

# D.3.1.1. MAPPING GUIDELINES AND TOOLS FOR MAP OF EXCELLENCE

InnovaMare project

Blue technology - Developing innovative technologies for sustainability of Adriatic Sea

WP3 - Enhancement of framework conditions by development of innovation ecosystem

## 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:** D.3.1.1. Mapping guidelines and tools for map of excellence

**Expected date:** M3

**Deliverable description:** Mapping guidelines and tools for map of excellence is necessary for unified research and analysis of relevant innovation players by all partners on project. Besides that data gathered will be important part of collaboration and networking on interactive web network.

**Partner responsible for the deliverable:** University of Trieste

**Dissemination level:** CO - Confidential

**Status:** Final

**Version:** V1

**Date:** 30<sup>th</sup> September 2020

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## PRELIMINARY INSTRUCTIONS FOR THE INTERVIEWER

This document is to be used to collect information and data from each stakeholder (company, university, research center, etc.) interviewed.

The interview starts with a short introduction of the project followed by the aim of this data collection.

- 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
- One of the projects objectives consists of mapping and analyzing all the relevant stakeholders, their capabilities (human, technological, projects, equipment), needs, etc. in order to create a map of excellence.

The questions are divided in separated sections followed by a final section for giving free comments.

Some basic information related to the stakeholder has already been collected as part of the desk research. However, additional information is still to be collected during the interview.

Please note that in some cases, the answers should correspond to the information provided in an annex (1-4) or should be retrieved from the EU website (NACE rev.2 & ERC codes). In the case of EU website, the PDF files can be downloaded in advance.

In the majority of the questions we have put a limit on the number of the items (e.g. maximum 5 projects or 5 platforms) or the time period (last 5 years).

**The consent form is in the last page together with the GDPR.**

**Once the information has been inserted** in the word file, it should be sent back to the interviewee for their approval. This can be done by asking them to sign all the pages of the file and send it back or by sending an email giving their authorization. In the latter case the email should be attached to the final word file. This final approved file, should be uploaded in the Monday platform. This can be done under the organizations board where the possibility of file attachment has been enabled in the very last column.

## A. Contact information:

This information has already been inserted under organizations in the Monday platform. Please refill, only if different from the ones in the database or if the information is missing on the platform.

Name of the Institution / Company	
Type (Scientific research, Private or Public Sector)	
Web address	
Location (address)	
Country	
Contact	
Email	
Phone	
Type (only scientific or public organization)	
Size of the company (Small, Medium, Large) (Only for Private organization)	
Sector of activity "NACE rev.2"	
Position within underwater robotics Value Chain (annex 1)	
Affiliation: within Marine Strategy Framework Directive's 11 descriptors (annex 2) <b>(only for Private organization)</b>	
Affiliation: Blue economy sectors that corresponds to the NACE codes (annex 3) <b>(only for Private organization)</b>	
Affiliation: Blue Economy new and emerging sectors (annex 4) <b>(only for Private organization)</b>	
Additional information	

For interviewers:

- Please use this link for detecting Sector of activity "NACE rev.2"  
<https://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF>

- Remember that typology used in Annex3 has a direct correspondence to the NACE codes. Therefore, the information can be provided in advance together with the to NACE rev.2

## B. Key activity

Description of the activity/ies that the company/institution performs in concrete and specific relation to the sector of underwater robotics and sensors

Examples:

- scientific research in the field of underwater sensors
- production of metal components for underwater robots
- production of software for IoT to be implemented in underwater robots

### Maximum 5 activities

1. Activity in relation to the sector	
2. Activity in relation to the sector	
3. Activity in relation to the sector	
4. Activity in relation to the sector	
5. Activity in relation to the sector	

Please note that a new column called “key activities” has been added under the organizations board in the Monday platform. Put there the information collected in this table

## C. Key resources

List of the key resources in the sector of underwater robotics and sensors that the company/institution would like to communicate to potential business and research partners.

Please note that a new BOARD called Key Resources has been added in Monday.

Examples:

- infrastructures (R&D labs; testing labs; Fablabs; etc.)
- technologies (laser cutter; 3D metal printer; lidar technologies; etc.)
- intellectual property rights (patents; trademarks, etc.)
- technologies in which the organization has patents/ applied for patents

**Maximum 5 resources**

Resource type	Counter (automatic)	Description of the resource (free text)	Organization the resource belongs to
Example: technology	0.	eg: Innovative Lidar Technology	eg: University of Trieste
	1.		
	2.		
	3.		
	4.		
	5.		

## D. Key individuals

List of the key persons working in the sector of underwater robotics and sensors in this institution.

**Maximum 5 people**





Name	Count	Organization	Specialization	Country	Email	Phone	Information (free text)	ERC scientific domain <sup>1</sup>
Guido Bortoluzzi	e.g.	University of Trieste	Innovation Management	Italy	guido.bortoluzzi@deams.units.it	+393293739326	Guido is not an expert in IOT and sensors but he has many contacts with engineering and IT companies in the Friuli Venezia Giulia region	SH-P08
	1.							
	2.							
	3.							
	4.							
	5.							

<sup>1</sup> if relevant: Specialization refers to the main competence; for example: “software development for underwater navigation”

Please use this link for detecting ERC scientific domain: [https://erc.europa.eu/sites/default/files/document/file/ERC\\_Panel\\_structure\\_2020.pdf](https://erc.europa.eu/sites/default/files/document/file/ERC_Panel_structure_2020.pdf)



## E. Key projects

This section includes both “research” projects or projects that involves the society (NGOs, citizens, students...). To distinguish between the two, use the column “Status” (Green for research, Yellow for society). Examples of projects involving the society are organization of maker-fairs; public speeches; public events for citizens; educational events for students.

**Please indicate Maximum 5 research projects + 5 society projects in the last 5 years**

### 1. FOR EACH RESEARCH PROJECT PLEASE INDICATE:

Project name	Status (Research/Society)	Website (if any)	Funding program	Lead partner	Country of LP	Project scope	Information	Status

If applicable, please for each project also indicate: Project name	Affiliation: within Marine Strategy Framework Directive’s 11 descriptors (annex 2) <b>(only for Private organization and only applicable)</b>	Affiliation: Blue economy sectors that corresponds to the NACE codes (annex 3) <b>(only for Private organization and only applicable)</b>	Affiliation: Blue Economy new and emerging sectors (annex 4) <b>(only for Private organization and only applicable)</b>

**2. FOR EACH SOCIETY PROJECT JUST INDICATE (leave other cells blank)**

Project	Status (Research/ Society)	Website of the project (IF ANY)	Information



If applicable, please for each project also indicate: Project name	Affiliation: within Marine Strategy Framework Directive's 11 descriptors (annex 2) <b>(only for Private organization and only applicable)</b>	Affiliation: Blue economy sectors that corresponds to the NACE codes (annex 3) <b>(only for Private organization and only applicable)</b>	Affiliation: Blue Economy new and emerging sectors (annex 4) <b>(only for Private organization and only applicable)</b>



## F. Key platforms and communities

List of the platforms for co-development related to the sector of underwater robotics and sensors (crowdsourcing; crowdfunding; open innovation platforms, online community).

Examples: Innocentive; Zoopa; Indiegogo; Redhat

### Maximum 5 platforms in the last 5 years

<b>1. Name of the platform</b>	
Web address	
Information	
Affiliation: within Marine Strategy Framework Directive's 11 descriptors (annex 2) <u>Only if applicable</u>	
Affiliation: Blue economy sectors that corresponds to the NACE codes (annex 3) <u>Only if applicable</u>	
Affiliation: Blue Economy new and emerging sectors (annex 4) <u>Only if applicable</u>	
Type of the platform	
<b>2. Name of the platform</b>	
Web address	
Information	
Affiliation: within Marine Strategy Framework Directive's 11 descriptors (annex 2) <u>Only if applicable</u>	
Affiliation: Blue economy sectors that corresponds to the NACE codes (annex 3) <u>Only if applicable</u>	
Affiliation: Blue Economy new and emerging sectors (annex 4) <u>Only if applicable</u>	
Type of the platform	
<b>3. Name of the platform</b>	
Web address	
Information	
Affiliation: within Marine Strategy Framework Directive's 11 descriptors (annex 2) <u>Only if applicable</u>	

Affiliation: Blue economy sectors that corresponds to the NACE codes (annex 3) <u>Only if applicable</u>	
Affiliation: Blue Economy new and emerging sectors (annex 4) <u>Only if applicable</u>	
Type of the platform	
<b>4. Name of the platform</b>	
Web address	
Information	
Affiliation: within Marine Strategy Framework Directive's 11 descriptors (annex 2) <u>Only if applicable</u>	
Affiliation: Blue economy sectors that corresponds to the NACE codes (annex 3) <u>Only if applicable</u>	
Affiliation: Blue Economy new and emerging sectors (annex 4) <u>Only if applicable</u>	
Type of the platform	
<b>5. Name of the platform</b>	
Web address	
Information	
Affiliation: within Marine Strategy Framework Directive's 11 descriptors (annex 2) <u>Only if applicable</u>	
Affiliation: Blue economy sectors that corresponds to the NACE codes (annex 3) <u>Only if applicable</u>	
Affiliation: Blue Economy new and emerging sectors (annex 4) <u>Only if applicable</u>	
Type of the platform	

## G. Key partners

This section IS NOT INCLUDED in the Monday Platform. However, it is crucial to identify other relevant organizations that are active in the sector of underwater robotics and sensors (following the snow-ball methodology).

In case during the interview you discover new potential interesting Organisations, please fill the table below and report than the information collected in the Monday platform under the Organizations' board as **new Organisations** if they belong to the project Area. If not (for example, a technological supplier from Japan but

very critical for the sector) the information will be simply stored in this file but not added to the Monday platform.

Key partners can be:

- **business or research partners of the interviewed institution:** suppliers, universities, NGOs/associations, technology poles, local clusters, venture capital, equity funds, business Angels etc. They must be relevant for the sector of underwater robots/sensors and for application/test.
- **partners the company interviewed aspires to collaborate** in the future (in the sector of underwater robotics and sensors)
- **very important organizations working in the sector** of underwater robots and sensors at scientific level of your knowledge.

Key partner	Additional info (ex: location, specialization, internal contacts, etc.)

**FINAL NOTES (FOR THE INTERVIEWERS)**

You can use this space to write any additional information



## INTERVIEW PARTICIPANT CONSENT FORM<sup>2</sup>

Project title: Italy - Croatia CBC Programme, InnovaMare.

WP 3.1. Mapping of relevant stakeholders in underwater robotics and sensors

1	I confirm that I have had the project explained to me, and I have read the participant consent sheet, which I may keep for my records.
	I understand this will involve: <ul style="list-style-type: none"> <li>• be interviewed by the researcher</li> <li>•</li> </ul>
2	I agree to _____ (InnovaMare partner) processing the information about the institute/organization. I understand that this information will be used only for the purpose(s) set out in this statement and my consent is conditional complying with its duties and obligations under the General Data Protection Regulation (GDPR).
3	I agree to the arrangements for data storage, archiving, sharing.
4	I agree to take part in the above study.
5	This information will be held by Croatian chamber of economy as data controller and processed for mapping and analysing all the relevant stakeholders, their capabilities (human, technological, projects, equipment), needs, etc. in order to create a map of excellence. The legal basis for processing your personal data will be that this research is a task in the public interest, that is Croatian Chamber of Economy considers the lawful basis for processing personal data to fall under Article 6(1)(e) of GDPR (public task) as the processing of research participant data is necessary for research purposes and all research with human participants by staff has to be scrutinized and approved by Croatian Chamber of Economy. Croatian Chamber of Economy considers the processing of special category personal data will fall under: Article 9(2)(g) of the GDPR as the processing of special category data has to be for the public interest in order to receive research ethics approval and occurs on the basis of law that is, inter alia, proportionate to the aim pursued and protects the rights of data subjects and also under Article 9(2)(a) of the GDPR as the provision of these personal data is completely voluntary.

Name of Participant

Signature

Date

Name of Researcher

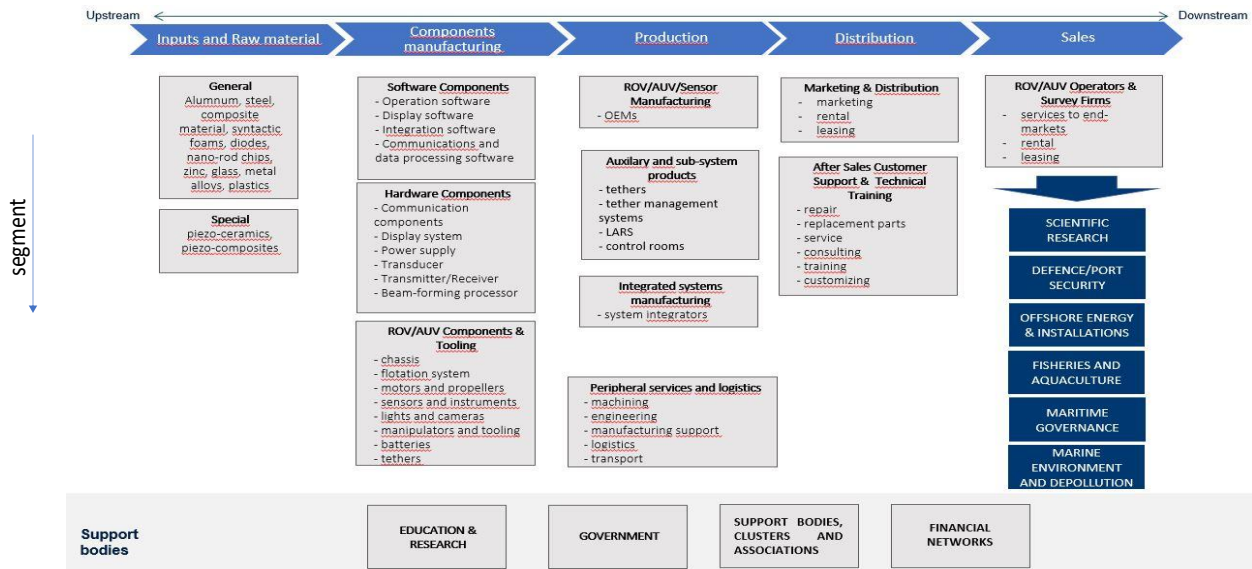
Signature

Date

<sup>2</sup> if the interview is not conducted in person, the above should be read and the person should agree and this should be audio/video recorded.

# ANNEX 1

## Underwater robotics simplified value chain



## ANNEX 2

### MSFD's 11 DESCRIPTORS

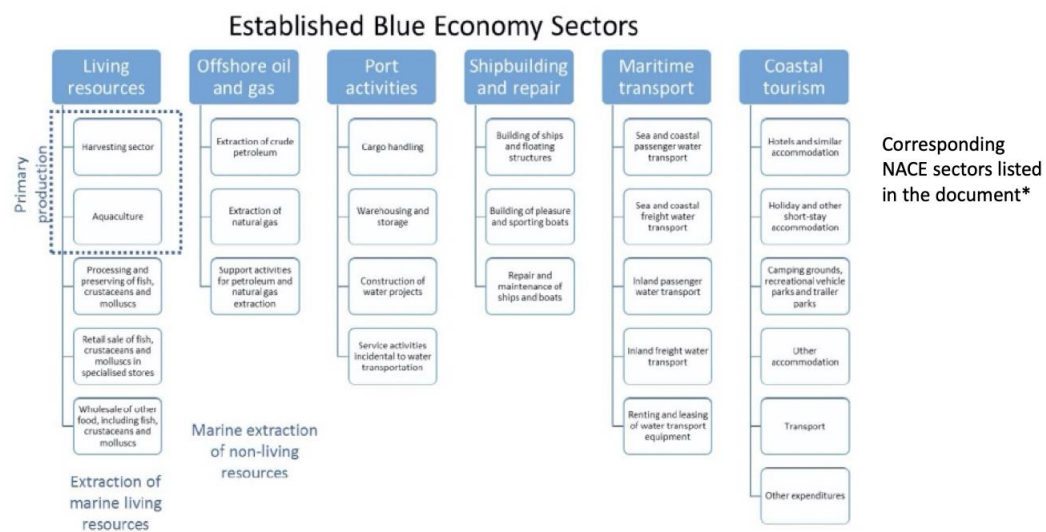
The aim of the European Union's ambitious **Marine Strategy Framework Directive (MSFD)** is to protect more effectively the marine environment across Europe.

Monitoring and observation is done through measuring, on regular basis, the state of the following descriptors:

Descriptor	Name	Components
D1	Biodiversity	Sea mammals, Sea birds, Sea turtles, Fishes, Photophilic algae settlements and species <i>Cystoseira amentacea</i> , <i>Posidonia</i> settlements and species <i>Posidonia oceanica</i> , <i>Coraligena</i> and species <i>Corallium rubrum</i> , Pelagic plankton community
D2	Non-indigenous species	Determining of invasive species from the list
D3	Populations of commercially exploited fish and shellfish	Demersal stocks, Pelagic stocks, Coastal stocks, Shellfish stocks, Hatcheries of sardines and anchovies, Seagrass meadows, Shellfish fishing by rampon
D4	Pelagic food webs	Microbe food web, Phytoplankton, Mesozooplankton, Small bluefish, Top predator
D5	Eutrophication	Nutrient loadings, Concentration of chlorophylla, Concentration of dissolved oxygen, Toxic blooms events (frequency), Concentration of nutrients, Submerged vegetation (changes), Benthic communities (changes), Benthic organisms/fishes (mortality)
D6	Sea floor integrity	Epifauna on soft bottoms and bottoms with fishery activities, Macro and meiofauna on soft bottoms, Mediollittoral on hard bottoms and rocks/Biocenosis of infralittoral algae, <i>Posidonia oceanica</i> meadows (mapping)
D7	Hydrographic conditions	Temperature, Salinity, Turbidity, Waves, Currents, Bathymetry
D8	Contaminants	Concentration of contaminants in seawater and sediment, Effects of contaminants (toxicity and genotoxicity)
D9	Contaminants in food	Shellfish <i>Mytilus galloprovincialis</i> , Commercially important fishes
D10	Marine litter	Litter washed ashore (quantity, composition), Litter on sea surface and seafloor (quantity, composition), Micro-plastics on beaches and sea surface (quantity, composition, distribution), Litter ingested by marine animals
D11	Underwater noise	Impulsive noise, Ambient (continuous) noise

## ANNEX 3

### BLUE GROWTH AREAS

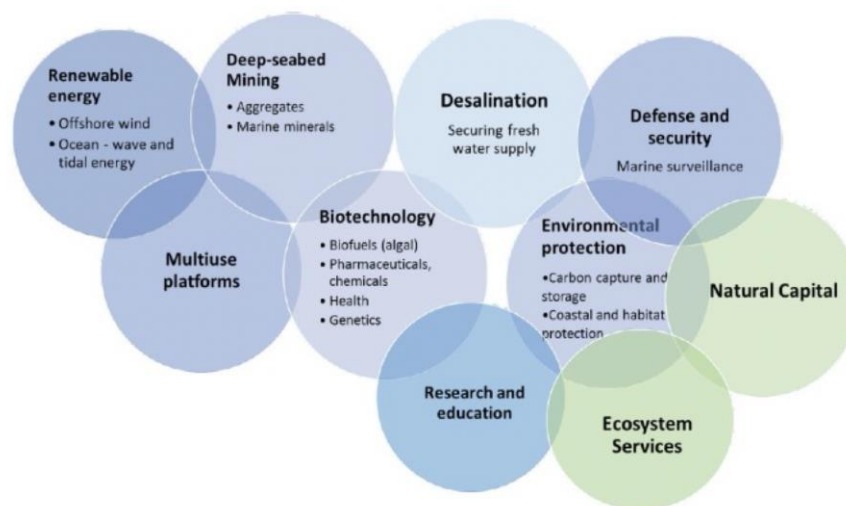


\*Source: The 2018 Annual Economic Report on EU blue Economy, DG for Maritime Affairs and Fisheries Economic Analysis, JRC, 2018

## ANNEX 4

### BLUE GROWTH AREAS

Emerging and innovative Sectors



European Regional Development Fund

**University of Trieste**  
 Contact person  
 Guido Bortoluzzi

Piazzale Europa, 1 - 34127 – Trieste  
 Italy



+39 329 373 9326



guido.bortoluzzi@dreams.units.it



ateneo@pec.units.it



[www.italy-croatia.eu/innovamare](http://www.italy-croatia.eu/innovamare)