

InnovaMare in 2022

The second year of a InnovaMare strategic project was a year in which we presented the results of the project so far through held roadshows, continued to maintain the platform and had meetings with different stakeholders. The second half of a year dedicated to the establishment of DIH and the organization of Innovamare Academy.

January is a month in which we have prepared all the documentation regarding the third reporting period and several deliverables such as: D1.3.2. Monitoring report 6, D2.2.3. Social Media Marketing reports 6, D4.2.1. Underwater robotics and sensors interactive web platform Beta-test report, D4.1.3. Technology foresight paper. We also had a project partners meeting regarding the organisation of the events in 2022.

In **February** we had a meeting with project partner regarding the organisation of the workshop during the roadshows. It is a month in which we started preparatory activities related to the Dubrovnik roadshow such as the creation of the agenda.

We participated at the **Roundtable Challenges of companies in the transition to digitalization and modern technologies in application vs. legislation** as a part of the CEUP 2030 project (Central Europe Upstreaming for Policy Excellence in Advanced Manufacturing & Industry 4.0 towards 2030), whose activities are aimed at creating policies in the field of Industry 4.0. During the round table, the panelists came up with the two most important conclusions: The importance of coordinating the activities of innovation ecosystem stakeholders, emphasizing the need to make more efforts to achieve better connectivity of all stakeholders in the innovation process. One of the ways is to establish digital innovation centers that would also encourage the development of local scientific research institutions such as the Alu Tech Development and Innovation Center in Šibenik. The second conclusion is the importance of greater connectivity between scientific and educational institutions and small and medium-sized enterprises. The above mentioned is exactly what we want to achieve through our project.

We also had a meeting with different stakeholders as a part of InnovaMare innovation ecosystem and we accepted to participate at the Ravenna EMD 2022.

March was very exciting for us because InnovaMare team, together with SMEs and experts, were in a **study visit to the innovation driver of Finland, city of Espoo**, for exchanging experiences and knowing the ecosystem of sustainable growth and innovation. This study visit taught us that Skilled individuals and knowledge sharing are key pillars in creating an ecosystem. Together with networking, they are the essential part of the modern Innovation ecosystem, as said Professor Erkki Ormala. This study visit in Finland gave us clear information and has widen our views where to start and how to build a successful innovation ecosystem as a team. We worked on the organisation and preparation for our first InnovaMare Roadshow, which took place in Dubrovnik. Project partner CNR presented InnovaMare strategic project at the **Dubai expo**.

We also worked on preparing of the finalisation of the D4.1.2. Position paper on offer and request in robotic and sensors and D3.1.2. Map of excellence at cross-border level.

In **April** we couldn't wait to have **first InnovaMare Roadshow in Dubrovnik** (Croatia). This event was a part of the InnovaMare strategic project activities to promote cross-border cooperation between Italy and Croatia and implement the Blue Economy by increasing the transfer of knowledge among partners and stakeholders. It has brought out the results of almost two years of activities aimed at building a shared stakeholders ecosystem of innovation through a multidisciplinary approach to foster

Adriatic sustainability. The event included a series of workshops and practical demonstrations of new industrial applications against marine pollution based on robotic and sensoric solutions. It was an event in which we launched an **Innovamare innovation interactive platform**, a shared web space among key players where private sector, public institutions, research centers and experts from different countries will keep in touch for further cooperation, development and promotion of innovations in marine technologies. Also the most ambitious result of InnovaMare project – the **Digital Innovation Hub (DIH)**, has been presented. It is a digital place for networking, exchanging knowledge and connecting supply and demand for highly innovative underwater anti-pollution technologies with a wide range of services. Also, the project partner UCV, presented InnovaMare project at **EUSAIR conference**.

In this month we prepared several deliverables: D1.3.2. Monitoring report 7, D2.2.3. Social Media Marketing reports 7, D4.4.1. Joint report from study trips in Norway and Finland, D4.1.5. Business plan for MARIOS, D3.1.2. Map of excellence at cross-border level, D4.1.2. Position paper on offer and request in robotic and sensors, D5.2.2. Swarm of autonomous vehicles with full documentation ready for variety of end-users' applications, D5.2.3. Sensors solutions with full documentation ready for end-users' applications.

May was full of events. The strategic project InnovaMare on behalf of the Croatian Chamber of Economy, Mercator Ocean International, together with the European Investment Bank participated on the **European Maritime Day (EMD)** in Ravenna, Italy, in the DG MARE workshop "Ocean Technologies, Services and Financial Instruments". We participated at **ROBOTIMA my sea robotics – Awareness raising event on marine robotics** where we had DEMO of marine robotics and sensors solutions performed at sea (Canal Grande) and in the pool set in the area. Participants saw solutions in real environment and got details about the functioning and possible applications from the reference developers. We had a presentation of the project during the **regional cross-fertilization workshop of the BLUEAIR project**, organized for stakeholders in the Friuli Venezia Giulia Region involved in Blue Growth projects.

We participated at the **Blue Talks – The Role of Marine Robotics in Ocean's Monitoring** where Mr Ivanac presented the project, its main activities and main goal. The goal is to showcase how marine robotics can be useful for the ocean monitoring and to discuss the future of technology applied to Blue Economy sectors such as ocean monitoring and protection and fisheries among others. The event was co-organized by project partner FER and the Embassy of Portugal in Zagreb related to the 2022 United Nations Ocean Conference.

At the end of May and beginning of June we had our **second roadshow held in Venice** in which we explore new opportunities for strengthening strategies to develop an innovative ecosystem model in the area of underwater robotics, also by participating in upcoming EU calls. The roadshow was an important opportunity for networking, discovering new sustainable business models, learning best practices from experts and companies and building up new consortiums to apply for future calls in the Blue economy sectors.

InnovaMare strategic project has been presented by President of Croatian Chamber of Economy in Roma (Italy), in **Italy-Croatia Business Forum** organized by Croatian Chamber of Economy.

In **June** we participated at the **Blue Wave Week** – Innovation for the sustainable use of marine and maritime resources in our Seas, Interreg Adrion, project BlueAir - Infrastructure and maritime works (underwater robotics) and at the conference **Industry 4.0 and Innovation for the Blue Economy**, at the Venice Boat Show – Arsenale in Venice

Afterwards we participated in the **Greencajt Festival**, in a panel: **Innovators as messengers of the future - do we have a new Nikola Tesla?** where Mr Ivanac presented the project, its main activities and main goal. The InnovaMare project is a proof that technology and ecology can go hand in hand, as evidenced by this project, which actually works thanks to the mutual cooperation of nature and new technologies. We were also preparing documentation for the Activities report 4, deliverables: Monitoring report 8, 5.2.6. Results report of the demonstration 1 of the Pilot action I. and scientific paper with demonstration 1, Pilot I. results published, D5.2.7. Results of the demonstration 2 of the Pilot action I. and scientific paper with demonstration 2, Pilot I. results published. Started the activities that will result in the creation of the D5.2.4. Specification and scenario of the demonstration 1 and D5.2.5. Specification and scenario of the demonstration 2. The deliverable D3.4.1. Strategy and action plan was made in this month.

The second half of 2022 was a bit more challenging than the first half.

We started **July** with prepared deliverables: D1.3.1. Activities progress reports 4, D1.3.2. Monitoring report 8, D1.4.2. Financial Reports (FR) & Payment Claims (PC) 4 and D2.2.3. Social Media Marketing reports 8. However, the most important thing is that we had a **meeting regarding the establishment of DIH Innovamare** as a crucial step in the creation of an innovation ecosystem model. Representatives of 14 organisations that are project partners on strategic project InnovaMare held a meeting in Trieste, where we officially started the process of establishment of the Digital Innovation Hub Innovamare on cross-border level. We discussed about the roles of each partner as well as the services that will be available to the future members.

In **September** we had an **international workshop „Ocean monitoring and protection Technologies and Services – in the Adriatic”** as part of the activities of the strategic project InnovaMare within BTS event. The aim of the workshop was to create a strong ecosystem for a sustainable blue economy in the Adriatic, to encourage new market opportunities through innovative technologies and solutions, raise awareness of the Adriatic as a fundamental resource and develop a model of sustainable growth of the blue economy in the Adriatic in accordance with the European Green Plan and the digital transition. Startups are carriers of new technologies and their applications were presented at the workshop. A total of seven startups was presented that offer modern solutions for the sustainable development of the sea.

In **October** we had our **3rd Roadshow held in Rijeka**, an event where we presented the achieved results of this project, the established innovation ecosystem as a point that unites all stakeholders and opens space for further development of cross-border cooperation in the area of blue growth. We had workshops and presentations on marine technologies and their applications delivered by the scientific research sector intended for the private and public sectors, with the presentation of future trends and forecasts as well as the joint development of new project concepts and the establishment of partner consortia for future calls. At the roadshow we had a Bluetech demo day organized with the Faculty of Marine Studies, Center for Marine Technologies in Torpedo, Rijeka.

During this month we participated at the event regarding the New Interreg Italy-Croatia Programme 21-27: **“Our Shared Blue Basin From 14-20 to the new Programme 21-27”** in Venice and we had the privilege to participate at the **Interreg annual event “Better together”** where the InnovaMare project was presented as a project selected by the European Commission.

In this period we produced two deliverables: D1.3.2. Monitoring report 9 and D2.2.3. Social Media Marketing reports 9.

In **November** we had meeting with different stakeholders discussing the next steps and participation at the Living Lab in the Adriatic Sea and the establishment of the DIH InnovaMare and we produced deliverable D2.4.2. Reports on 3rd BTS.

At the end of a year, in **December** we participated in the **Conference on Maritime Transport** within the Maritime and Inland Navigation Day by Ministry of the Sea, Transport and Infrastructure. We have organized PP meeting and started with the preparation of the documentation and Activity report 5. and at the **Panel on DIHs' within „SEE Regional Conference 2022 Enterprise Europe Network“** in Tuheljske Toplice, Croatia.

We produced several deliverables: D1.3.1. Activities progress reports 5, D1.3.2. Monitoring report 10, D1.3.9. Minutes of the 6th SCOM in Šibenik (Biograd), D1.4.2. Financial Reports (FR) & Payment Claims (PC) 5, D2.2.3. Social Media Marketing reports 10.

***Conclusion of the year 2022:**

- **Number of deliverables:** 29
- **Number of stakeholders meetings:** 45
- **Event attendance:** more than 700 people participated in our events
- **Map of excellence:** we engaged more than 500 stakeholders in our.
- **Meetings with decision and policy makers in Italy and Croatia:** organized 15 meetings
- **Cooperation:** with leading European institutions as European Investment Bank, DG Mare, European Investment Fund and scientific and research institutions like NTNU - Norwegian University of Science and Technology, University of Helsinki and Aalto University.
- **Outside events:** participated in 18 outside events, roundtables, campaigns, workshops and conferences.
- **Social media interactions:** over 25500 interactions
- **Performed testings:**
 - **Roadshow Dubrovnik (April)** - Project partners, University of Dubrovnik and FER have presented new solutions and their possibilities and application in protection of our sea.
 - **Testing of robot for marine technologies in Robotima event in Trieste (May)** - Project partner FER tested robot during event Robotima
 - **Project partner CNR brought SWAMP in the Arctic (July)** - SWAMP-2 vehicle designed and developed in the CNR laboratories within our project has been used to sample water and collect data in the stretch of water in front of tidewater glaciers in the Arctic (Hornsund, Spitsbergen). Angelo Odetti and Roberta Ferretti, researchers at the CNR-INM, participated in the campaign. Onboard the Joinus Yacht they moved from Longyearbyen to the Hornsund Fjord in the south of Spitsbergen. In the Hornsund Fjord SWAMP was used to sample water and record CTD data from freshwater runoff spots in the direct front of three tidewater glaciers: Hansbreen, Hornbreen and Storbreen. The data collected should allow to increase the knowledge on contaminant fluxes and loads in the Arctic that is particularly important in the era of global warming
 - **BTS 2022 (September)** - presented robots created as a result of the cooperation of the project partners, FER, and CNR. Those are two robots - Korkyra, which is intended

for monitoring fish farms, and SWAMP for monitoring environmental parameters in swamps - and also a system of smart buoys that will monitor the quality of the sea

- **Roadshow Rijeka** (October) - Project partner, FER has presented new solutions and their possibilities and application in protection of our sea.