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DIH InnovaMare

DIH INNOVAMARE PROJECT

D 1.2.1 Conference report on marine technologies and its implementation

A1.2 Mapping of examples of good practice in cooperation of private and scientific sectors and applied research to market in marine technologies and raise awareness on them

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Project identification

Project id: ITHR0200416
Name of the lead partner organisation: Hrvatska gospodarska komora
Name of the lead partner organization in English: Croatian Chamber of Economy
Project title: Cross-border digital innovation Hub for innovative marine technology
Project acronym: DIH InnovaMare
Programme priority: Sustainable growth in the blue economy
Specific objective 1.1: Developing and enhancing research and innovation capacities and the uptake of advanced technologies
Project duration in months: 30
Work package: WP1 Innovation capacity building for implementation of marine technologies
Activity title: A1.2 Mapping of examples of good practice in cooperation of private and scientific sectors and applied research to market in marine technologies and raise awareness on them
Expected date: M 10

Activity description: Mapping examples of good practice will give us a clear overview of what blue economy sectors we have most implemented marine technological solutions, who are the stakeholders involved in this cooperation, and the marine technologies that are mostly used. With this mapping, we are expanding our map of excellence and bringing new actor profiles into our ecosystem that we will use for further activities. After conducting mapping, we intend to organize the conference in Padua with the help of an associated partner, the University of Padua. It will help us raise awareness of other stakeholders on what kind of use cases there are so they can implement maybe already existing solutions to improve their production, products, or processes that will have less impact on the marine ecosystem. We will raise awareness for other stakeholders to better understand how to implement marine technologies in other areas of blue economy sectors.
Partner responsible: UCV

Dissemination level: CO - Confidential

Status: Draft

Version: V1

Date: 20 November 2024

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DIH InnovaMare – International meeting 13th November 2024

Padua – Caffè Pedrocchi - Sala Rossini

Introduction:

The “Marine Technologies and Implementation for a Sustainable Blue Economy” conference on November 13th at the historic Caffè Pedrocchi in Padova brought together over 100 attendees, including researchers, industry leaders, young entrepreneurs, and students. Organized by the Croatian Chamber of Economy as the Lead partner of the DIH InnovaMare project, in collaboration with project partners Unioncamere del Veneto and the University of Padova, this event provided an invaluable platform for discussions on advancing sustainable marine technologies within the blue economy. The event was supported by DIH Innovamare, the European Commission, Ocean Autonomy Cluster, and Aegean University to engage a wide range of stakeholders, including spin-offs, companies, students, and researchers, in the field of marine technologies.

The conference featured a presentation on the updated “Map of Excellence”, a strategic resource that identifies key stakeholders, innovative technologies, and projects in marine robotics, sensors, and data collection tools across Europe. This map serves as a valuable resource for companies, researchers, and students aiming to contribute to the digital and green transformation of the blue economy. The event fostered connections and collaborations among researchers and companies, enhancing the overall research and development ecosystem. Please check the rest of the introduction to match.

Opening remarks

Speakers:

- Monica Fedeli, Deputy pro-rector of the University of Padova
- Antonio Santocono, President of the Unioncamere del Veneto
- Iain Shepherd, Expert Maritime Affairs and Ocean Observation, former EC official

Monica Fedeli, welcomed the audience, made of more of 100 attendees, in Padua and remarked the relevance of the theme for the University, as a proactive approach in the relations between research and business is the best way to be at the forefront to find practical solutions to real problems faced in the wide sector of the blue economy.

Antonio Santocono, as President of Unioncamere del Veneto, underlined the importance of the blue economy sectors for Veneto Region and for Italy as a whole. He then appreciated the meeting goal as it makes it easier for Public Institutions and private sector to work together to reach common objectives such as the identification of new business models and supporting the development of new technologies for monitoring and protecting the marine environment.

Iain Shepherd presented the view and the strategy of the European Commission for Blue Economy. The new Commissioner just appointed Costas Kadis is a scientist and will be in charge only for Fisheries and Oceans, meaning the theme will have his full attention and will be more and more at the center of EU policies and actions. Also, he stressed that by “Oceans” the EU now intends saltwater and freshwater, in a global approach that takes into consideration communities’ engagement, biodiversity protection, innovation and sustainability.

Mr. Shepherd illustrated the strengths and weaknesses of the EU Blue Economy Policy and two key factors the EU is working on to reach better performances: the lack of “Active Unicorns” and the shortage of skilled labor force. The term “Unicorn” means a private tech or innovation company, valued over 1 billion € and the evidence shows Europe is well behind the US and China in this respect.
To support the creation of EU Unicorns what is needed is business support actions and strategic crowdfunding. To compensate for the labor shortage, in June 2024 the EU launched the Net-zero Industry Academy. Also, it was underlined that we can count on strong data infrastructures that we will integrate into Blue Economy such as Copernicus.

First session – Map of excellence - new potential in digital and green transformation in the blue economy


Mateo Ivanac presented the Map of Excellence just done within the DIH project and it’s clear that the potential for growth of the sector is very high.
Mapping was conducted via desk work and interviews on two key factors: cooperation among research and businesses in research applied to the market and young researchers – at cross border level - working on marine technology.
The first aspect concerning users mapped is that the majority are made by SMEs, and they are technology providers. The complexity of the marine robotics, sensors, and data collection tools sectors and marine technology emerges but data also show that high-quality offers are available in terms of applied research, there is still room for support actions and governance strengthening as it is done since the beginning of the first Innovamare project and will be enforced also via the MAIROS web platform www.mairos.org.
A total of 34 young researchers were interviewed, most of them being PhD or Postdoc.
A great number of young researchers work on sustainability and on enhancing the protection and safeguarding of marine ecosystems. A great benefit for the marine robotics sector will certainly derive from the cross-sectoral and cross-border exchange, facilitation, and networking actions among universities, businesses, and researchers.

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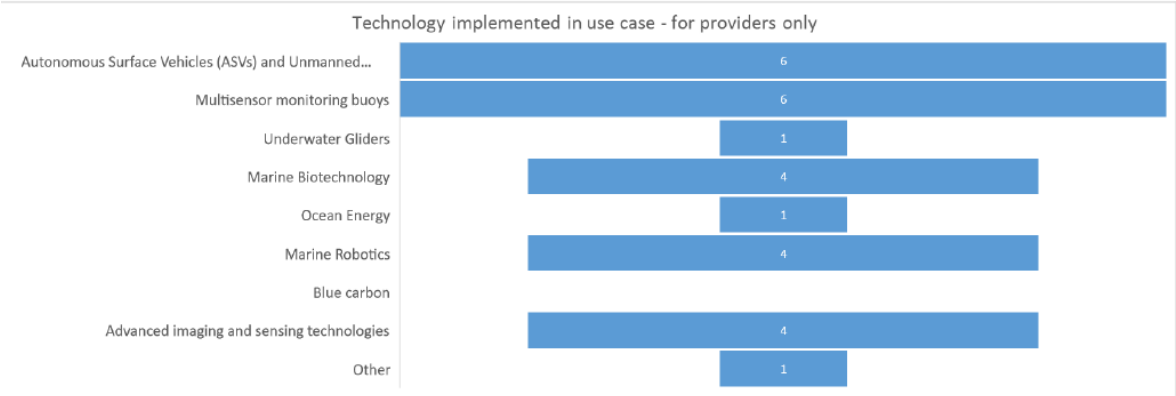
Mapping of use cases – **results after conducted interviews**



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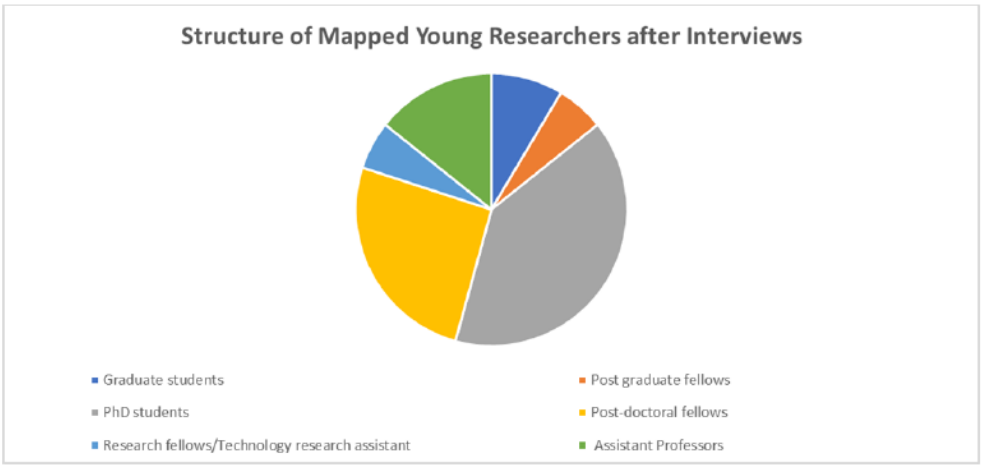
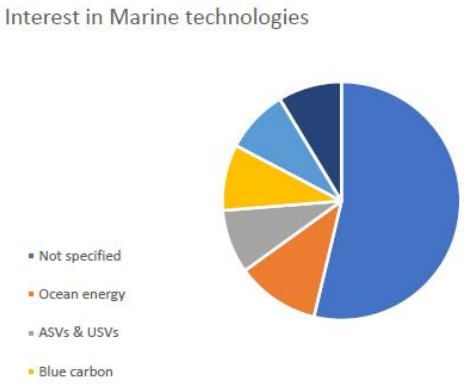
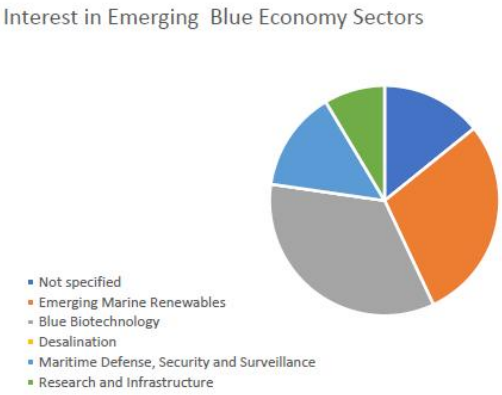
Mapping of young researchers – total 34







[source: "Map of excellence – new potential in digital and green transformation in the blue economy" by Mateo Ivanac – presentation]

1st Panel discussion – how to enhance the application of marine technologies in blue economy sectors with the use of testing sites in Europe

Moderator:
Mateo Ivanac, Project Coordinator DIH InnovaMare, Croatian Chamber of Economy

Panelists:

- Frode Halvorsen, Cluster Manager at Ocean Autonomy Cluster, Norwegian University of Science and Technology (NTNU) (remote)
- Ruben Eiras, Forum Oceano, Portugal (remote**)**
- Antonio Montanari, Dept. of Information Engineering (SIGNET group)
- Iain Shepherd, Expert Maritime Affairs and Ocean Observation, former EC official
- Cosimo Palmisano, Chief Business Development & Operations, WSense
- Carlo Kraskovic, Senior Project Manager, mareFVG

The discussion focused on testing sites and regulatory burdens that make it difficult to have a strong focus on applied research and bring it to market. Two main issues were shared and brought up to the audience:

- **the need for cross-border testing collaboration as** testing sites are essential resources for scaling innovative technologies. Collaborative efforts across borders and via clusters could facilitate knowledge sharing, foster partnerships, and ultimately strengthen the blue economy.
- **the adoption of a common European regulatory approach that includes testing protocols can** simplify the adoption of new technologies, making it easier for companies and researchers to bring innovations to the market.

The discussion emphasized critical challenges in advancing applied research and translating it into market-ready solutions within the blue economy. Two key issues were highlighted for the audience:

1. Cross-Border Testing Collaboration: testing sites are indispensable for scaling innovative technologies. Collaborative efforts across borders and through clusters can maximize these resources, enabling knowledge sharing, fostering partnerships, and bolstering the overall growth of the blue economy.
2. Common European Regulatory Approach: harmonized regulatory frameworks, including standardized testing protocols, are essential. A unified approach can simplify the adoption of new technologies, reducing barriers for companies and researchers and accelerating the journey of innovations from lab to market.

These points underline the importance of coordinated actions to address regulatory burdens and enhance the ecosystem for blue economy innovation.

2nd Panel discussion: **How to fund research and innovation in the blue economy – potential opportunities**

Moderator: Marija Rajaković, Head of Sector, Directorate for Strategic Planning and Coordination of EU Funds

Panelists:

- Claus Schultze, Directorate-General for Maritime Affairs and Fisheries - (remote)
- Antonella Calvia Gotz, European Investment Bank (EIB) - (remote)
- Christelle Sapata, PricewaterhouseCoopers (PwC) - (remote)
- Flavia La Colla, APRE, Horizon Europe: Cluster 6 Food, Bioeconomy, Natural Resources, Agriculture and Environment - (remote)
- Stefania De Santi, APRE Opportunities within the European Innovation Council program (EIC)
- Dimitris Zissis, Associate Professor at the University of the Aegean at the Department of Product & Systems Design Engineering - (remote)

One of the key issues discussed was EU funding structures, including Horizon Europe, the European Innovation Council, the EIB, and the EBF; examples of funded actions were given and a wide spectrum of possibilities for funding was presented to the participants, encouraging them to apply.

The other focus of the panel was sustainability, which is becoming more and more relevant as a funding criterion in blue economy grants so potential applicants shall consider the long-term environmental impacts of their research and the contribution to the zero-emission strategy of the EU.

During the discussion, two crucial aspects emerge:

- EU Funding Opportunities: participants were introduced to a wide array of EU funding structures, including Horizon Europe, the European Innovation Council, the European Investment Bank (EIB), and the European Blue Fund (EBF). Real-life examples of funded actions illustrated the breadth of possibilities available, inspiring attendees to actively seek and apply for these opportunities.
- Sustainability as a Funding Criterion: sustainability emerged as an increasingly significant factor in blue economy grants. Potential applicants were encouraged to consider the long-term environmental impacts of their research and align their projects with the EU's zero-emission strategy.

These discussions highlighted the alignment of innovation and sustainability as key drivers for successful funding applications and for fostering impactful contributions to the blue economy.

Round table: Entrepreneurship and market opportunities for research in the blue economy

Moderator:
Guido Bortoluzzi, Innovation Management and Entrepreneurship at the University of Trieste

Participants:

- Ana Rapljenović, Ruđer Bošković Institute
- Prof. Michele Zorzi, Wireless and More
- Stipe Lukin, SeaCras (remote)
- Karlo Džafić, Hartera Robotics
- Prof.ssa Maria Cristina Pedicchio, INEST project
- Prof. Campagnaro, SubSeaPulse

The roundtable was the most informal and probably ice-breaking moment of the day, and some relevant issues were raised and found a preliminary answer that should be proved by practice, thanks to projects like DIH Innovamare.
Young researchers can benefit from meetings and knowledge sharing by experts and business owners, as they were done during the round table, and they can even become partners exploiting the potential of their different views on reality.
Academia and Industry shall cooperate more and shall make it easier for researchers to engage with companies early on during their research studies, to bring market-ready solutions to life.
Business models should include sustainability into their everyday and innovative activities, to align to EU strategy and to catch market demand which is quite high on this matter.

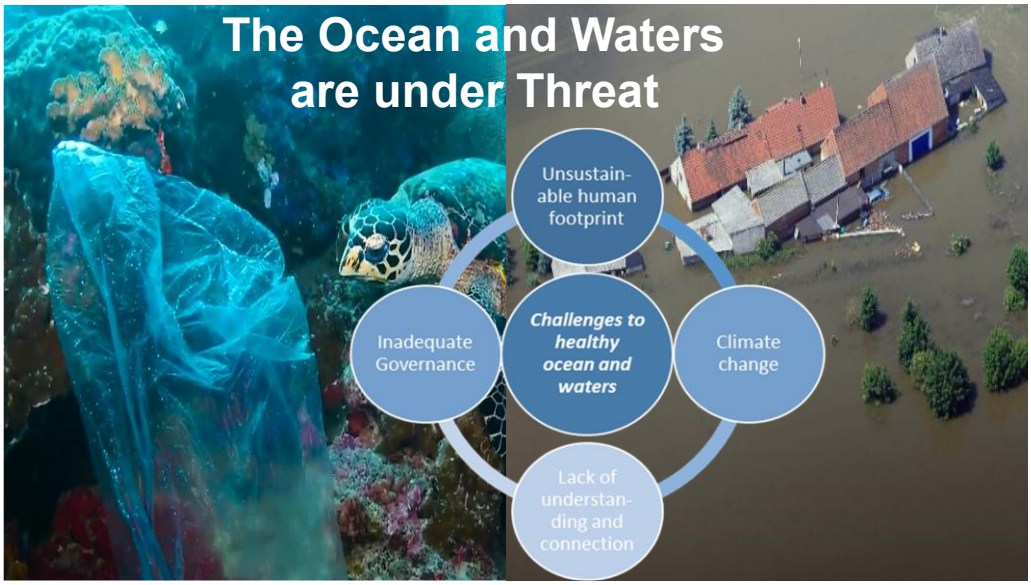
The Round Table provided a dynamic and informal setting that fostered open dialogue, with relevant issues raised and initial solutions explored many of which can be further validated through practical application in projects like DIH Innovamare.

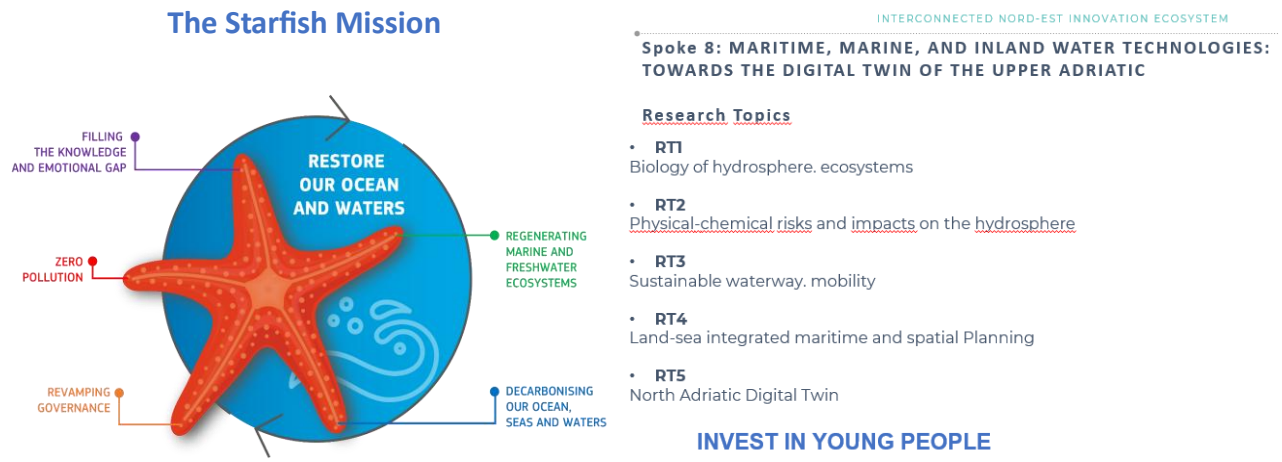
- Opportunities for Young Researchers: the session highlighted the value of connecting young researchers with experts and business leaders. These interactions not only facilitate knowledge exchange but also open pathways for collaboration, leveraging the fresh perspectives of researchers to address real-world challenges.

- Strengthening Academia-Industry Collaboration: greater cooperation between academia and industry is crucial. Early engagement of researchers with companies can accelerate the development of market-ready solutions, bridging the gap between innovation and commercialization.

- Sustainability in Business Models: Businesses should integrate sustainability into their core and innovative activities to align with the EU's strategy and meet the growing market demand for environmentally responsible solutions.

The roundtable underscored the importance of cross-sector collaboration, sustainability, and proactive engagement in shaping the future of the blue economy.





[source: "A European Pact for the Oceans: the role of the INEST Project" by Maria Cristina Pedicchio – presentation]

Blue economy projects presentations

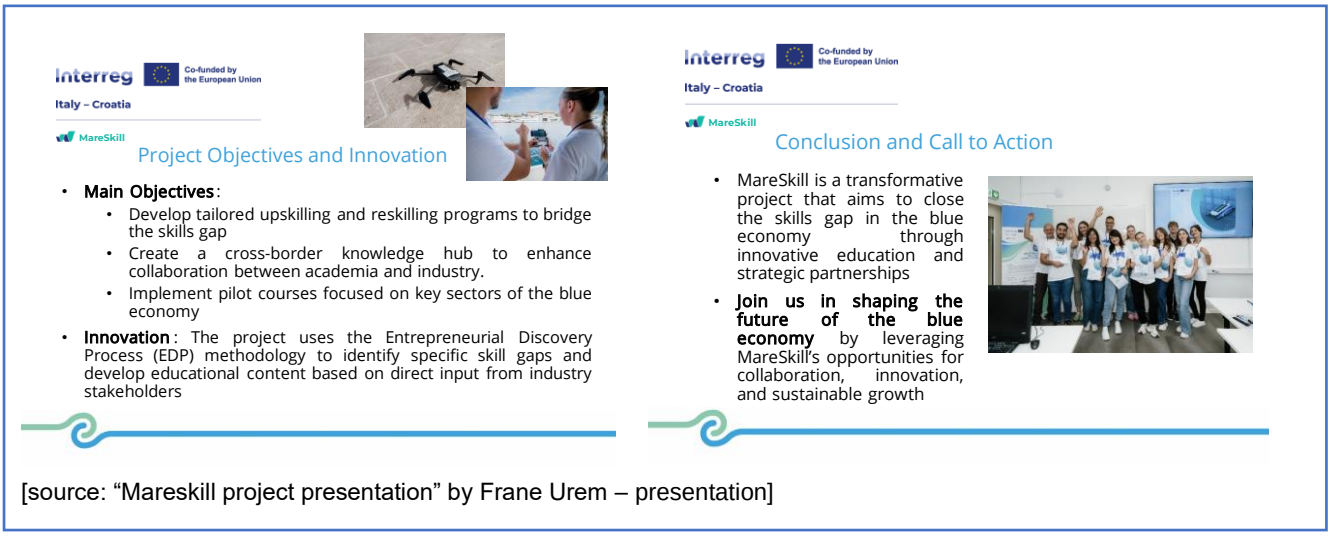
Four additional projects dealing with Blue Economy were presented, to increase the potential for crosscutting issues to be tackled together and further networking initiatives to be jointly planned.

- Frane Urem, project coordinator, MareSkill project
- Sabina Susmel, Brigantine project
- Carlo Krašković, project partner, Eccentric
- Marina Ivašić Kos, project coordinator, inno2mare

The importance of sharing information and experiences was underscored through the presentation of four additional projects focused on the blue economy. These examples illustrated how collaboration and knowledge exchange can:

1. Enhance Cross-Sector Collaboration: by addressing crosscutting issues collectively, stakeholders can identify synergies and develop more comprehensive solutions.
2. Foster Networking Opportunities: the shared insights from these projects provide a foundation for planning future networking initiatives, strengthening partnerships across sectors and regions.

This collaborative approach not only expands the scope of innovation but also accelerates progress toward sustainable development within the blue economy.



[source: "Mareskill project presentation" by Frane Urem – presentation]

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Brigantine

Project aim

Develop and implement an **autonomous monitoring surface vessel (ASV)** to assess the health of seaweed and seagrass meadows (SSM).

BRIGANTINE

To enhance the preservation and sustainable management of the Adriatic Sea

To bridge regional disparities in research and innovation, ***fostering collaboration*** and ***technology transfer*** between ***researchers*** and the ***blue business SME sector***.

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[source: "Brigantine" by Sabina Susmel – presentation]

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ECCENTRIC

ECCENTRIC – An overview

Enhancing circularity in the Adriatic area supporting innovation and growth of the blue-economy emerging sectors

DURATION
01/04/2024 - 30/09/2026
30 months

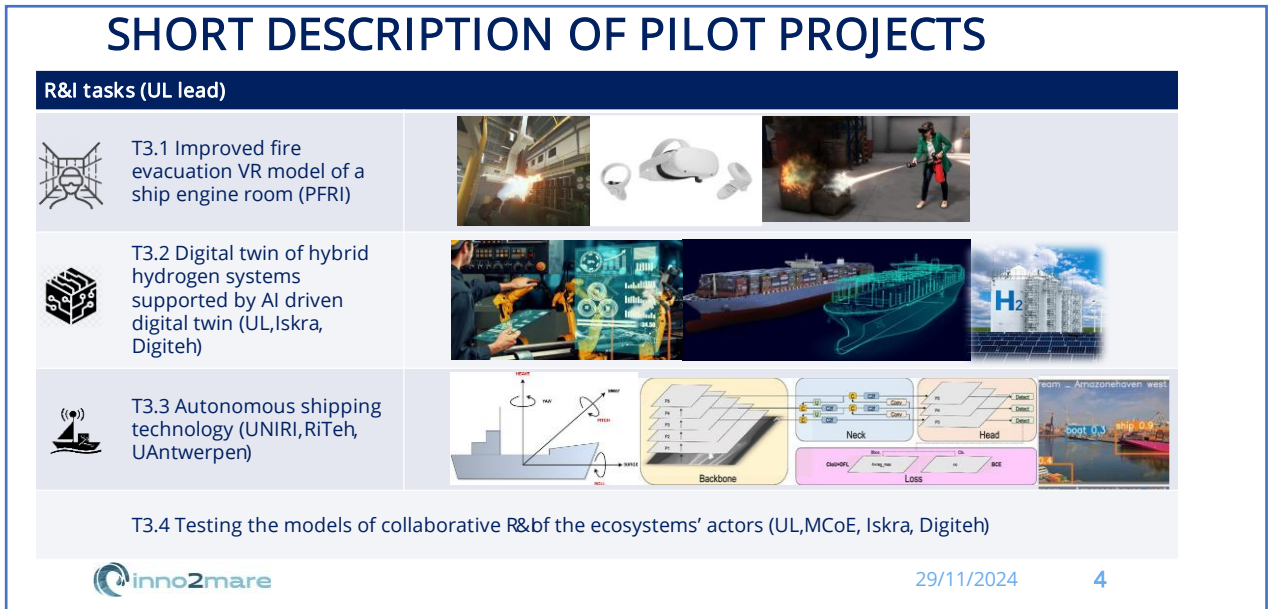
ECCENTRIC Blue Emerging Sectors
Marine Energy - Maritime surveillance and security - Maritime infrastrutures

PARTNERSHIP
Italy: T2i (project coordinator), Maritime Technology Cluster FVG, University of Bologna, IMAST Cluster, CNA Abruzzo

Croatia: Marinn – Maritime Innovation Cluster, HAMAG BICRO, Croatian Chambers of Economy

Associated partners: ARTI Puglia, Croatian Ministry of Sea, Traffic and Infrastructures, Regional Agency Primorsko Goranska County PRIGODA, Emilia Romagna Region, ALUTECH Development Center, Italian Business Angels Association IBAN

[source: "Eccentric" by Alessandro Bosco – presentation]



[source: "Inno2mare" by Marina Ivašić-Kos – presentation]

Conclusion:

The event will underscore the vast potential for digital and green transformations within the blue economy, inspiring students, and researchers to delve into new research topics and innovative study programs. By presenting key outcomes, including an updated map of excellence, we will provide valuable insights to students, companies, and researchers within the university community. This exchange of knowledge will catalyze forging new connections and fostering collaborations between researchers and companies. Ultimately, the event will strengthen the research and development ecosystem, driving innovation and sustainable growth within the blue economy.

Final remarks

Mateo Ivanac and Roberta Lazzari thanked the audience proud to announce further actions in the development of stronger collaboration among Italian and Croatian Institutions and companies, which will be launched in the next few days directly on the web platform www.mairos.org, so those who are working on the marine robotics sector should stay tuned!

Here is the link to the related documents:

- Agenda
- PPT
- List of Participants (attached)