

D3.1.2. MAP OF EXCELLENCE AT THE CROSS-BORDER LEVEL

InnovaMare project

Blue technology - Developing innovative technologies for sustainability of Adriatic Sea

WP3 - Enhancement of framework conditions by development of innovation ecosystem

(30.06.2023)

Project References

Call for proposal 2019 Strategic – InnovaMare

Project number: 10248782

Work package: WP3 Enhancement of framework conditions by development of innovation ecosystem

Activity title: A1 Mapping of relevant stakeholders in underwater robotics and sensors

Deliverable title: D3.1.2. Map of excellence at cross-border level

Expected date: 30.6.2023.

Deliverable description: As a main document to understand what stakeholders are offering in technology, services and people as well as what are their main needs for partner search, RDI projects development, internationalization and financing. the map consists of relevant stakeholders from quadruple helix approach, services, best practices, projects regarding monitoring, surveillance sector, robotics, and sensors as technology. All partners will work on development of map of excellence.

Partner responsible for the deliverable: University of Trieste

Dissemination level: CO - Confidential

Status: Final

Version: V1

Date: 30.6.2023.

1. INTRODUCTION

This report contains the last version of the Map of Excellence at the cross-border level produce for the project INNOVAMARE. The document supplements and updates the previous versions of the Map of Excellence. Since this is the last version of the map, we have done an update of the situation for the period from the 1st of January, 2022 to the 30th of June 2023.

The updates implemented in this report concern mainly section 4 (Methodology used and different phases) and section 5 (Results from the data collection). Compared to the previous report, these sections have been significantly improved with additional data collected during the above-mentioned period. The implementations mainly concern the number and typology of the organizations in our sample (from 169 to 346). This number is doubled due to the continuous expansion of the InnovaMare project. In the last period, the attention was focused on the project's expansion in new areas (Montenegro, North Macedonia, Greece) for a future capitalization of InnovaMare. As a result, the other dimensions have only been marginally updated: the key project section (from 99 to 102), the key individual section (from 106 to 107), key platform section (remained 19), and lastly the key resources section (remained 115). In the future, new updates are also expected on the other dimensions.

For the sake of completeness, all the report's sections have been slightly modified with the new information collected.

2. AIM- MAP OF EXCELLENCE AT THE CROSS-BORDER LEVEL

The aim of the InnovaMare project is to enhance the framework conditions on cross-border level by jointly developing and implementing strategical and operational level capacities that consist of mix

of policy instruments and innovation players as a frame for development of innovative technologies for sustainability of the Adriatic Sea. In this project, the overall aim of WP3 had been to research and analyse policy instruments in overall framework conditions as well as **key innovation players** on cross border level and thru policy dialogues define best mix of policy instruments together with innovation players for development of innovation ecosystem in underwater robotics and sensors and in this way enhance framework conditions for innovation.

The first objective had been to research and analyse all relevant stakeholders together with their capacities (human, technological, projects, equipment), to create a map of excellence. For this aim the first activity had aimed at identification and mapping of the main stakeholders – based on the quadruple helix approach – which can be included into the underwater robotics and sensors sector. Further, each identified stakeholder will be described based on specific organizational and technological capacities and previous experience in the field, with particular attention concerning marine and maritime robotics and sensors activities. Stakeholders will be considered both taking into account the geographical areas of the projects.

3. THEORETICAL FRAMEWORK

Quadruple Helix model of innovation (Carayannis & Campbell 2009) is the main theoretical framework used for activity WP3.1. This model has added a fourth helix to the original “Triple Helix” model of innovation (Etzkowitz and Leydesdorff 2000) which refers to interactions among academia/universities, industry, and state/government that can shape the innovation ecosystem. Instead, Quadruple Helix has added the fourth dimension of “society/public” to the original model. Cooperation and collaboration among the various actors are at the core of this model.

In order to use this framework, it is important to gain an understanding of relevant terminology that is at the core of data collection.

- **Stakeholders:** the aim of this activity had been to map the relevant stakeholders. They are defined as companies, private and public institutions, policy makers, service providers (i.e. KIBS), citizens and NGOs, support bodies, clusters and associations, etc. which have scientific, public, business-related interests in the sector of **underwater robotics and sensors and sea pollution activities**
- **Snowballing:** a sampling technique that allows to reach new contacts based of the information and data provided by previous contacts

4. METHODOLOGY USED AND DIFFERENT PHASES

The data gathering needed for the mapping of the stakeholders has been based on the snowball sampling technique (Goodman, 1961). For this aim, the data collection had been divided into two phases. In the first phase University of Trieste – PP2 (UNITS) also supported by Regional Union of the Chambers of Commerce of Veneto Region - PP1 (UCV) had asked the project partners to conduct a desk research in order to provide the contact information of their relevant public and private stakeholders (suppliers, clients, research partners, policy makers, etc.) in the sectors of underwater robotics and sensors by inserting such data in the Monday platform.

The information to be gathered was categorized as following:

General information on the organization: scientific research, private sector and public sector;

Key projects: research projects and projects involving the society;

Key individuals: key persons working in the sector;

Key platforms: list of the platforms such as crowdsourcing; crowdfunding; open innovation platforms, online community that has been used for co-development;

Key resources: these resources were categorized in 5 sections:

- *infrastructures* (R&D labs; testing labs; Fablabs; etc.)
- *technologies* (laser cutter; 3D metal printer; lidar technologies; etc.)

- *intellectual property rights* (patents; trademarks, etc.)
- *know-how*
- *equipment*

Key partners: other relevant organizations that are active in the sector of underwater robotics and sensors (following the snow-ball methodology) as they have come up during the interview.

In the second step, University of Trieste and Croatian Chamber of Economy had indicated to each partner the name of the stakeholders they should collect relevant data (conducting interviews) to complete the data gathering in the Monday platform and the names and contacts of further relevant stakeholders to be added into the Monday platform. The aim of this activity had been to gather more in depth data through in depth interviews. This phase has also contributed to the snowball method employed in this activity.

By the 30th of June 2023, information regarding 346 stakeholders was collected and this number is distributed with 249 organizations from Croatia and 97 from Italy. Of these organization 37 had been deeply interviewed including 11 in Croatia and 26 in Italy. The **snowball method** applied in this activity has required an **update** of the situation every 6 months/12 months until the end of the project, as we have done in this report for the final period from the 1st of January, 2022 to the 30th of June 2023.

At the end of these two phases information regarding a total number of 346 organizations were collected with the overall situation as following:

Table 1- Number of organizations by country

| | | Number of organizations |
|----------------|---|-------------------------|
| Croatia | N | 249 |
| | % | 72% |
| Italy | N | 97 |
| | % | 28% |

The percentage for countries refers to the distribution of the variable between the countries.

The snowball method helped with adding new organizations to those found in the desk research. Having used the snow ball method also had contributed with finding relevant projects, individuals and platforms. Table 2 illustrates the overall situation at the end of the data collection.

Table 2- Total collected data

| | Total |
|----------------------|-------|
| Organizations | 346 |
| Projects | 102 |
| Resources | 115 |
| Individuals | 107 |
| Platforms | 19 |

By the 30th of June 2023, information regarding 346 stakeholders was collected and from these organizations, we collected further information about 102 relevant projects, 107 individuals active in these sectors, 115 key resources and 19 platforms.

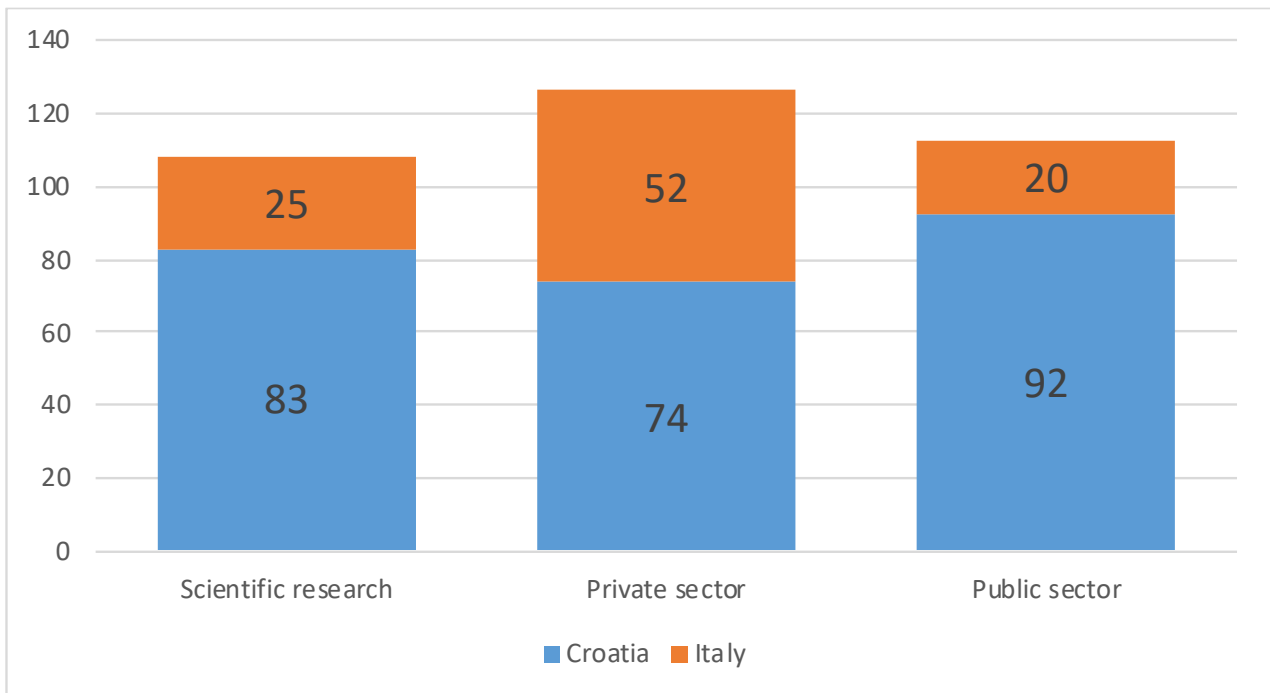
5. RESULTS FROM THE DATA COLLECTION

5.1. Characteristics of the organizations:

The data collection had been devoted to gathering data on the organizations active in the field of sector of underwater robotics and sensors. The gathered data had been related to their type (public sector, private sector and research centres). In addition to the descriptive data, private firms were particularly asked to identify their position in the value chain, blue economy sectors, Marine Strategy Framework Directive's 11 descriptors and their NACE code. In the following section the descriptive data will be presented.



A. Organizations by type and country (total 346)

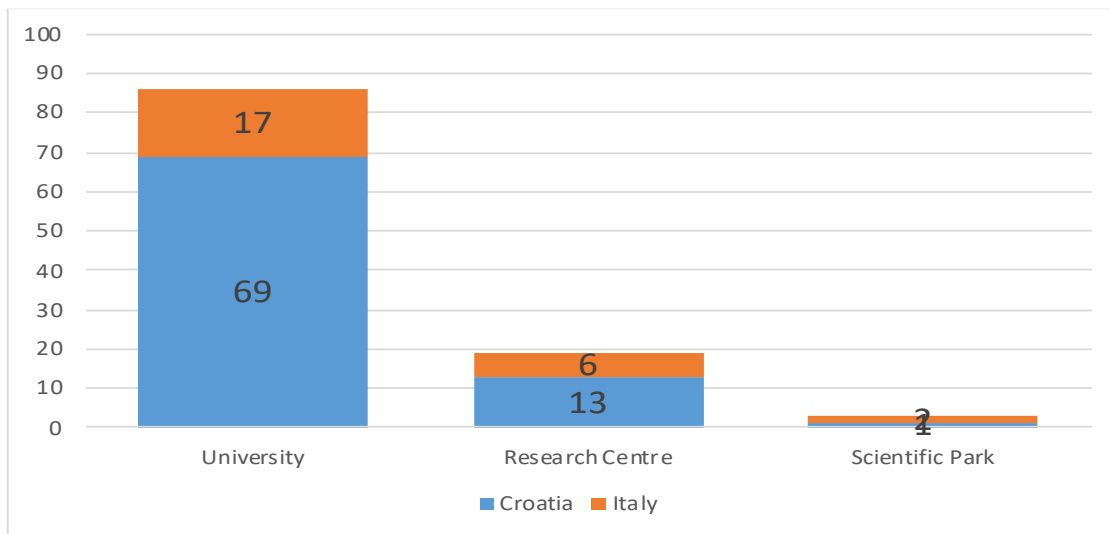


| | | Croatia | Italy | Total |
|----------------------------|---|---------|-------|------------|
| Scientific research | N | 83 | 25 | 108 |
| | % | 77% | 23% | 31% |
| Private sector | N | 74 | 52 | 126 |
| | % | 59% | 41% | 37% |
| Public sector | N | 92 | 20 | 112 |
| | % | 82% | 18% | 32% |

The percentage for countries refers to the distribution of the variable between the countries. The percentage for the total refers to the distribution of the variable across the type of organizations.

Our data sample is dominated by the private sector (37% of the overall data). While scientific research sector and public sector are rather evenly distributed (32% Public sector and 31% Scientific Research). With public sector playing a significant role in Croatia (82%) as in comparison to Italy (18%).

B. Scientific research by type and country (total 108)

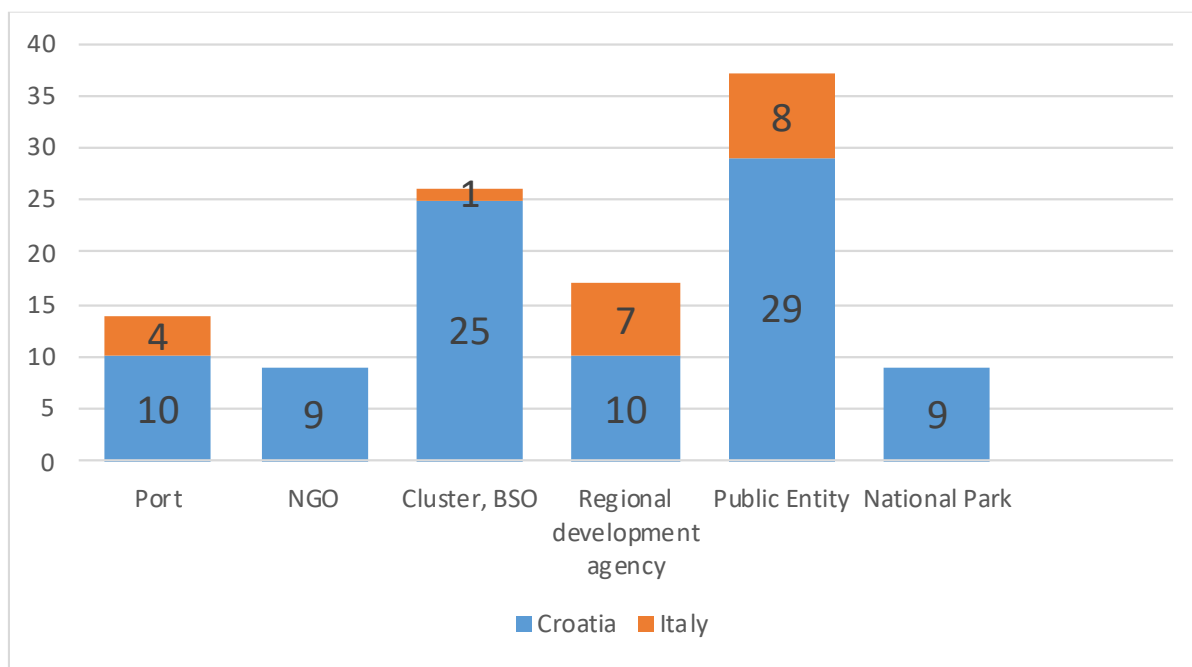


| | | Croatia | Italy | Total |
|------------------------|---|---------|-------|------------|
| University | N | 69 | 17 | 86 |
| | % | 80% | 20% | 80% |
| Research centre | N | 13 | 6 | 19 |
| | % | 68% | 32% | 18% |
| Scientific Park | N | 1 | 2 | 3 |
| | % | 33% | 67% | 3% |

The percentage for countries refers to the distribution of the variable between the countries. The percentage for the total refers to the distribution of the variable across the type of organizations.

The results show that in the scientific sector, universities (80%) are the main active actor both for Croatia and also Italy. Among the category are also included “laboratories within universities” (35 out of 86). However scientific parks do not play a crucial role in both countries with only one organization from each.

C. Public sector by type and country (total: 112)

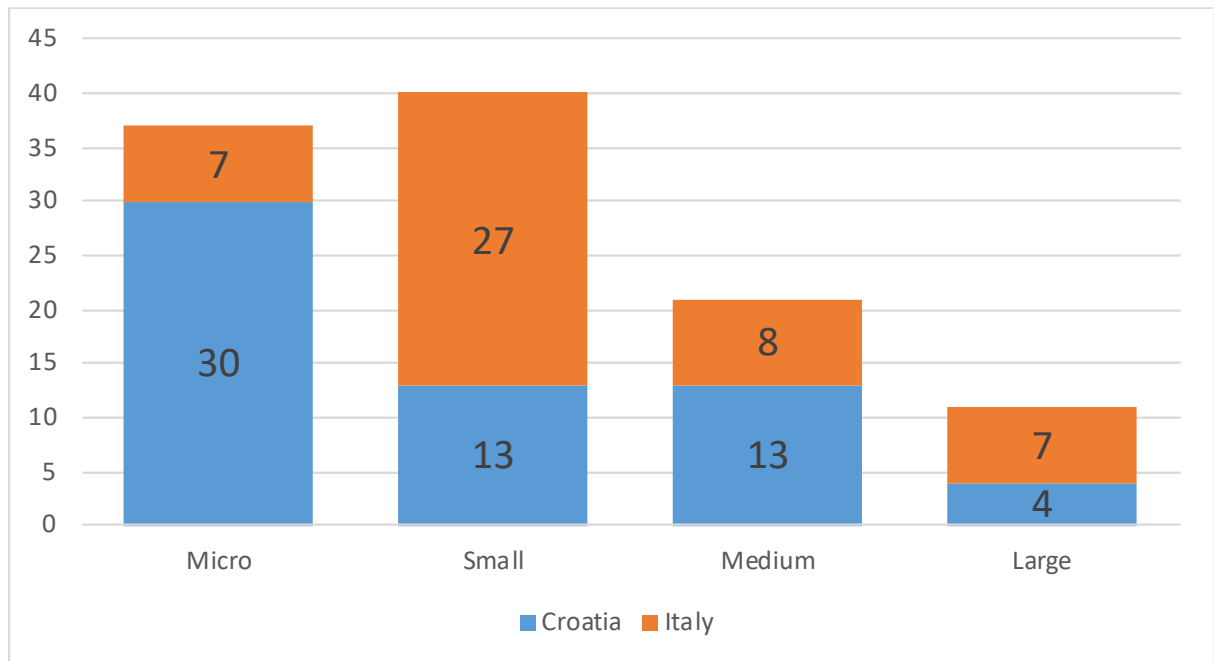


| | | Croatia | Italy | Total |
|---------------------------------|---|---------|-------|------------|
| Port | N | 10 | 4 | 14 |
| | % | 71% | 29% | 13% |
| NGO | N | 9 | 0 | 9 |
| | % | 100% | 0% | 8% |
| Cluster, BSO | N | 25 | 1 | 26 |
| | % | 96% | 4% | 23% |
| Regional develop. Agency | N | 10 | 7 | 17 |
| | % | 59% | 41% | 15% |
| Public entity | N | 29 | 8 | 37 |
| | % | 78% | 22% | 33% |
| National Park | N | 9 | 0 | 9 |
| | % | 100% | 0% | 8% |

The percentage for countries refers to the distribution of the variable between the countries. The percentage for the total refers to the distribution of the variable across the type of organizations.

In the public sector, there are different categories of institutions. Public entities play a crucial role (33%). However, we can observe the role of NGOs, National Parks, and Cluster-BSO in Croatia.

D. Private sector by size and country (total 126)

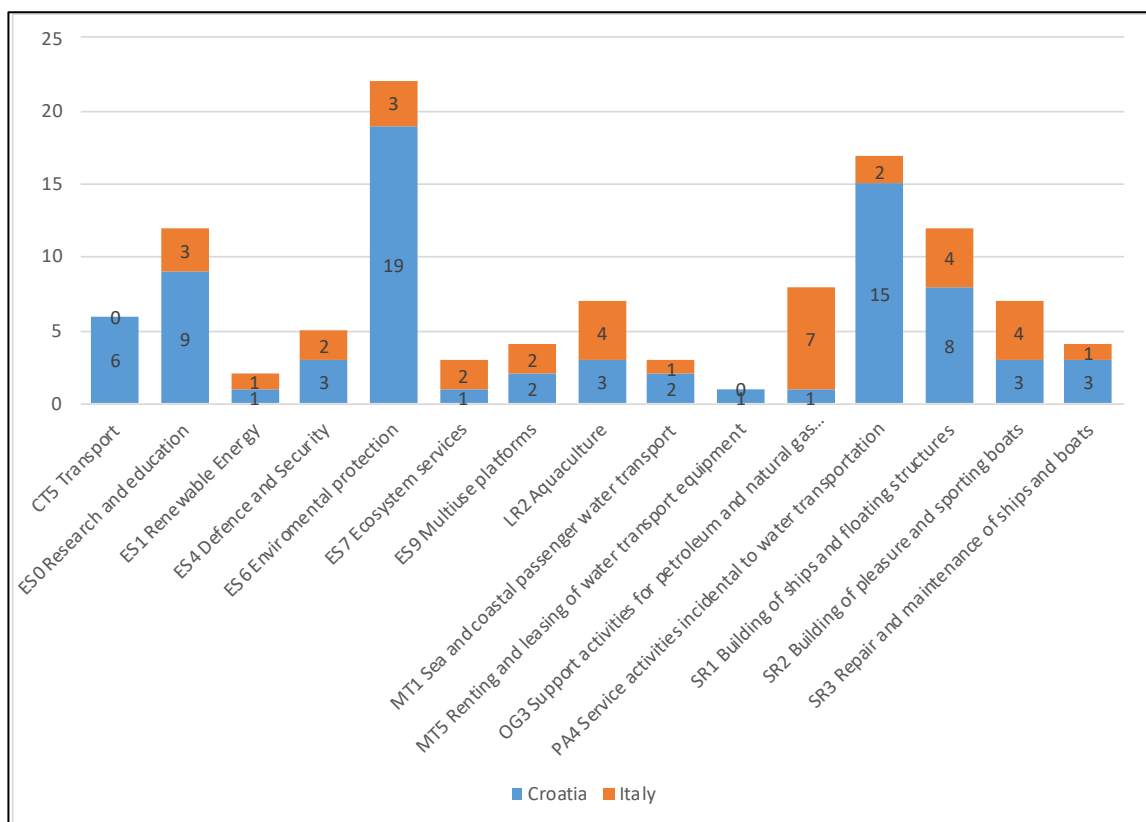


| | | Croatia | Italy | Total |
|----------------|---|---------|-------|------------|
| Micro | N | 30 | 7 | 37 |
| | % | 81% | 19% | 29% |
| Small | N | 13 | 27 | 40 |
| | % | 33% | 69% | 32% |
| Medium | N | 13 | 8 | 21 |
| | % | 62% | 38% | 17% |
| Large | N | 4 | 7 | 11 |
| | % | 36% | 64% | 9% |
| Missing | N | 14 | 3 | 17 |
| | % | 82% | 18% | 13% |

The percentage for countries refers to the distribution of the variable between the countries. The percentage for the total refers to the distribution of the variable across the size of organizations.

When it comes to the size of firms, micro and small firms (61% overall) are the main firms active in the sector. We do not see a clear distinction among the countries in terms of the size of the firms present in our sample.

E. Private sector by blue economy and country (total: 62 answers)



| | | Croatia | Italy | Total |
|-----------------------------------|---|---------|-------|------------|
| CT5 Transport | N | 6 | 0 | 6 |
| | % | 100% | 0% | 10% |
| ES0 Research and education | N | 9 | 3 | 12 |
| | % | 75% | 25% | 19% |
| | N | 1 | 1 | 2 |

| | | | | |
|--|---|------|-----|------------|
| ES1 Renewable Energy | % | 50% | 50% | 3% |
| ES4 Defence and Security | N | 3 | 2 | 5 |
| | % | 60% | 40% | 8% |
| ES6 Environmental protection | N | 19 | 3 | 22 |
| | % | 86% | 14% | 35% |
| ES7 Ecosystem services | N | 1 | 2 | 3 |
| | % | 33% | 67% | 5% |
| ES9 Multiuse platforms | N | 2 | 2 | 4 |
| | % | 50% | 50% | 6% |
| LR2 Aquaculture | N | 3 | 4 | 7 |
| | % | 43% | 57% | 11% |
| MT1 Sea and coastal passenger water transport | N | 2 | 1 | 3 |
| | % | 67% | 33% | 5% |
| MT5 Renting and leasing of water transport equipment | N | 1 | 0 | 1 |
| | % | 100% | 0% | 2% |
| OG3 Support activities for petroleum and natural gas extraction | N | 1 | 7 | 8 |
| | % | 13% | 88% | 13% |
| PA4 Service activities incidental to water transportation | N | 15 | 2 | 17 |
| | % | 88% | 12% | 27% |
| SR1 Building of ships and | N | 8 | 4 | 12 |
| | % | 67% | 33% | 19% |

| | | | | |
|--|---|-----|-----|------------|
| floating structures | | | | |
| SR2 Building of pleasure and sporting boats | N | 3 | 4 | 7 |
| | % | 43% | 57% | 11% |
| SR3 Repair and maintenance of ships and boats | N | 3 | 1 | 4 |
| | % | 75% | 25% | 6% |

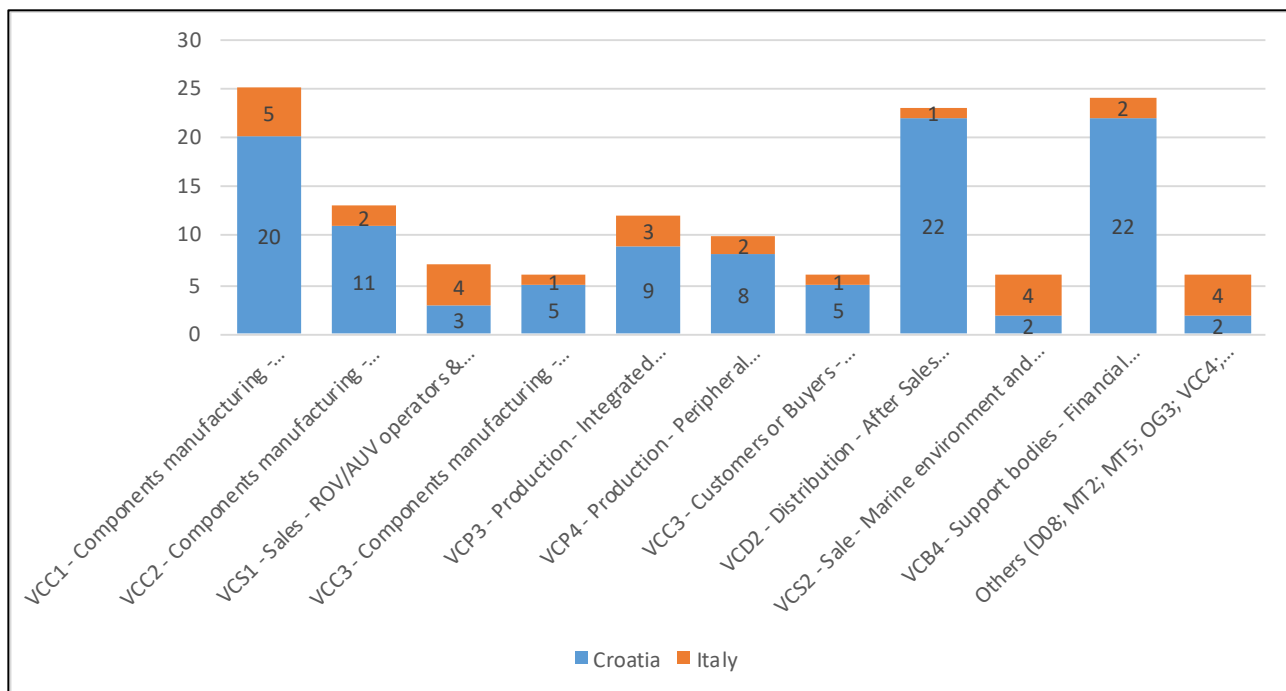
The percentage for countries refers to the distribution of the variable between the countries. The percentage of the total is calculated based on the number of firms that have answered to the question.

*Others: CT5 Transport; ES0 Research and education; LR3 Processing and preserving of fish; MT1 Sea and coastal passenger water transport; MT5 Renting and leasing of water transport equipment.

Of the total of 126 firms in our private sector sample, 62 had answered to this question (40 firms from Croatia and 22 firms from Italy). However, as some had stated more than one answer, the number of answers is higher than the total number of firms.

According to the blue economy sector categorization, “ES6 Environmental protection” is an important sector for Croatia (19 firms) followed by “PA4 Service activities incidental to water transportation” (15 firms) and “ES0 Research and education” (9 firms). However, for the Italian firms we can see the importance of “OG3 Support activities for petroleum and natural gas extraction” (7 firms).

F. Private sector by value chain position and country (total: 95 answers)



| | | Croatia | Italy | Total |
|--|---|---------|-------|-------|
| VCC1 - Components manufacturing - SW Components | N | 20 | 5 | 25 |
| | % | 80% | 20% | 20% |
| VCC2 - Components manufacturing - HW Components | N | 11 | 2 | 13 |
| | % | 85% | 15% | 10% |
| VCS1 - Sales - ROV/AUV operators & Survey Firms | N | 3 | 4 | 7 |
| | % | 43% | 57% | 6% |
| VCC3 - Components | N | 5 | 1 | 6 |
| | % | 83% | 17% | 5% |

| | | | | |
|--|---|-----|-----|-----|
| manufacturing - ROV/AUV Components & Tooling | N | 9 | 3 | 12 |
| | % | 75% | 25% | 10% |
| VCP3 - Production - Integrated systems manufacturing | N | 8 | 2 | 10 |
| | % | 80% | 20% | 25% |
| VCP4 - Production - Peripheral services and logistics | N | 5 | 1 | 6 |
| | % | 83% | 17% | 5% |
| VCC3 - Customers or Buyers - Offshore Energy & Installations | N | 22 | 1 | 23 |
| | % | 96% | 4% | 18% |
| VCD2 - Distribution - After Sales Customer Support & Technical Training | N | 2 | 4 | 6 |
| | % | 33% | 67% | 5% |
| VCS2 - Sale - Marine environment and depollution | N | 22 | 2 | 24 |
| | % | 92% | 8% | 19% |
| VCB4 - Support bodies - Financial Networks | N | 2 | 4 | 6 |
| | % | 33% | 67% | 5% |
| Others* | N | 2 | 4 | 6 |
| | % | 33% | 67% | 5% |

The percentage for countries refers to the distribution of the variable between the countries. The percentage of the total is calculated based on the number of firms that have answered to the question.

* Others: D08 Contaminants; MT2 Sea and coastal freight water transport; MT5 Renting and leasing of water transport equipment; OG3 Support activities for petroleum and natural gas extraction; VCC4 - Customers or Buyers - Fisheries and Aquaculture; VCD1 - Distribution - Marketing & Distribution.

Of the total of 126 firms in our private sector sample, 95 had answered to this question (73 firms from Croatia and 22 firms from Italy). However, as some had stated more than one answer, the number of answers is higher than the total number of firms.

When it comes to the value chain position the Croatian firms are mainly positioned in: “VCB4 - Support bodies - Financial Networks” (22 firms), “VCD2 - Distribution - After Sales Customer Support & Technical Training” (22 firms), “VCC1 - Components manufacturing - SW Components” (20 firms) and “VCC2 - Components manufacturing - HW Components” (11 firms). While the Italian firms are positioned in: “VCC1 - Components manufacturing - SW Components” (5 firms), “VCS1 - Sales - ROV/AUV operators & Survey Firms” (4 firms) and “VCS2 - Sale - Marine environment and depollution” (4 firms).

G. Private sector by NACE and country (total: 45 answers)

| | | Croatia | Italy | Total |
|--|---|---------|-------|-------|
| 71.1 Architectural and engineering activities and related technical consultancy | N | 9 | 1 | 10 |
| | % | 90% | 10% | 22% |
| 62.0 Computer programming, consultancy and related activities | N | 4 | 3 | 7 |
| | % | 57% | 43% | 16% |
| 27.9 Manufacture of other electrical equipment | N | 3 | | 3 |
| | % | 100% | 0% | 7% |
| 71.2 Technical testing and analysis | N | 1 | 1 | 2 |
| | % | 50% | 50% | 4% |
| 26.5 Manufacture of instruments and appliances for | N | 1 | 1 | 2 |
| | % | 50% | 50% | 4% |

| measuring, testing and navigation; watches and clocks | | | |
|---|---|-----|-----|
| Others* | N | 10 | 8 |
| | % | 56% | 44% |
| | | | 18 |
| | | | 40% |

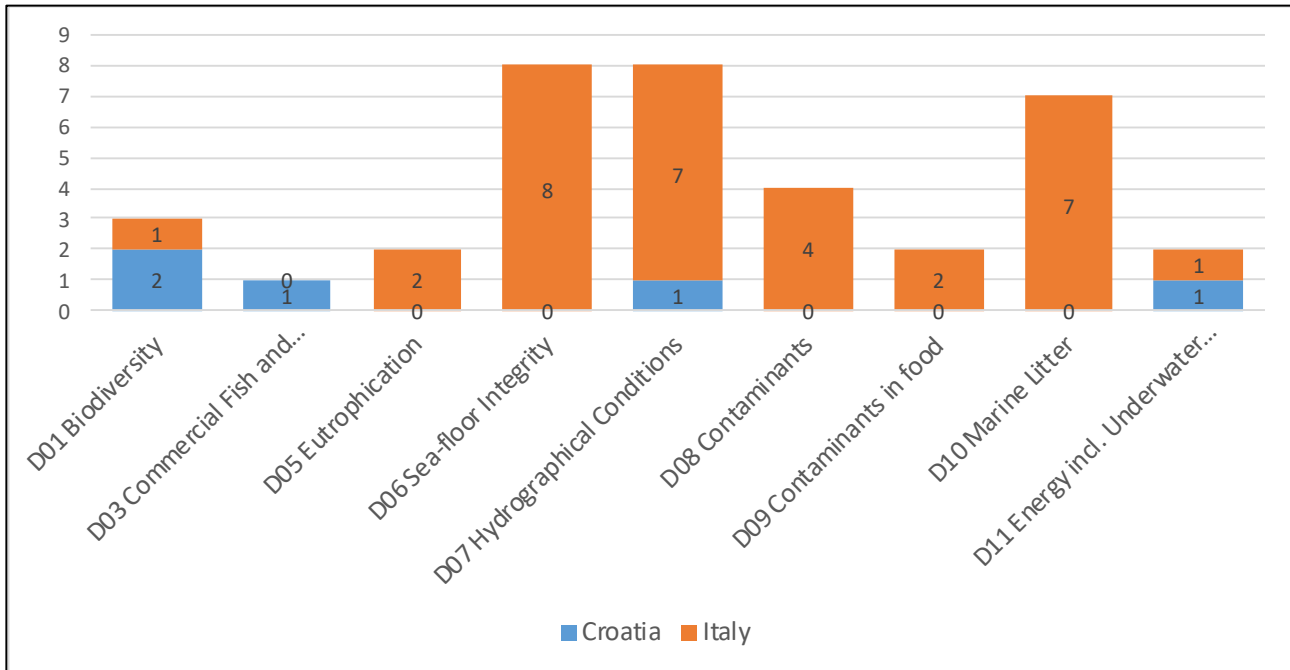
The percentage for countries refers to the distribution of the variable between the countries. The percentage of the total is calculated based on the number of firms that have answered to the question.

*Others: 3.1. Fishing; 3.2. Aquaculture; 9.1 Support activities for petroleum and natural gas extraction; 25.1 Manufacture of structural metal products; 26.1 Manufacture of electronic components and boards 28.9 Manufacture of other special-purpose machinery; 30.1 Building of ships and boats; 33.1 Repair of fabricated metal products, machinery and equipment; 33.2 Installation of industrial machinery and equipment; 38.1 Waste collection; 39.0 Remediation activities and other waste management services; 41.2 Construction of residential and non-residential buildings; 43.9 Other specialised construction activities; 46.1 Wholesale on a fee or contract basis; 46.9 Non-specialised wholesale trade; 50.0 Water transport; 61.9 Other telecommunications activities; 72.1 Research and experimental development on natural sciences and engineering; 74.9 Other professional, scientific and technical activities n.e.c..

Of the total of 126 firms in our private sector sample, 45 had answered to this question (29 firms from Croatia and 16 firms from Italy). However, as some had stated more than one answer, the number of answers is higher than the total number of firms.

The NACE codes show that the Croatian firms are active in: “71.1 Architectural and engineering activities and related technical consultancy” (9 firms). However, both for Italian and Croatian firms we can see that they are active in a wide variety of sectors when it comes to the NACE classification.

H. Private sector by Marine Strategy Framework Directive's 11 descriptors and country (total: 30 answers)



| | | Croatia | Italy | Total |
|--|---|---------|-------|-------|
| D01 Biodiversity | N | 2 | 1 | 3 |
| | % | 67% | 33% | 10% |
| D03 Commercial Fish and shellfish | N | 1 | 0 | 1 |
| | % | 100% | 0% | 3% |
| D05 Eutrophication | N | 0 | 2 | 2 |
| | % | 0% | 100% | 7% |
| D06 Sea-floor Integrity | N | 0 | 8 | 9 |
| | % | 0% | 89% | 30% |
| D07 Hydrographical Conditions | N | 1 | 7 | 8 |
| | % | 13% | 88% | 27% |
| D08 Contaminants | N | 0 | 4 | 4 |
| | % | 0% | 100% | 13% |

| | | | | |
|--|---|-----|------|-----|
| D09 Contaminants in food | N | 0 | 2 | 2 |
| | % | 0% | 100% | 7% |
| D10 Marine Litter | N | 0 | 7 | 8 |
| | % | 0% | 88% | 27% |
| D11 Energy incl. Underwater Noise | N | 1 | 1 | 2 |
| | % | 50% | 50% | 7% |

The percentage for countries refers to the distribution of the variable between the countries. The percentage of the total is calculated based on the number of firms that have answered to the question.

Of the total of 126 organizations in our private sector sample, 30 had answered to this question (5 from Croatia and 15 from Italy). However, as some had stated more than one answer, the number of answers is higher than the total number of firms.

The MSFD categorization shows that private organizations are mainly related to the “D06 Sea-floor Integrity” (30%) followed by “D07 Hydrographical Conditions” (27%) and “D10 Marine Litter” (27%).

I. Key Activities.

Only firms that were interviewed have answered to these questions. The key activities were stated as following:

- Geophysics; Habitat mapping; Water quality; Bathymetry; Autonomous Surface Vehicles (ASVs) (Autonomous underwater vehicles (AUVs) is more adapt for underwater);
- Service management and execution for the prevention, control and restraint of water pollution;
- Studies made for the assessment of the environmental impact coming from maritime activities or industrial sites along coastal areas or open sea;
- Sampling and monitoring of waters;
- Management and fulfilment of the pollution;
- Designing building and preparation of maritime crafts used for the prevention of pollution in the cleaning up of maritime and inland waters;
- Underwater robotic systems development and production;
- Underwater sensors development and production- ultrasonic and eddy current sensors remote control software for underwater robotic systems;
- Underwater non-destructive testing and inspection services (ultrasonic, eddy-current, visual);
- Underwater repair systems;
- Radar sensors research;
- Development, and production – electronics, phase array antennas, embedded software and signal processing software;
- Monitoring of fish fauna in transitional environments or in shallow waters;
- Monitoring of general biotic or abiotic parameters in coastal marine environments and transitional waters;
- Management of harmful and allochthonous wildlife, both freshwater and transitional marine waters, terrestrial including poultry (avicolo);

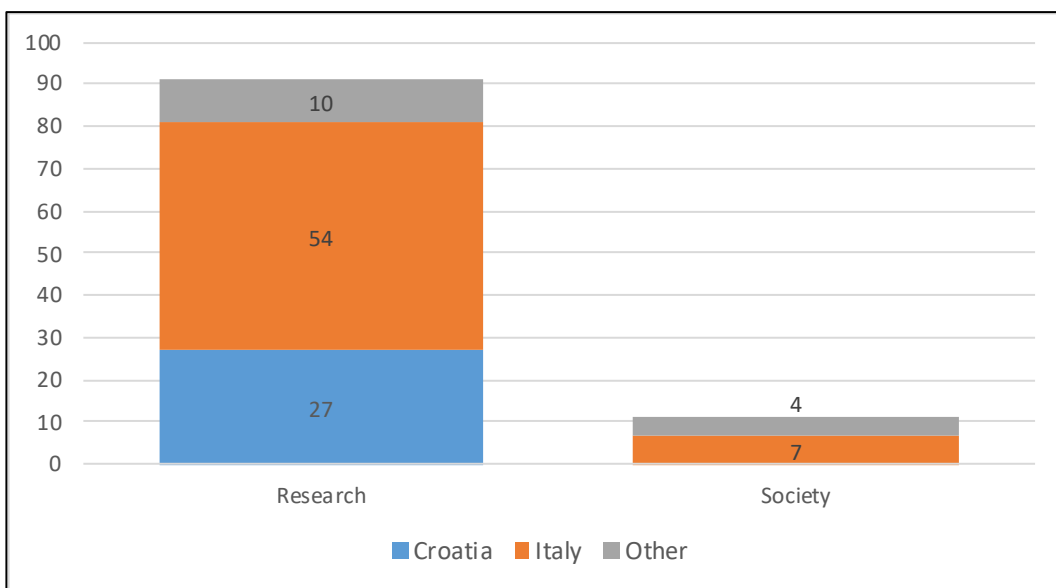
- Problem management and resource management related to fishing areas (both traditional fishing in the lagoon area and small-scale coastal fishing);
- Service and research project development (i.e., They have just closed a European project MARGNET of which they were partners. They worked on the assessment and removal of the presence of marine plastic waste in the upper Adriatic area).
- Scientific research in the field of underwater sensors. - Production of software for IoT and development of advanced methods for cooperative control of a fleet of AMVs and of their support vessel;
- Production of software and hardware components to be implemented in underwater robots and sensors;
- Advanced users of underwater robots for naval and offshore infrastructure inspection (e.g. structural integrity) and underwater robotics system integrators Engineering procurement and construction contractors operating in the energy segment and specialized offshore Multidisciplinary structural engineering, Naval engineering (e.g. ferry boats, anchor handling vessels, harbour platforms) Super yachts construction and sales



5.2. Projects:

Identification of the main projects (in the past 5 years) related to the sector, had been a main part of the data collection but during the desk research and also followed up by interviews. The projects had included both “research” projects or projects that involves the society (NGOs, citizens, students...). In the following analysis, projects are analysed by the country of lead partner.

J. Projects by type and country of Lead Partner (LP) (total projects: 102)



| | | Croatia | Italy | Other* | Total |
|-----------------|---|---------|-------|--------|-------|
| Research | N | 27 | 54 | 10 | 91 |
| | % | 30% | 59% | 11% | 89% |
| Society | N | 0 | 7 | 4 | 11 |
| | % | 0% | 64% | 36% | 11% |

The percentage for countries refers to the distribution of the variable between the countries. The percentage of the total is calculated based on the total number of projects.

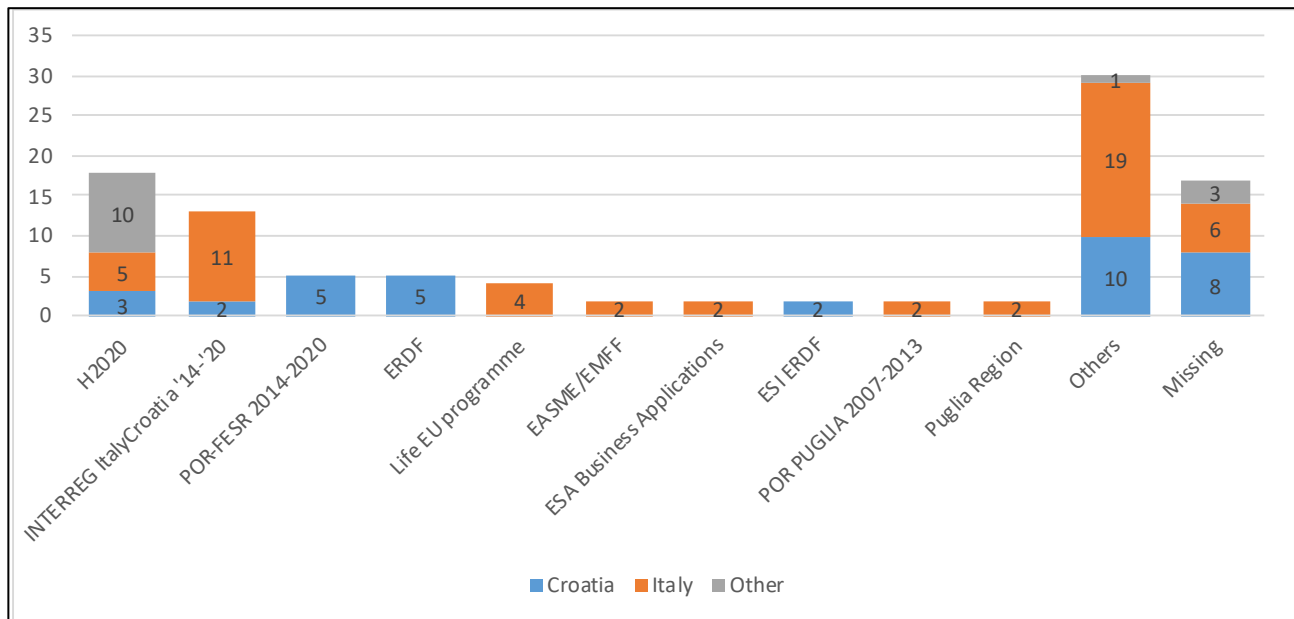
*Other countries as the lead partner included: Belgium, Germany, Greece, Israel, Netherland, Norway; Portugal, UK.

Identified projects had been mainly research projects (89%). In this regard Italians have been involved in 54 projects (59%) as the lead partner.

The gathered data also show that the main lead partners had been: CNR – ISMAR (5 projects); DIV Group (5 projects); Inetec Ltd. (4 projects); Proambiente S.c.r.l. (4 projects); ISPRA (2 projects); G-NOUS (2 projects), Seastema SpA (2 projects) and Byte Lab Group Ltd. (2 projects).



K. Funding programme and country of LP (total projects: 102)



| | | Croatia | Italy | Other | Total |
|---|---|---------|-------|-------|-------|
| H2020 | N | 3 | 5 | 10 | 18 |
| | % | 17% | 28% | 56% | 18% |
| INTERREG - Italy Croatia 2014-2020 | N | 2 | 11 | 0 | 13 |
| | % | 15% | 85% | 0% | 13% |
| POR-FESR 2014-2020 | N | 5 | 0 | 0 | 5 |
| | % | 100% | 0% | 0% | 5% |
| European regional development fund(ERDF) | N | 5 | 0 | 0 | 5 |
| | % | 100% | 0% | 0% | 5% |
| Life EU programme | N | 0 | 4 | 0 | 4 |
| | % | 0% | 100% | 0% | 4% |
| EASME/EMFF | N | 0 | 2 | 0 | 2 |
| | % | 0% | 100% | 0% | 2% |

| | | | | | |
|----------------------------------|---|----|------|----|----|
| ESA Business Applications | N | 0 | 2 | 0 | 2 |
| | % | 0% | 100% | 0% | 2% |
| | N | 2 | 0 | 0 | 2 |

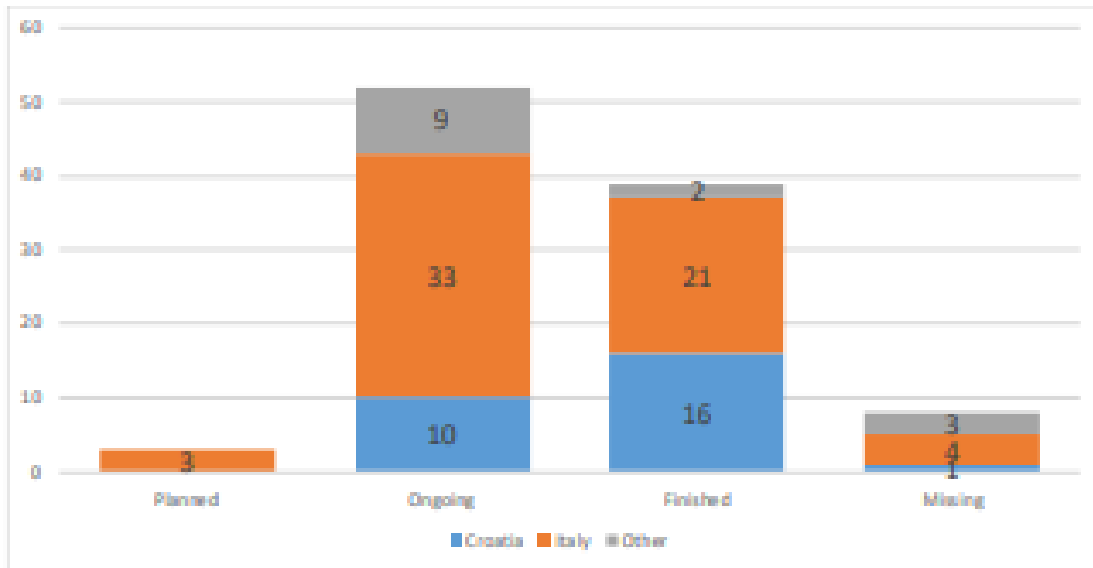
| | | | | | |
|---|---|------|------|-----|-----|
| ESI European Regional Development Fund | % | 100% | 0% | 0% | 2% |
| POR PUGLIA 2007-2013 | N | 0 | 2 | 0 | 2 |
| | % | 0% | 100% | 0% | 2% |
| Puglia Region | N | 0 | 2 | 0 | 2 |
| | % | 0% | 100% | 0% | 2% |
| Others | N | 10 | 19 | 1 | 30 |
| | % | 33% | 67% | 4% | 29% |
| Missing | N | 8 | 6 | 3 | 17 |
| | % | 47% | 35% | 18% | 17% |

The percentage for countries refers to the distribution of the variable between the countries. The percentage for the total refers to the distribution of the variable across the funding programme.

**Others: Adrion; Regional Technological Clusters 2014; Private source; IPA II; PON PNR 2015-2020 – BLUE GROWTH; INTERREG - Italy Croatia 2018-2021; Ministry of the Environment and Protection of Land and Sea; ROP-ERDF 2014-2020; PRIN 2017 MIUR; Regional Project Veneto Region; National Defense Ministry; ISPRA internal funding; Interregional Superintendent for Public Works.*

The main funding programmes for the projects had been the H2020 followed by INTERREG - Italy Croatia. However, for the Italian projects we can also see the role of local funds.

L. Status of the project by LP country (total projects: 102)

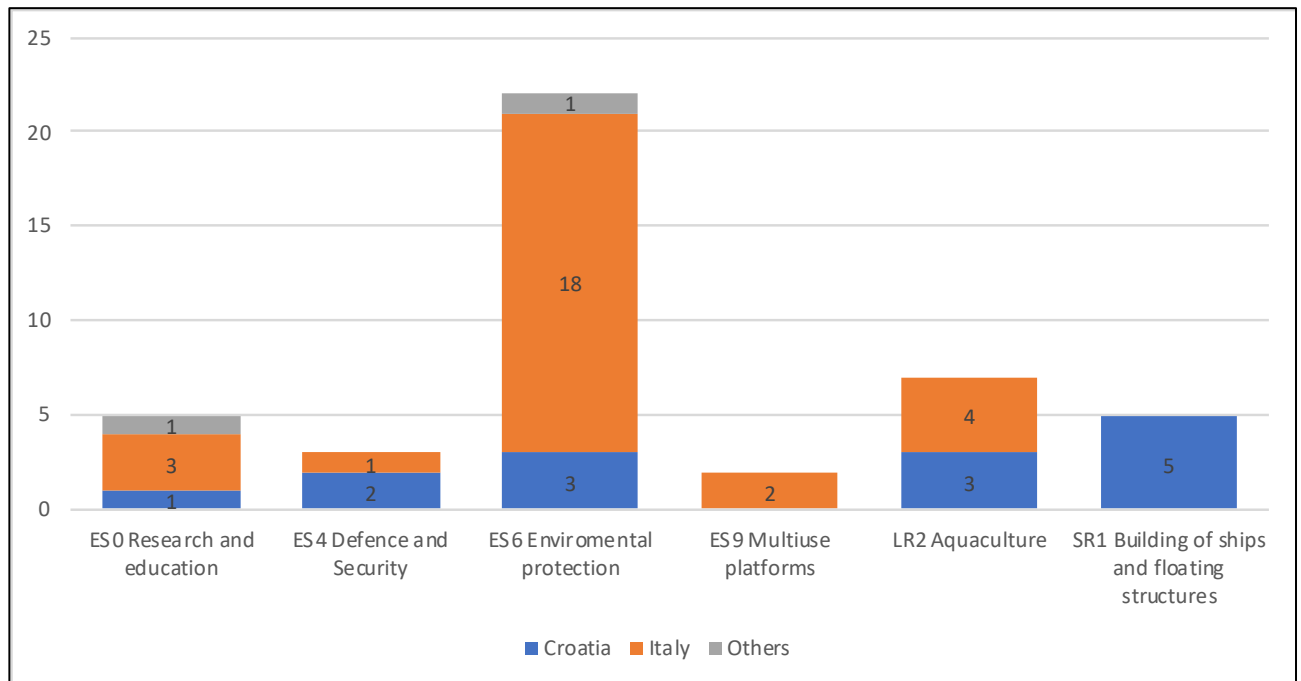


| | | Croatia | Italy | Other | Total |
|-----------------|---|---------|-------|-------|-------|
| Planned | N | 0 | 3 | 0 | 3 |
| | % | 0% | 100% | 0% | 3% |
| Ongoing | N | 10 | 33 | 9 | 52 |
| | % | 19% | 63% | 17% | 51% |
| Finished | N | 16 | 21 | 2 | 39 |
| | % | 41% | 54% | 5% | 38% |
| Missing | N | 1 | 4 | 3 | 8 |
| | % | 13% | 50% | 38% | 8% |

The percentage for countries refers to the distribution of the variable between the countries. The percentage for the total refers to the distribution of the variable across the status of the projects.

The projects in our data are mainly ongoing projects although we can also see 3 relevant projects planned for the future.

M. Projects by blue economy sector and LP country (total answers:41)



| | | Croatia | Italy | Others | Total |
|------------------------------------|---|---------|-------|--------|-------|
| ES0 Research and education | N | 1 | 3 | 1 | 5 |
| | % | 20% | 60% | 20% | 12% |
| ES4 Defence and Security | N | 2 | 1 | 0 | 3 |
| | % | 67% | 33% | 0% | 7% |
| ES6 Enviromental protection | N | 3 | 18 | 1 | 22 |
| | % | 14% | 82% | 5% | 54% |
| ES9 Multiuse platforms | N | 0 | 2 | 0 | 2 |
| | % | 0% | 100% | 0% | 5% |
| LR2 Aquaculture | N | 3 | 4 | 0 | 7 |
| | % | 43% | 57% | 0% | 17% |
| | N | 5 | 0 | 0 | 5 |

| | | | | | |
|--|---|------|----|----|-----|
| SR1 Building of ships and floating structures | % | 100% | 0% | 0% | 12% |
|--|---|------|----|----|-----|

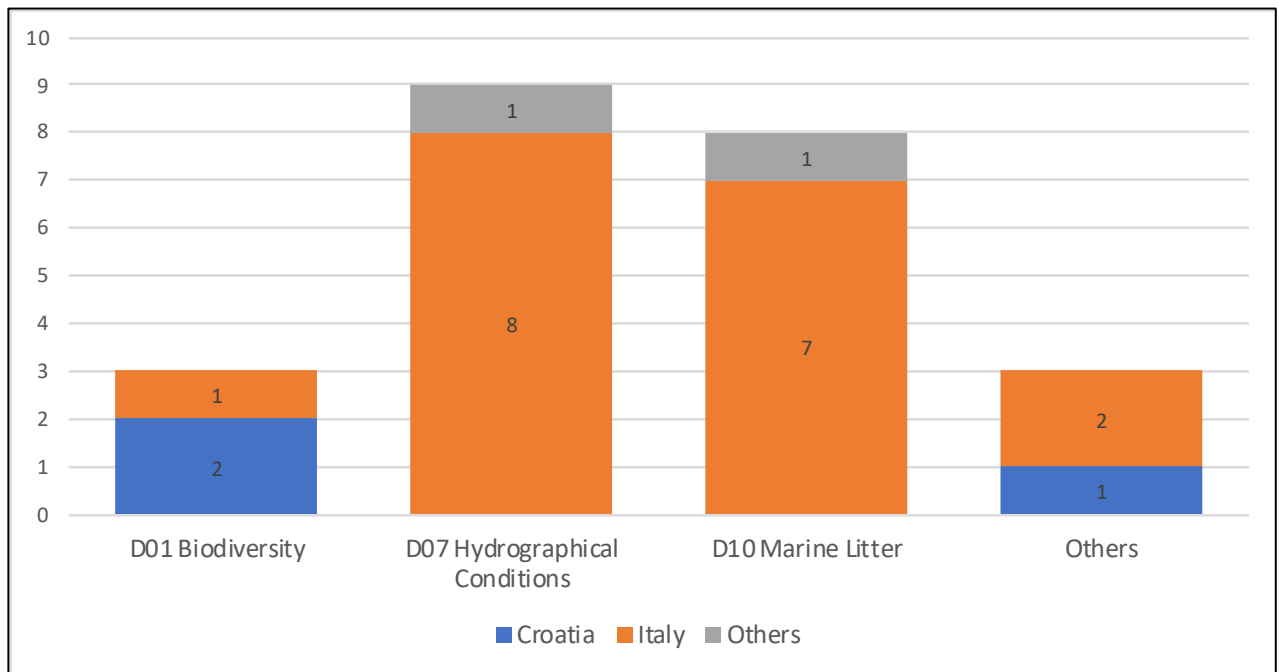
The percentage for countries refers to the distribution of the variable between the countries. The percentage of the total is calculated based on the number of firms that have answered to the question.

*Others: ES7 Ecosystem services; ES9 Multiuse platforms

Of the total of 102 projects in our private sector sample, 41 had answered to this question (11 projects from Croatia and 28 projects from Italy; 2 from others). However, as some had stated more than one answer, the number of answers is higher than the total number of firms.

Projects are mainly related to the “ES6 Environmental protection” when it comes to the blue economy sector (54%).

N. Marine Strategy Framework Directive's 11 descriptors (23 answers in total)



| | | Croatia | Italy | Others | Total |
|--------------------------------------|---|---------|-------|--------|-------|
| D01 Biodiversity | N | 2 | 1 | 0 | 3 |
| | % | 67% | 33% | 0% | 14% |
| D07 Hydrographical Conditions | N | 0 | 8 | 1 | 9 |
| | % | 0% | 89% | 11% | 41% |
| D10 Marine Litter | N | 0 | 7 | 1 | 8 |
| | % | 0% | 88% | 13% | 36% |
| Others | N | 1 | 2 | 0 | 3 |
| | % | 33% | 67% | 0% | 14% |

The percentage for countries refers to the distribution of the variable between the countries. The percentage of the total is calculated based on the number of firms that have answered to the question.

*D02 Non-indigenous Species; D03 Commercial Fish and shellfish; D06 Sea-floor Integrity.

Of the total of 102 projects in our private sector sample, 23 had answered to this question (3 projects from Croatia and 18 projects from Italy; 2 from the Netherlands). However, as some had stated more than one answer, the number of answers is higher than the total number of firms.

The MSFD categorization shows that Projects are mainly related to the “D07 Hydrographical Conditions” (41%) followed by D10 Marine Litter (36%).

5.3. Key resources

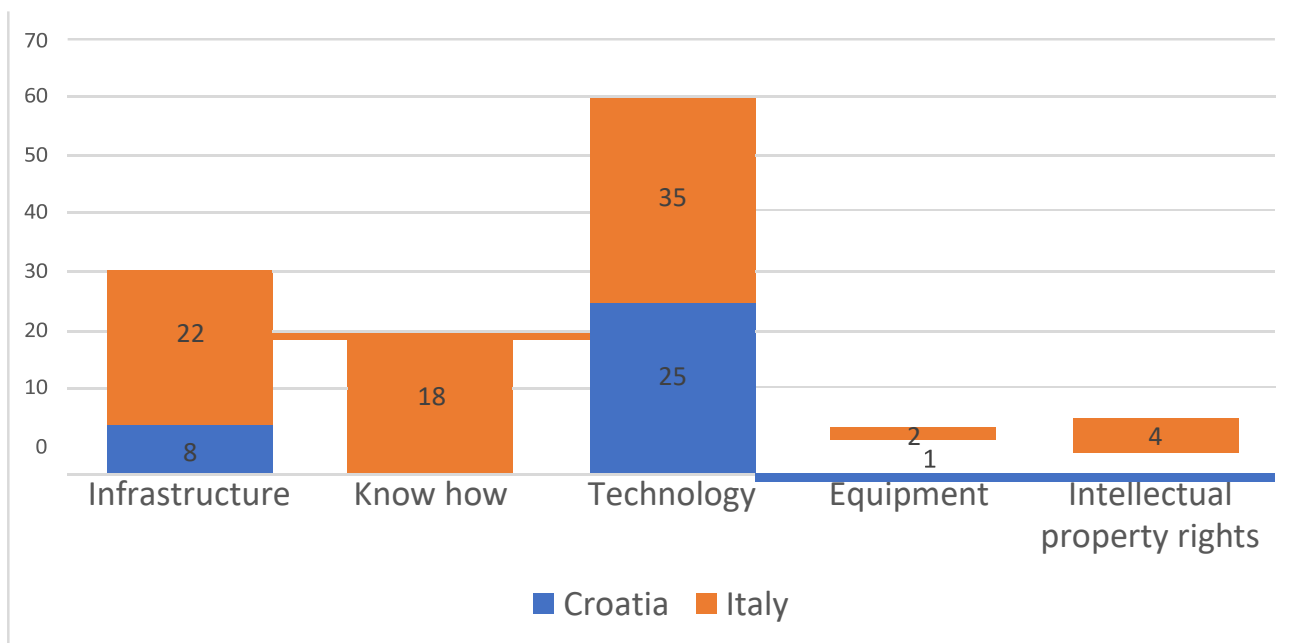
Organizations were asked to indicate their main key resources refer to the resources that the company/institution would like to communicate to potential business and research partners.

They had been categorized as following:

- infrastructures (R&D labs; testing labs; Fablabs; etc.)
- technologies (laser cutter; 3D metal printer; lidar technologies; etc.)
- intellectual property rights (patents; trademarks, etc.)
- equipment
- know-how (if none)

O. Key resources by category (total answers: 115)

Graph1- key resources by category



| | | Croatia | Italy | Total | Examples |
|-------------------------------------|---|---------|-------|-------|---|
| Infrastructure | N | 8 | 22 | 30 | Vehicles for monitor and studying the marine ecosystem; R&D lab |
| | % | 27% | 73% | 26% | |
| Know how | N | 0 | 18 | 18 | Structural calculations; analysing satellite data; the "commercial" side of developing products |
| | % | 0% | 100% | 16% | |
| Technology | N | 25 | 35 | 60 | Hardware and software; 3D Print; Submarine technology |
| | % | 42% | 58% | 52% | |
| Equipment | N | 1 | 2 | 3 | Underwater equipment; equipment for diving activities |
| | % | 33% | 67% | 3% | |
| Intellectual property rights | N | 0 | 4 | 4 | Patents in the sector |
| | % | 0% | 100% | 3% | |

The percentage for countries refers to the distribution of the variable between the countries. The percentage of the total is calculated based on the number of firms that have answered to the question.

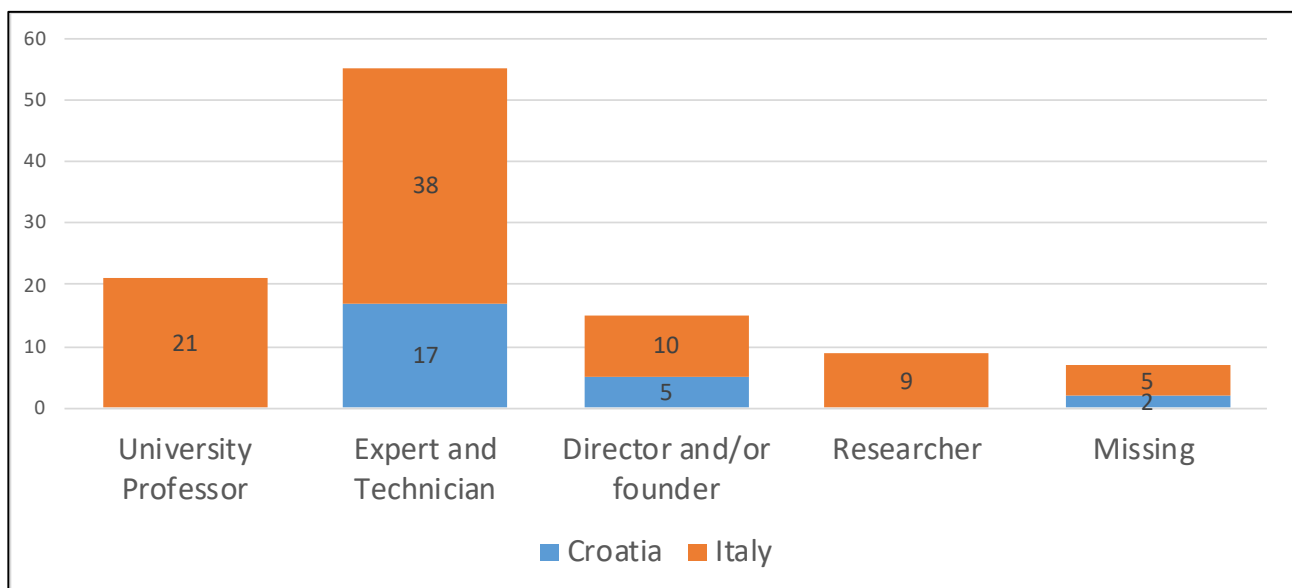
In total 115 key resources including 34 (30%) from Croatia and 81 (70%) from Italy had been identified. The main category is related to the having a key technology (25 from Croatia and 35 from Italy) followed by an infrastructure (8 from Croatia and 22 from Italy) and for the Italian firms a know-how (18 from Italy). However, organizations in our sample does not show to be in position of an important Intellectual property rights with only four firms stating such.

5.4. Key individuals

Information related to key persons working in the sector of underwater robotics and sensors had also been collected both in the desk research phase and also during the interviews.

In total 107 individuals including 24 (22%) from Croatia and 83 (78%) from Italy had been identified. The main specialization is University Professors (21 from Italy) followed by experts and technicians (16 from Croatia and 38 from Italy).

P. Key individuals by specialization (total answers: 107)



| | | Croatia | Italy | Total | Examples of Expertise |
|------------------------------|---|---------|-------|-------|--|
| University Professor | N | 0 | 21 | 21 | Expert in Integrated 3D design; Expert in fuel cell propulsion; Expert in electric systems |
| | % | 0% | 100% | 20% | |
| Expert and Technician | N | 17 | 38 | 55 | GIS and drones; Marine geologist; submarine |
| | % | 31% | 69% | 51% | |

| | | | | | |
|--------------------------------|---|-----|------|-----|---|
| | | | | | ships building; IT and Security Service; environmental sciences; Environmental monitoring |
| Director and/or founder | N | 5 | 10 | 15 | |
| | % | 33% | 67% | 14% | |
| Researcher | N | 0 | 9 | 9 | Researcher geologist, researcher physician, researcher engineer |
| | % | 0% | 100% | 8% | |
| Missing | N | 2 | 5 | 7 | |
| | % | 29% | 71% | 7% | |

Q. Key individuals by ERC sector (total answers: 45)

| | Total | |
|--|--------------|-----|
| LS8 Ecology, Evolution and Environmental Biology | N | 7 |
| | % | 16% |
| PE7_3 Simulation engineering and modelling | N | 7 |
| | % | 16% |
| PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment | N | 6 |
| | % | 13% |
| PE10_8 Oceanography (physical, chemical, biological, geological) | N | 5 |
| | % | 11% |
| PE7_10 Robotics | N | 5 |
| | % | 11% |
| SH2 Institutions, Values, Environment and Space | N | 3 |
| | % | 7% |
| Others* | N | 18 |
| | % | 40% |

**Others: PE10 Earth System Science; PE6 Computer Science and Informatics; PE7_1 Control engineering; PE7_2 Electrical engineering: power components and/or systems; PE7_7 Signal processing; SH1 Individuals, Markets and Organisations; SH4 The Human Mind and Its Complexity; PE8_1 Aerospace Engineer; LS9_3 Applied animal sciences.*

Of the total of 107 individuals in our sample, 45 had answered to this question (2 from Croatia and 43 from Italy). However, some had stated more than one answer. The majority of individuals belongs to LS8 Ecology, Evolution and Environmental Biology (7 key individuals) and PE7_3 Simulation engineering and modelling (7 key individuals), followed by PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment (6 individuals).

5.5. Key platforms:

The platforms (total 19) for co-development related to the sector of underwater robotics and sensors were identified as following:

| Platform name | Web Address | Info + |
|---|---|--|
| crodrones.network. | https://crodrones.network/ | Croatian network/platform of drone operators and related services. |
| Plavo Oko / Blue Eye | http://plavo.oko.hr/ | Blue eye is an application designed to systematically record data on marine organisms and sea pollution with the aim of increasing knowledge of the sea and its effective protection. By delivering photos and information, a person can actively participate and assist in scientific research (Citizen Science) thus achieving a better insight in the movement of a given organism and more effective measures for the protection of the Adriatic Sea. The purpose of the application is mutual informing and education of the public, as well as the effective operation of experts and services in charge in solving possible problems related to the protection of the Adriatic Sea. Mutual information transmission creates a more complete picture of the state of biodiversity and the movements of possible dangerous species. |
| Italian Institute of Robotics and Intelligent Machines | https://i-rim.it/en/ | I-RIM, the Institute for Robotics and Intelligent Machines, aims to favor the development and practice of Robotics and Intelligent Machines technologies to improve citizens quality of life and well-being and enhance society conditions, through the development of new solutions for |

| | | |
|---|--|---|
| <p>euRobotics</p> | | <p>helping people, improving working conditions, transferring applications and economic enhancement of research. I-RIM is an institute created to offer a national organizational reference for its members and stakeholders, and to interact with public institutions on the topics of Robotics and Intelligent Machines.</p> |
| | <p>https://www.eu-robotics.net/eurobotics/index.html</p> | <p>euRobotics aisbl (Association Internationale Sans But Lucratif) is a Brussels based international non-profit association for all stakeholders in European robotics. It was founded in September 2012 with the aim to strengthen Europe's competitiveness and to ensure industrial leadership of manufacturers, providers and end-users of robotics technology-based systems and services</p> |
| <p>Cluster BIG (Blue Italian Growth)</p> | <p>http://www.clusterbig.it/</p> | <p>National Italian Cluster for Blue Growth. Main Topics: - Marine and coastal environment - Blue biotechnologies - Renewable energy from the sea - Marine a-biotic resources - Marine biotic resources - Shipbuilding and marine robotics.</p> |
| <p>MITO technology</p> | <p>https://mitotech.eu/</p> | <p>Responsible partner for companies, universities, venture funds, start-ups and research centers to turn their intellectual property in economic success</p> |
| <p>Mind-The-Bridge</p> | <p>https://mindthebridge.com/</p> | <p>Innovation advisory firm working at the intersection of corporates and startups</p> |

| | | |
|-------------------------------------|---|--|
| Evolen-up | http://www.evolenup.com | Start-up accelerator in the Energy sector |
| Aster Fab | https://aster-fab.com/ | <p>Aster fab:</p> <ul style="list-style-type: none"> - helps companies identify the technologies, business models and key driving forces disrupting their industry through the analysis of clusters of startups. - helps companies foster startup engagement through the identification of relevant collaboration scenarios and investment opportunities - helps companies find their pioneering path into the future and get their break-through innovation off the ground |
| SWiG (Subsea Wireless Group) | https://subseawirelessgroup.com/ | <p>International oil and gas industry network promoting interoperability for subsea wireless communications (radio frequency, acoustic, free-space optic, inductive power, hybrid). SCOPE: Definition of document standards for subsea wireless communication and power transfer technologies for the Oil&Gas.</p> |
| ROCA | http://www.roca-oilandgas.com | Roca (Ravenna Offshore Contractor Association) is an association of contractors and suppliers in the offshore area. |
| ATENA (Ravenna) | http://www.atenanazionale.org/web | ATENA is an association that involves engineers, professors, researchers, shipowners, insurers and maritime operators. ATENA focuses in the shipbuilding processes, design, management, environmental issues, safety and security. |

| | | |
|---------------------------|---|--|
| DESERT UNDERWATER | http://desert-underwater.dei.unipd.it/index.php/desert-underwater-team-members/ | Complete set of public C++ libraries that extend the NS-MIRACLE simulator to support the design and implementation of underwater network protocols |
| WOSS | http://telecom.dei.unipd.it/ns/woss/ | Multi-threaded C++ framework that permits the integration of any existing underwater channel simulator that expects environmental data as input and provides as output a channel realization |
| PhotoScan Agisoft | | Photogrammetric |
| RHINOCEROS | https://www.rhino3d.com/it/ | 3D modelling |
| ORCA 3D | https://orca3d.com/ | 3D modelling |
| Real Engine | | Virtual reality |
| EuroMarine Network | https://www.euromarinenetwork.eu/about-us/scientific-strategy-and-plan | <p>EuroMarine is a European marine science network. It represents the merger of the scientific communities of three former European Networks of Excellence:</p> <ul style="list-style-type: none"> • EUR-OCEANS • Marine Genomics Europe • MarBEF. <p>The primary goals of EuroMarine are to support the identification and initial development of important emerging scientific topics or issues and associated methodologies in marine sciences, as well as to foster new services relevant to the marine scientific community.</p> |

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Annex 1:

Organizations in the platform by 30th of June 2023.

Scientific Research (SCR)

| |
|--|
| (FER) Faculty of Electrical Engineering and Computing, University of Zagreb |
| Laboratory for Underwater Systems and Technologies (LABUST) |
| Laboratory for autonomous systems and mobile robotics (LAMOR) |
| (FSB) The Faculty of Mechanical Engineering and Naval Architecture, University of Zagreb |
| Department of Vessel Construction |
| Department of Robotics and Automation of Production Systems |
| Institute for Engines and Means of Transport |
| Laboratory for Automation and Robotics |
| Laboratory for autonomous systems |
| Computer Intelligence Laboratory |
| Department of Water and Environmental Engineering |
| (PMF) Faculty of Science |
| Department of Biology |
| (UNIRI) The University of Rijeka |
| (RITEH) Faculty of Engineering |
| Department of Automation and Electronics |
| Department of Naval Architecture and Ocean Engineering |
| (PFRI) Faculty of Maritime Studies |
| (AIRI) Center for Artificial Intelligence and Cybersecurity |
| Laboratory for Machine Learning |
| Laboratory for Computer Vision, Virtual and Augmented Reality |
| Laboratory for Cybersecurity of Communication and Navigation Devices |
| Laboratory for Autonomous Navigation Systems |
| Laboratory for Artificial Intelligence in Mechatronics |
| (UNIST) The University of Split |
| Technology Transfer Office, University of Split |
| Research and development office |
| Department of Professional Studies |
| (PFST) Faculty of Maritime Studies |
| Department for Marine Electrical engineering and IT |
| (FESB) Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split |
| Department of Electronics and Computing |
| Department of Mechanical Engineering and Naval Architecture |
| (UNIDU) University of Dubrovnik |
| Maritime department |
| Department of Aquaculture |
| Department of electrical and computer engineering |
| Institute for Marine and Coastal Research |
| (UNIZD) University of Zadar |
| (UNIPU) University of Pula |

| |
|--|
| (ICENT) Innovation Centre Nikola Tesla |
| (ATRAC) Adriatic training and research centre |
| (IZOR) Institute of Oceanography and fisheries |
| Physical Oceanography Laboratory |
| Laboratory of Chemical Oceanography and Sedimentology of the Sea |
| Laboratory of Plankton and Shellfish toxicity |
| Laboratory of Marine Microbiology |
| Laboratory for Benthos |
| Laboratory of Ichthyology and Coastal Fishery |
| Laboratory of Fisheries Science and Management of Pelagic and Demersal Resources |
| Laboratory for Aquaculture |
| (IRB) Ruđer Bošković Institute |
| Center for Marine Research |
| Laboratory of marine ecotoxicology |
| Laboratory for Evolutionary Ecology (LEE) |
| Laboratory for marine microbial ecology |
| Laboratory for Marine Nanotechnology and Biotechnology |
| Division for Marine and Environmental Research |
| Laboratory for Aquaculture and Pathology of Aquatic Organisms |
| Laboratory for Analytical Chemistry and Biogeochemistry of Organic Compounds |
| Laboratory for inorganic environmental geochemistry and chemodynamics of nanoparticles |
| Laboratory for marine and atmospheric biogeochemistry |
| Laboratory for Biological Effects of Metals |
| Laboratory for biological diversity |
| Laboratory for physical chemistry of traces |
| Laboratory for physical chemistry of aquatic systems |
| Laboratory for Informatics and Environmental Modelling |
| Laboratory for molecular ecotoxicology |
| Laboratory for Environmental Microbiology and Biotechnology |
| Laboratory for Radioecology |
| The Center for Informatics and Computing |
| ALGEBRA |
| (FOI) Faculty of Organization and Informatics |
| (MedILS) Mediterranean Institute for Life Sciences |
| (VUŠ) The Polytechnic of Šibenik |
| (UNIN) University North |
| (TVZ) Zagreb University of applied sciences |
| Craft College, Institution for Adult Education |
| CNR |
| University of Bologna |
| University of Bologna DEPARTMENT Civil, Chemical, Environmental, and Materials Engineering - DICAM |
| University of Bologna Marine Biology and Fisheries Laboratory of Fano |
| University Ca' Foscari of Venezia |
| University Ca' Foscari of Venezia- Dipartimento di Scienze ambientali, Informatica e Statistica |

| |
|---|
| University Ca' Foscari of Venezia - Department of Humanities |
| Politecnico Bari DICATECh - Dipartimento di Ingegneria Civile, Ambientale, del Territorio, Edile e di Chimica |
| CMCC - Fondazione Centro Euro-Mediterraneo sui Cambiamenti Climatici |
| Department of Innovation Engineering |
| DISTEBA - Unisalento |
| ISME |
| University of Padua |
| University of Padua - Department of Information Engineering |
| University of Padua - Department Civil, Environmental and Architectural Engineering |
| University of Padua - Department of Biology |
| University of Padua - Department of Comparative Biomedicine and Food Science |
| Area Science Park |
| University of Trieste |
| University of Trieste - Department of Engineering and Architecture |
| Istituto Nazionale di Oceanografia e Geofisica Sperimentale - OGS |
| The Abdus Salam International Centre for Theoretical Physics |
| Università Politecnica delle Marche - Dipartimento di Ingegneria dell'informazione |
| Istituto Zooprofilattico Sperimentale delle Venezie |
| t2i – trasferimento tecnologico e innovazione s.c. a r.l. |
| CBRO |
| SPG & Centar izvrsnosti Sv.Lovre |
| Croatian Academy of Engineering |
| Bicro BioCENTRE |
| (AGR) Faculty of Agriculture |

Private Sector (PRS)

| |
|---|
| Bor-plastika d.o.o. |
| BRODOSPLIT d.d. |
| Byte Lab grupa d.o.o. |
| DALMONT d. o. o. |
| DE NAVAL d. o. o. |
| DIIV d.o.o. (Društvo za Istraživanje i Iskorištavanje Voda) |
| DVOKUT ECRO d.o.o. |
| Eko projekt d.o.o. |
| Eko-Adria d.o.o. |
| Ericsson Nikola Tesla d.d. |
| Exact Byte d.o.o. |
| GALO INDUSTRIES j.d.o.o. |
| GDi d.o.o. |
| Geolux d.o.o. |
| H2O robotics d.o.o. |
| iCat d.o.o. |
| INETEC - Institut za nuklearnu tehnologiju d.o.o. |

| |
|---|
| KvarnerCAD d.o.o. |
| NEPTUN SUB |
| NOVAMINA - Centar inovativnih tehnologija, d.o.o. za usluge |
| Oikon d.o.o. - Institut za primjenjenu ekologiju |
| Penta d.o.o. |
| Pičuljan technologies d.o.o. |
| Posada d.o.o. |
| PROBOTICA d.o.o. |
| RADEŽ d.d. |
| RoMB Technologies |
| Sarda d.o.o |
| Sea Cras jdoo |
| STEMI d.o.o. |
| Vectrino d.o.o. |
| Jadranski pomorski servis d.d. |
| Pelig d.o.o. |
| CLEAN BLUE d.o.o. |
| Jel-Tom d.o.o. |
| Bedalov d.o.o. |
| Ponikve eko otok Krk d.o.o. |
| Communication Technology srl |
| PROAMBIENTE S.c.r.l. (consorzio) |
| Saipem S.p.A. |
| Redaelli Tecna SPA |
| TRIPMARE SPA |
| Crismani ecologia srl |
| Skyproxima |
| Rana Diving SPA |
| Subsea fenix srl |
| Bourbon offshore DNT s.r.l |
| Seastema SPA |
| CNT Technologies Srls |
| Reicom- Insis engineering solutions Srl |
| EniProgetti SpA |
| SOCOTEC Italia |
| Diamec |
| Microlaben |
| Shoreline soc. Coop. |
| Laguna Project snc |
| ANTHEUS srl |
| APPHIA srl |
| Servizi Tecnici S.r.l. |
| PLANETEK Italia Srl |
| MEDIS DIH |

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| Terminale GNL Adriatico S.r.l. |
| G-NOUS Srl |
| DIAMEC Technology Srl |
| Rosetti Marino Group of Companies S.p.A. |
| MICOPERI S.p.A |
| Navalprogetti Srl |
| Aqua Engineering Srl |
| Orion S.p.A. |
| GeoCom Parma |
| GREEN SEA Soc. Coop |
| SELC Soc. Coop. |
| AGRI.TE.CO sc Ambiente Progetto Territorio |
| ELMAR s.r.l. |
| ROVCRAFT |
| Distretto Ittico di Rovigo e Chioggia |
| WIRELESS AND MORE |
| CODEVINTEC |
| Tecnos sas Chioggia |
| ViaKornel |
| Statim d.o.o. |
| Cromaris d.o.o. |
| Novacavi Srl |
| Aitronik Srl |
| River cleaning |
| Hidrocibalae d.o.o. |
| SAP Hrvatska |
| Prehnit d.o.o. |
| Plovput d.o.o. |
| ISKRA shipyard 1 d.o.o. |
| Aitac d.o.o. |
| CIAN d.o.o. |
| Cronomar d.o.o. |
| Miab d.o.o. |
| FORTIA d.o.o. |
| Flumensys Technologies B.V. |
| Platforma 22 d.o.o. |
| ANT d.o.o. |
| Primotronic d.o.o. |
| ADRIA LIBAR d.o.o. |
| Eol-ekos d.o.o. |
| MARINA PUNAT d.o.o. |
| Salona VAR d.o.o. |
| Jadran tuna d.o.o. |
| ADRIATIC FARMING d.o.o. |

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| AS Labruna |
| RIVER CLEANING |
| INNOVO |
| MICAD |
| CPI ENG |
| BOSS Technologies |
| Tergeste Power and Propulsion |
| Zagrebačka burza d.d. |
| Funderbeam South-East Europe d.o.o. |
| Croatian Bank for Reconstruction and Development (HBOR) |
| FIL ROUGE CAPITAL |
| South Central Venture |
| Hrvatska mreža poslovnih anđela (CRANE) |
| Cooperative for Ethical Financing |
| FEELSGOOD CAPITAL PARTNERS d.o.o. |
| Generali Investments d.o.o. |
| Blue Sea Capital |
| MEZZANINE PARTNERS d.d. |
| Prosperus Growth Fund |
| Provectus Capital Partners |
| Private Equity & Venture Capital Association (HVCA) |

Public Sector (PBS)

| |
|---|
| The port of Rijeka |
| The port of Zadar |
| The port of Šibenik |
| Port of Šibenik authority |
| Šibenik HARBOUR MASTER'S OFFICE |
| Port authority of Šibenik-knin county |
| The port of Split |
| The port of Ploče |
| The port of Dubrovnik |
| Eastern Adriatic Port Authority- Trieste |
| Central Adriatic Port Authority- Ancona |
| North Adriatic Sea Port Authority- Venezia |
| Port of Ravenna Authority - Autorità di Sistema Portuale del Mare Adriatico Centro Settentrionale |
| ACI d.d. |
| Clean Adriatic Sea Alliance |
| Association for Nature, Environment and Sustainable Development Sunce |
| CEDRA (Cluster) |
| Center for Social Innovation and Sustainable Development (CEDIOR) |
| Ecological association Lijepa Naša |
| Greenpeace Croatia |

| |
|---|
| WWF Adria |
| BIOM |
| Croatian Water Pollution Control Society |
| Centar za održivi razvoj GIS tehnologijama |
| Trokut |
| Croatian chamber of economy - HGK ICT Association |
| Croatian Employers Association - HUP ICT Association |
| Croatia Independent Software Exportes (CISEX) |
| Croatian AI Association |
| SPOCK Startup inkubator FER |
| Croatia Business Council for Sustainable Development |
| Startup - an association for the promotion and development of the IT sector in Split and the region |
| Croatian Society for Information, Communication and Electronic Technology - MIPRO |
| The Croatian Defense Industry Competitiveness cluster |
| Entrepreneurial incubator IZAZOV Pula |
| Croatian Association of Unmanned Systems (HUBS) |
| Local action groups (LAGs / FLAGS) |
| Croatian Association of Innovators |
| Croatian Association of Technical Culture (CATC) |
| Forum of the Chambers of Commerce of the Adriatic_Ionian area |
| Technology center Split |
| Development Innovation Center AluTech |
| Zagreb Innovation center |
| Technology Incubator Pula |
| HUB385 |
| Step Ri znanstveno-tehnologijski park Sveučilišta u Rijeci |
| Urban center/Incubator Šibenik |
| MarInn - Maritimni inovacijski klaster |
| Misli more |
| ARPA Puglia |
| ARPA Emilia Romagna - The oceanographic structure DAPHNE |
| ARPA Calabria |
| ARPA Liguria |
| ARPA FVG |
| ARPA Molise |
| ARTA Abruzzo |
| Development Agency Zagreb |
| Dubrovačko neretvanska County Regional Development Agency DUNEA |
| Dubrovnik Development Agency DURA d.o.o. |
| Rijeka Development Agency |
| Šibensko kninska County Regional Development Agency |
| The Istrian Development Agency |
| ZADRA NOVA - Zadar County Development Agency |
| Public institution RERA S.D. for Coordination and Development of the Splitsko dalmatinska County JU RERA S.D. |

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| Primorsko goranska County Regional Development Agency PRIGODA |
| Development Agency Orebić |
| (MINGOR) Ministry of Economy & sustainable development |
| Ministry of Economy and Sustainable Development - Climate Activities Directorate |
| Ministry of Economy and Sustainable Development - Directorate for Environmental Impact Assessment and Sustainable Waste Management |
| Ministry of Economy and Sustainable Development - Directorate of Water Management and Marine Protection |
| Ministry of Economy and Sustainable Development - Directorate for Nature Protection |
| Ministry of Economy and Sustainable Development - Directorate for EU Programs and Projects, European and International Affairs |
| Ministry of Economy and Sustainable Development - Institute for Environmental Protection and Nature |
| (MRFEEU) Ministry of Regional Development and European Union Funds |
| Ministry of Regional Development and European Union Funds - Directorate for Strategic Planning and Coordination of EU Funds |
| Ministry of Regional Development and European Union Funds - Islands Administration |
| Ministry of Regional Development and European Union Funds - Directorate for Strategic Communication and Visibility of EU Funds |
| (MMPI) Ministry of the Sea, Transport and Infrastructure |
| Ministry of the Sea, Transport and Infrastructure - Maritime Administration |
| Ministry of the Sea, Transport and Infrastructure - Directorate for EU Funds and Strategic Planning |
| (FZOEU) The Environmental Protection and Energy Efficiency Fund |
| (DZIV) State Intellectual property office |
| Zadar county |
| County of Dubrovačko neretvanska |
| County of Primorsko goranska |
| County of Splitsko dalmatinska |
| County of Šibensko kninska |
| Region of Istria |
| Hydrographic Institute of the Republic of Croatia - Split |
| HRVATSKE VODE - legal entity for water management |
| ARPAV - Servizio Osservatorio Acque Marine e lagunari |
| ISPRA - Istituto Superiore per la Protezione e la Ricerca Ambientale |
| Istituto Idrografico della Marina Militare |
| Regione Marche P.F. Biodiversita e Rete ecologica regionale |
| Autorità Portuale del Mare Adriatico Meridionale |
| Veneto Region |
| Friuli Venezia Giulia Region |
| Protezione Civile Regione Friuli Venezia Giulia |
| Ministry of agriculture |
| Directorate of Civil protection |
| Šibenik meteo |
| Balearic Islands Coastal Observing and Forecasting System |
| Institute for tourism |
| Public institution "Nature Park Telašćica" |
| Nacionalni Park Brijuni |

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| JU Nacionalni park Kornati |
| Javna ustanova “Nacionalni park Mljet” |
| Javna ustanova “Park prirode Lastovsko otočje” |
| Public institution Nature of Šibenik – Knin County |
| Javna ustanova Nacionalni park Plitvička jezera |
| Javna ustanova „Nacionalni park Krka“ |
| Park prirode Vransko Jezero |

