities network (Metropolis NCA).
- Conducting information dissemination activities on water in the Mediterranean, promoting SEMIDE in regional initiatives, particularly with the Union for the Mediterranean.
- Participating in meetings of the Water Expert Group, which brings together representatives of Mediterranean countries organized by the Union for the Mediterranean.
- Building partnerships and responding to project calls (PRIMA, LIFE, Horizon Europe, Interreg, WE4F, DIMFE).
- Launching the new SEMIDE website, which will serve as the showcase for the water world in the Mediterranean.

Done at Sophia Antipolis, on the 24th of June, 2024

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