



WP1 Strategy: REPORT on SMEs NEEDS and OPPORTUNITY ANALYSIS

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Results (if applicable)

Summary: Naval Defence Ecosystem and Value Chain

Executive Summary:

In order to solidify the value chain of the "Naval Defence System", the mobilisation of companies is essential. Founded on voluntary participation, it must be based on the study of their needs and the analysis of the opportunities they could benefit from.

On the basis of the WP1 D1.1 deliverable aiming at a "Mapping of the ecosystem's value chain in the Naval Defence sector", a presentation was organised on 14 February 2023 and aroused the interest of more than 50 participants from the four LEVIATAD countries. At the end of this presentation, a questionnaire was sent to them and about 50% send their response.

The aim of this report is to provide an objective presentation of their interests. It could be the basis for a common strategic vision in the perspective of an increased European sovereignty in naval defence.

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Conclusion:

1. The conditions of the survey

a. Report submitted

The first phase of WP1 entitled "Mapping of the ecosystem's value chain in the naval defence sector" aimed to situate the context and understand the evolutions, in order to detect the key sectors and the possible interdependencies between the 4 countries involved in the **LEVIATAD** programme. At the end of this work, a document of about 60 pages was produced.

In order to simultaneously reach the stakeholders of the four countries, an invitation was sent out by the six clusters:

- **DLTM** (Italy)
- **TVT Innovation/ System Factory** (France)
- **De BLAUWE** (Belgium)
- **NAVIGO** (Italy)
- **HKKOI** (Croatia)
- **Camera di Commercio Riviere di Ligura** (Italy)

To their members to attend a videoconference in English.
55 people responded positively to the invitation.

At the end of the presentation, they were asked to answer a questionnaire of 40 questions (an average of 31 minutes for answering). 24 people responded (Response rate of 44%), distributed as follows:

● France	4	
● Italy	10	
● Croatia	3	
● Belgium	7	✓
● Other	0	



b. The structures present

The typology of the structures represented was broken down as follows:

● SME	17	✓
● GROUP	1	
● STATE	0	
● OTHER	6	



And more specifically, the following names:

ID ↑	Nom	Résultat	Réponses
1	anonymous	×	MCA Community vzw
2	anonymous	×	KING ICT Ltd.
3	anonymous	×	Mind2Shake
4	anonymous	×	AZOTH SYSTEMS
5	anonymous	×	Citymesh NV
6	anonymous	×	Epic Blue
7	anonymous	×	METACRAFT
8	anonymous	×	Helicus
9	anonymous	×	Esel S.r.L.
10	anonymous	×	ARKEOCEAN
11	anonymous	×	ETT S.p.A.
12	anonymous	×	boatbuilding association Croatian chamber of comerce
13	anonymous	×	CIL4Sys Engineering
14	anonymous	×	Hypertechnics BV
15	anonymous	×	ETT S.p.A.
16	anonymous	×	Vulkan Italia
17	anonymous	✓	PropheSea
18	anonymous	×	e-BO Enterprises
19	anonymous	×	Sitep Italia SpA
20	anonymous	×	Graal Tech
21	anonymous	×	colmar srl
22	anonymous	×	CLEAR Srl
23	anonymous	×	ELSEL S.r.L.
24	anonymous	×	Euroguarco SpA

With a majority of Suppliers

● Customers	0
● Manufacturers	8
● Suppliers	13
● Subcontractors	3 ✓



c. General evaluation of Webinar

To the questions:

6
What is your general evaluation for this webinar ? *



A majority was satisfied with a quotation of 3.17

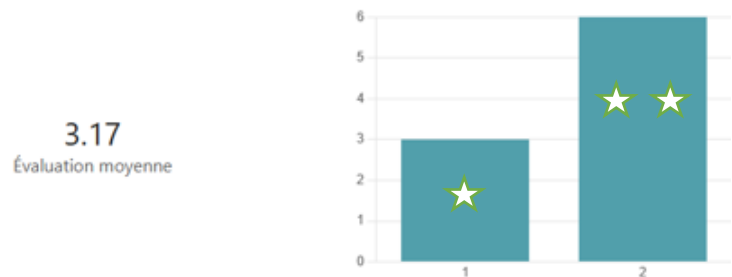


d. Perception of the information provided

During the presentation, different elements of the context were developed, with the description of five levels of disruption, the notion of the EEZ (Exclusive Economic Zone) and the importance of merchant fleets.

The aim was to find out whether they had a better overall vision of the issues related to the "Naval Defence" sector.

7
Did you understand the structuring of the defence value chain and its interconnections in our European economies ? *



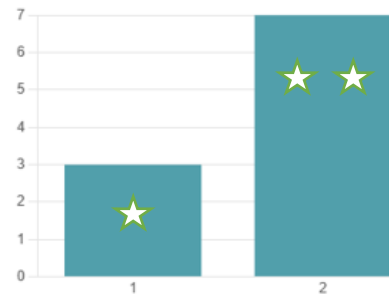
9

Did you understand the notion of **Strategic rupture** ?

This rupture therefore requires the great powers to have "long distance", "hybrid" operational resources (air, surface, submarine) able to ensure representation in all strategic zones. *



3.29
Évaluation moyenne



10

Did you understand the notion of **economical rupture** ?

This disruption requires the implementation of rapid intervention forces (commando type), as well as support and assistance vessels (e.g., Offshore Tugboats) *



3.17
Évaluation moyenne



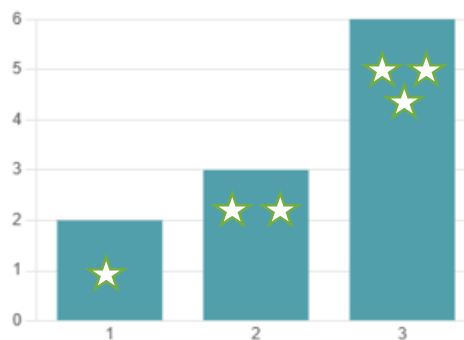
11

Did you understand the notion of **Technological rupture** ?

In order to respond to this technological disruption, there is a real challenge to deploy a diversity of solutions, composed of both detection and intervention means. *



3.54
Évaluation moyenne



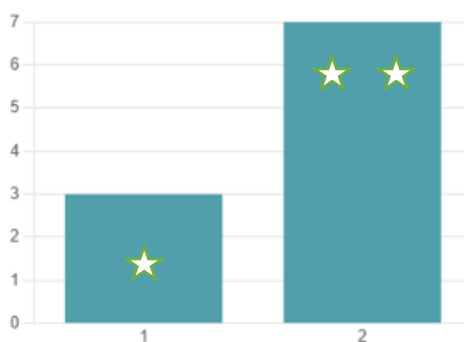
12

Did you understand the notion of **environmental rupture** ?

For naval forces, this implies logistical support, fast surveillance means (ships, helicopters, planes...) and new units adapted to specific intervention conditions (for example in polar waters). *



3.25
Évaluation moyenne



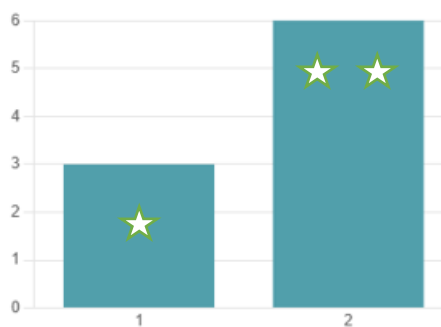
13

Did you understand the notion of "Fissuration of the world" ?

This requires a mix of military and civilian, naval and air, heavy and rapid response assets. *



3.21
Évaluation moyenne



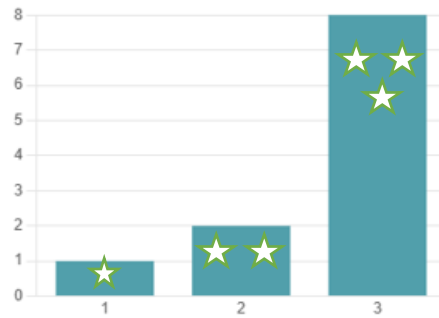
14

Did you understand the importance of the Exclusive Economic Zone (EEZ) ?

The diversity of the surface areas and geographical distance of the EEZs has a direct impact on the choice of navies, both in terms of the type of vessels used and their number. *



3.63
Évaluation moyenne



15

Did you understand the essential role of the commercial fleet and its repercussion on the naval defense fleet ?

In a system of globalised trade, it is essential for economies to pay particular attention to the protection of maritime trade. The deployment of operational means is therefore essential, requiring a diversity of equipment. Moreover, merchant fleets have shown their capacity to complement military means. *



3.96
Évaluation moyenne

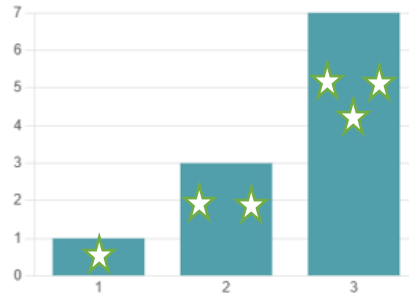


16

Did you understand the mission of the navies involved in the LEVIATAD EUROCLUSTER? *



3.50
Évaluation moyenne



17

Do you have now a better view of the naval defense sector in Europe and in the countries of the LEVIATAD Eurocluster? *



3.75
Évaluation moyenne



The majority of participants indicated that they had a better view of the naval defence sector in Europe and in the countries involved in the LEVIATAD programme.

2. Analysis of interests

Among the different topics dealt with during the presentation, participants were asked to define those they consider as a priority in the value chain. Indeed, we can consider that they represent the ones that they will commit to in the short/medium term.

In order to realize our objective, we asked a 'core' question (Question 18) which asked participants to distinguish their priority.

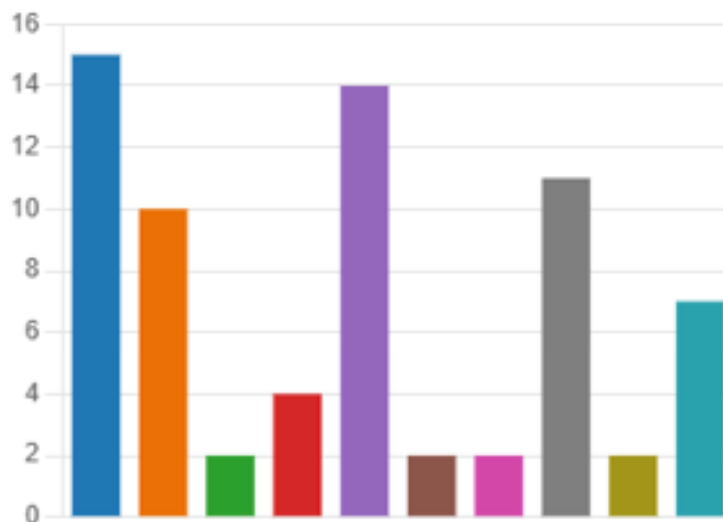
This revealed two significant interests, two median interests and the rest were weak.

We also wanted to know the areas in which collaboration could be initiated. We developed a list of questions based with their priority

a. Priorities identified

➤ Among the topics proposed as priorities in the value-Chain by the participants, we proposed:

- -Engineering and design: feasibility studies, architecture, system engineering, detailed design, industrialization
- - Supply of materials and equipment
- - Production of structural elements: cutting and shaping of sheets, construction of blocks, fitting of blocks
- - Assembly: Assembly of blocks, propulsion, interior fittings
- - Military and civil equipment, assembly integration
- - Classification- Certification- Testing: Embedded systems testing and homologation
- - Operations of ships and aircraft
- - Maintenance and repair: maintenance, retrofitting, maintenance in operational condition
- - Deconstruction
- -Other

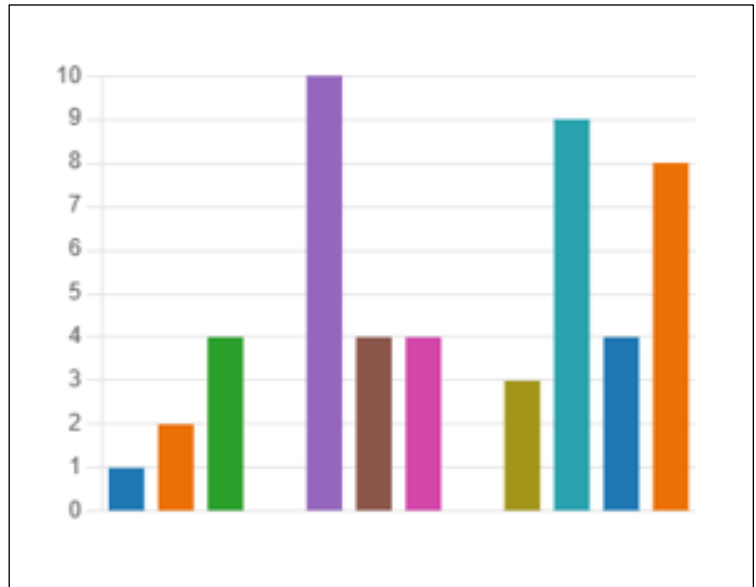


The two topics of high priority for a majority of participants

- - Engineering and design
- - Military and civil equipment, assembly integration

➤ Next we ask them what is their high priority if they have chosen “Engineering & Design”.

- Transition from Steel hulls to very high-performance composite hull
- Use of counter-rotating propellers driven and electric motors
- Hybridization of engines with the aim of reducing consumption by 20%
- Use of specialised infrastructures
- Use of new materials and technologies
- Use of collaborative Design Method
- Use of collaborative Design Method
- Research on hulls materials
- Research on Innovative Engines
- Research on Autonomous ships, smart ships, unnamed vessels, remote vessels drones
- Research on Environmental issues
- Other

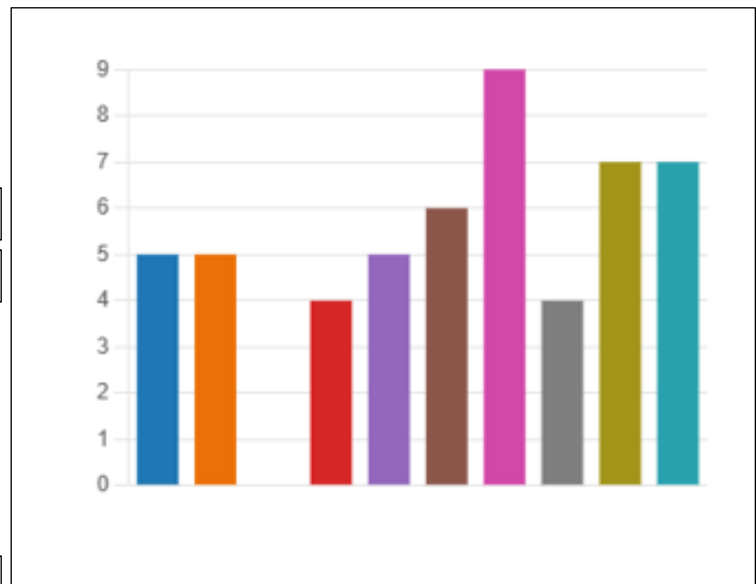


The two main topics chosen were:

- - **Use of new materials and technologies**
- - **Research on Autonomous ships, smart ships, unnamed vessels, remote vessels drones**

➤ And when they had chosen “Military and civil equipment”:

- Propulsion
- Energy
- Fresh-Water production
- Navigation system
- Detection (Radar- sonar)
- Weapons systems (Missiles, guns and torpedos)
- Communication and electronic warfare systems
- Targeting systems (such as optronics)
- On-board equipment (Airborne and/or submarine)
- Other

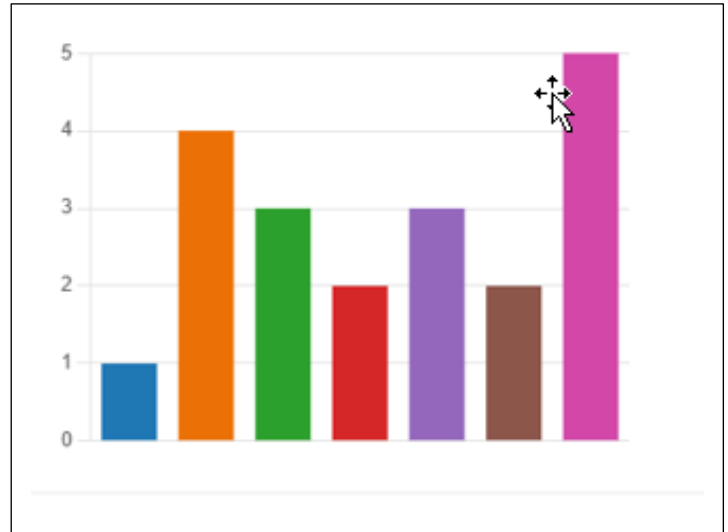


Priorities are more diffuse, but we can extract three domains:

- - **Communication and Electronic warfare systems**
- - **On-board equipment**
- - **Weapons systems**

➤ The third level of priorities when they choose “**Production of Components and Assembly**”

- Building and Assembling blocks methods
- Use of robots
- Use additive production in factory
- Install 3D printing systems on board ships
- Use of blockchain to secure 3D printing model transmission
- Use of multi-site production
- Other



They chose

- - **Use of robots**
- - **Use additive production in factory**
- - **Use of blockchain to secure 3D printing model transmission**

As a conclusion, the main priorities identified by companies in this survey are:

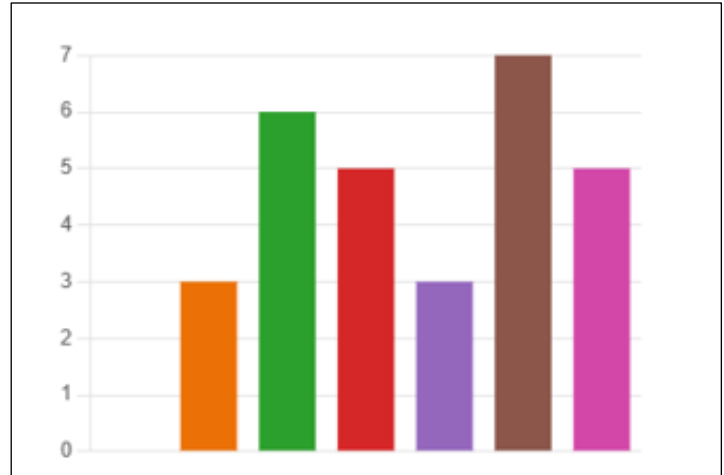
- ❖ **For the production**
 - **Use of new materials and technologies**
 - **Use of robots**
 - **Use additive production in factory**
 - **Use of blockchain to secure 3D printing model transmission**
- ❖ **Concerning new technologies**
 - **Research on Autonomous ships, smart ships, unnamed vessels, remote vessels drones**
 - **Communication and Electronic warfare systems**
 - **On-board equipment**
 - **Weapons systems**

b. Collaborations sought

After the identification of their priorities, we tried to know what sort of collaboration they need if:

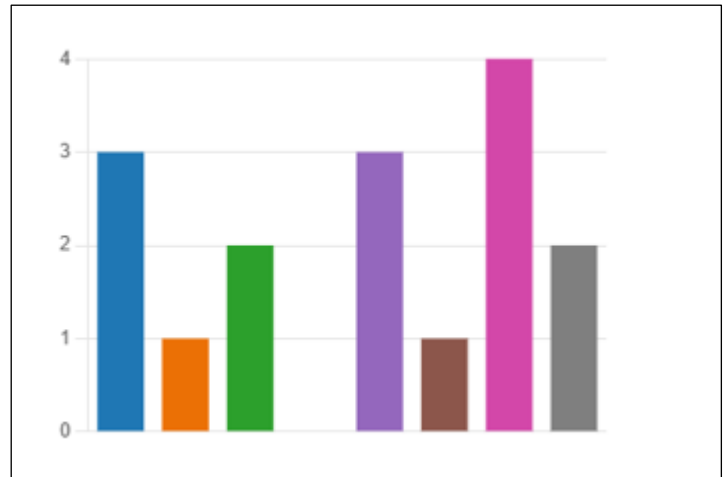
- They are in the **Radars and Sensors** domain

<input type="radio"/>	Counter-Stealth
<input type="radio"/>	Long range surveillance
<input type="radio"/>	Target identification and tracking
<input type="radio"/>	Advanced Data Fusion
<input type="radio"/>	Anti-Ship Missile Defence
<input type="radio"/>	Drone detection
<input type="radio"/>	Other



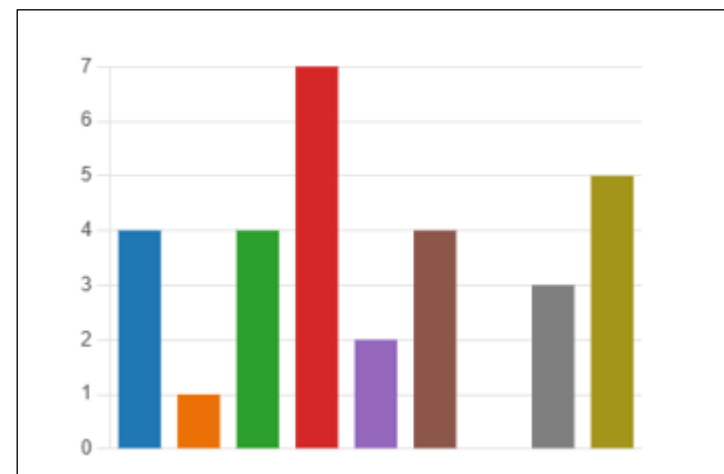
- They choose **Missiles and Torpedoes** domain

<input type="radio"/>	Guidance and control
<input type="radio"/>	Propulsion
<input type="radio"/>	Warhead Technology
<input type="radio"/>	Warhead hardening
<input type="radio"/>	Collaborative missiles
<input type="radio"/>	Missiles ability to evade defences
<input type="radio"/>	New Technology for detecting and attacking target
<input type="radio"/>	Other



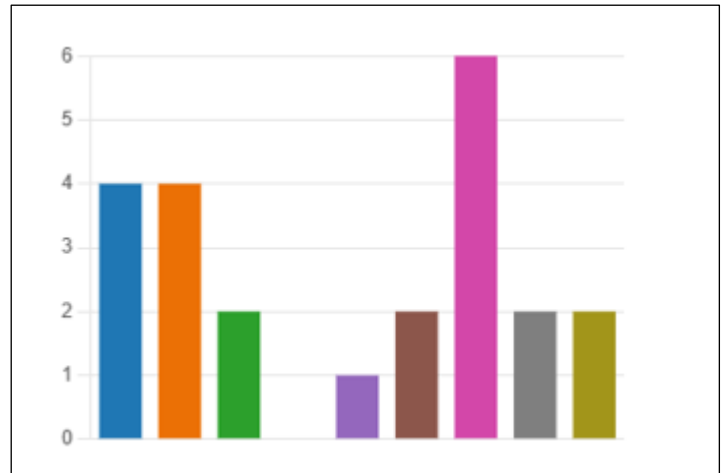
- They choose **Communication and Electronic Warfare Systems** domain

<input type="radio"/>	Electronic Countermeasures
<input type="radio"/>	Electronic Attack
<input type="radio"/>	Electronic Support Measures
<input type="radio"/>	Electronic protection Measures
<input type="radio"/>	Networked Electronic Warfare
<input type="radio"/>	Electronic Deception
<input type="radio"/>	Cognitive Electronic Warfare
<input type="radio"/>	Cyber Electronic Warfare
<input type="radio"/>	Other



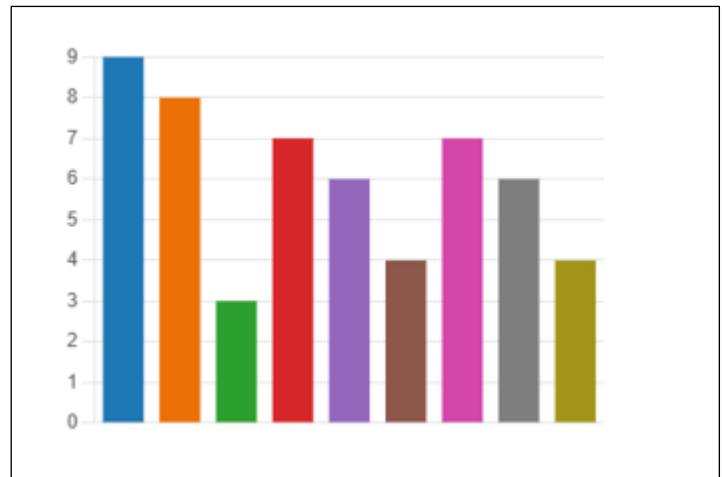
- They choose **Target Detection (and optronics systems)** domain

- Design and Analysis of multi/hyper spectral imaging systems
- Enhancement and processing of optical signals and images
- EO/IR signature measurement and reduction technologies
- Directed energy technologies, including high energy laser weapons
- Environmental modelling and system performance prediction
- EO countermeasure systems
- Data fusion and system integration
- Quantum optronics
- Other



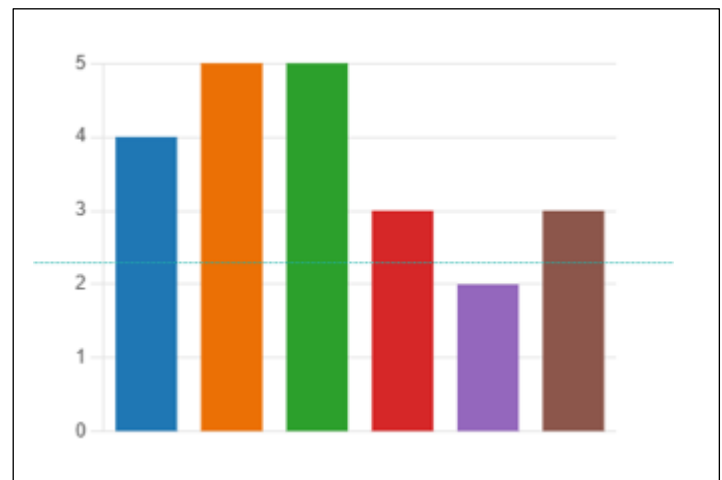
- They choose **Drones and Drone Swarms** domain

- Autonomous navigation
- Advanced sensors and Payloads
- Improved seaworthiness
- Anti-submarine Warfare
- Counter Mine Operations
- Electronic Warfare
- Networked operations
- Logistics and Support
- Other











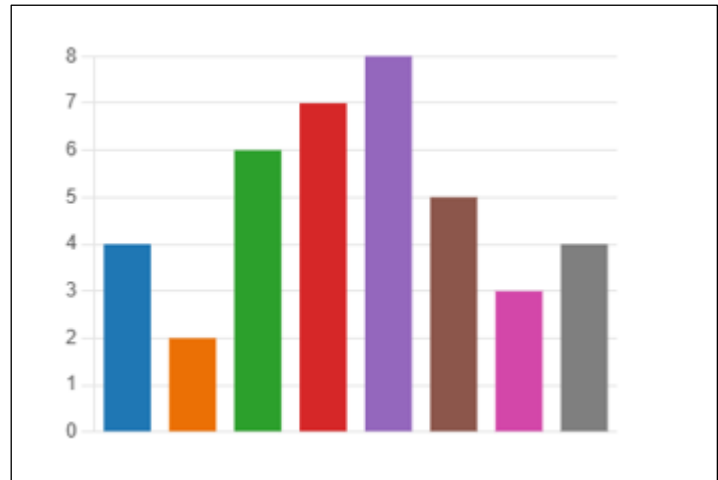
- They choose **Underwater Combat Tools** domain

- Use of Autonomous submarines
- Use of autonomous surface vessels
- Improving the performance of new acoustic sensors and sonar systems
- Containerisation of high-performance, detachable and transportable sonar systems for use on different types of vessels
- Use of multi-static sonar network
- Other



- They choose **Maintenance and Repair** domain

	Maintenance and Refurbishment
	Conversion
	Refit of ships
	Machine learning and AI (Artificial Intelligence) to identify and predict problems, thus keeping equipment in top condition and avoiding costly repairs
	BIG DATA to identify trends and patterns in data collected from sensors and other systems
	Simulation to test how different scenarios can affect the performance of ships and submarines
	Measure of performance of combat system equipment
	Other

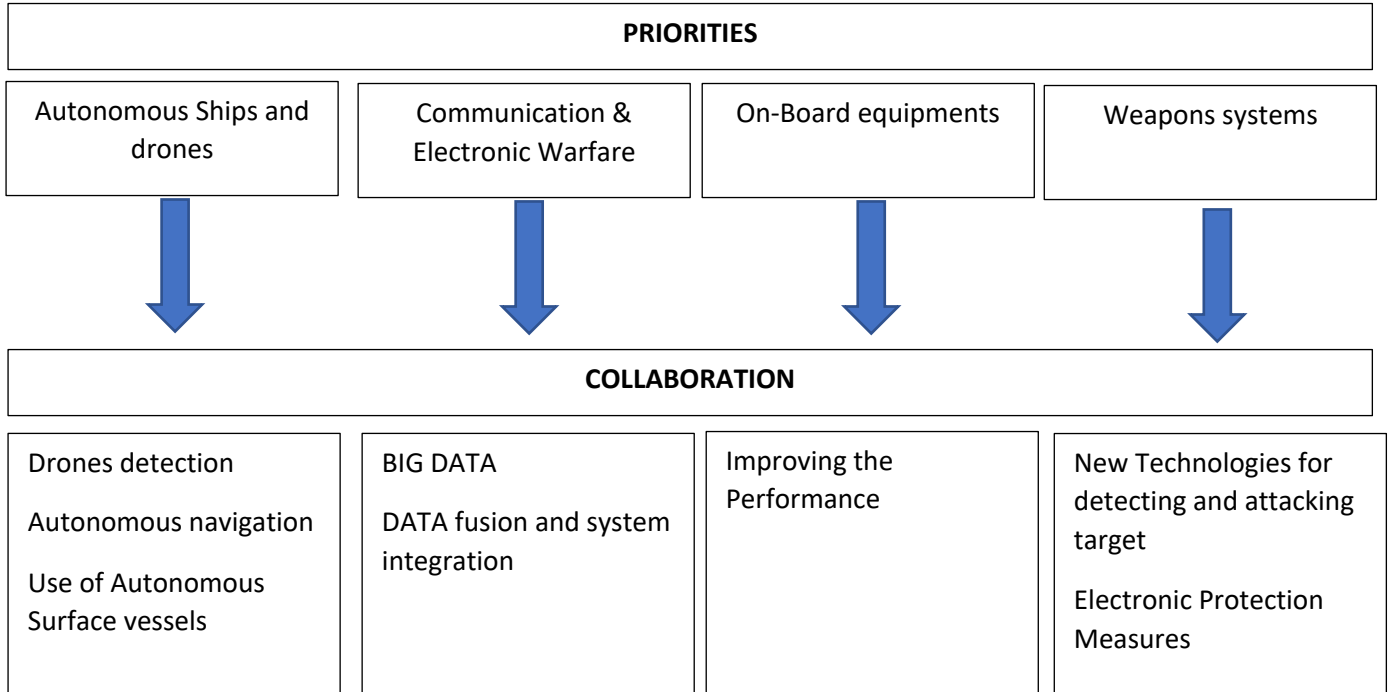


If we consider only the first level of each diagram, we can observe that the main topics industries would like to develop cooperations are:

- **Drone detection**
- **New Technology for detecting and attacking target**
- **Electronic protection Measures**
- **Data fusion and system integration**
- **Autonomous navigation**
- **Use of autonomous surface vessels**
- **Improving the performance of new acoustic sensors and sonar systems**
- **BIG DATA to identify trends and patterns in data collected from sensors and other systems**

c. Priority topics and possible collaborations

If we bring together the priority subjects and the subjects of collaboration to be developed, we arrive at the following synthesis



3. ROADMAP

Based on the priorities identified and the possible collaborations to be developed, we propose to work on three roadmaps.

As a summary tool, they list the actions to be carried out to achieve the objectives set.

Program : NAVAL DRONE & AUTONOMOUS SHIP	Submarines, Surface and Airborne complex systems, take into account NATO existing	
Equipment for Surface Vessel		European System Compatible with NATO systems
<p>Key Challenges :</p> <ul style="list-style-type: none"> - Develop a new technology - Co-design between different companies based in the LEVIATAD Countries - Controlled confidentiality - Control of Budget - Underwater and drone-to drone communication 		
<p>Calendar : Beginning 09/2022 End: 09/2024</p>		
<p>European Funds :</p> <ul style="list-style-type: none"> - EDF - EDIDP 		
<p>Teams Involved :</p> <p>Clusters</p> <ul style="list-style-type: none"> - Italy : NAVIGO- DLTM - Belgium : DE BLAUWE CLUSTER - Croatia : HKKOI - France : TVT System Factory 	<p>Mission:</p> <p>Stimulate innovation and identify the best suitable solutions in order to cater to the technological needs of defence forces through the involvement of members of the ecosystem.</p> <p>Collaborative research & development among companies located in the LEVIATAD's ecosystem area, also hypothesizing patenting processes and shared services.</p>	
<p>Means:</p> <ul style="list-style-type: none"> - MEETING/ B2B - NAVAL SHOWS - ad hoc INQUIRIES 		
<p>Expected results:</p> <ul style="list-style-type: none"> - Joint planning at European level of viable technological solutions - Realization of products, services and processes 		

Program : Communication & Electronic warfare		Embedded complex systems
Surface Vessels and submarines		European System Compatible with NATO systems
Key Challenges: <ul style="list-style-type: none"> - Response to developments in electronic warfare - Detection and protection of electromagnetic activities - Intelligence activities and cyber measures to detect threats - Defence activities and cyber security measures to neutralise threats 		
Calendar: Beginning 09/2022		End: 09/2024
European Funds : <ul style="list-style-type: none"> - EDF - EDIDP 		
Teams Involved : Clusters <ul style="list-style-type: none"> - Italy : NAVIGO- DLTM - Belgium : DE BLAUWE CLUSTER - Croatia : HKKOI - France : TVT System Factory 		Mission: Identify the best suitable solutions in order to cater to the technological needs of defence forces through the involvement of members of the ecosystem. Collaborative research & development among companies located in the LEVIATAD's ecosystem area, also hypothesizing patenting processes and shared services.
Means : <ul style="list-style-type: none"> - MEETING/B2B - NAVAL SHOWS - ad hoc INQUIRIES 		
Expected results: <ul style="list-style-type: none"> - Joint planning at European level of viable technological solutions - Realization of products, services and processes 		

Program: Weapons systems		Data programs and equipments
Equipment for Surface Vessel		European System Compatible with NATO systems
<p>Key Challenges :</p> <ul style="list-style-type: none"> - Modernisation of installed equipment - Respond to observed developments - Compatible with electronic warfare system 		
Calendar: Beginning 09/2022		End: 09/2024
<p>European Funds :</p> <ul style="list-style-type: none"> - EDF - EDIDP 		
<p>Teams Involved :</p> <p>Clusters</p> <ul style="list-style-type: none"> - Italy : NAVIGO- DLTM - Belgium : DE BLAUWE CLUSTER - Croatia : HKKOI - France : TVT System Factory 		<p>Mission :</p> <p>Stimulate innovation and Identify the best suitable solutions in order to cater to the technological needs of defence forces through the involvement of members of the ecosystem.</p> <p>Collaborative research & development among companies located in the LEVIATAD's ecosystem area, also hypothesizing patenting processes and shared services.</p>
<p>Means:</p> <ul style="list-style-type: none"> - MEETING/ B2B - NAVAL SHOWS - ad hoc INQUIRIES 		
<p>Expected results:</p> <ul style="list-style-type: none"> - Joint planning at European level of viable technological solutions - Realization of products, services and processes 		

4. ROADMAP for Dual Applications

The value chain analysis shows that the "Naval Defence" sector calls for solutions that can be applied in both Civil and Military applications.

For example, this is the case with "**Predictive Maintenance**" for propulsion systems and auxiliary engines specialised in the production of electricity, compressed air and fresh water. Whether it is a military ship, a mega-yacht or a merchant ship, this subject allows to optimise the efficiency of the engines, to anticipate the maintenance operations and to avoid the stops for breakdowns.

This is also true in the "**Decarbonation of the Engines**", with ships cleaner for their environment. It involves new technologies, the use of hybridation and carburants up to now unused in the naval sector.

Finally, whatever the applications, recent attacks from foreign countries on civil equipment show that "**Cyber Security**" has become a key issue.

So, these three subjects are common to many sorts of applications and could be an alternative market for SMEs and optimise by this way their budget of Research & Development.

The ROAD MAPS proposed:

Program: Predictive Maintenance		Data management and Digital Improvement
Equipment and software for Complex Systems (Engines and auxiliary, navigation...)		Naval vessels- Yachts and Merchant ships
Key Challenges: <ul style="list-style-type: none"> - Optimization of the performance, - Scheduling of Technical Stops - Improved availability and default prediction (use of AI, Edge computing) - Communications systems and Connectivity - Smart technologies and big data use for efficient management 		
Calendar: Beginning 05/2023		End: 12/2023
European Funds : <ul style="list-style-type: none"> - EDF - INTERREG - HORIZON EUROPE - National Funds 		
Teams Involved : Clusters <ul style="list-style-type: none"> - Italy : NAVIGO- DLTM - Belgium : DE BLAUWE CLUSTER - Croatia : HKKOI - France : TVT System Factory 		Mission: Stimulate innovation and identify the best suitable solutions in order to cater to the technological needs of defence forces through the involvement of members of the ecosystem. Collaborative research & development among companies located in the LEVIATAD's ecosystem area, also hypothesizing patenting processes and shared services.
Means: <ul style="list-style-type: none"> - MEETING - NAVAL SHOWS - <i>ad hoc</i> INQUIRIES 		
Expected results: <ul style="list-style-type: none"> - Tools for vulnerability assessments and compliance - Treat detection and mitigation- technologies - technical architecture design and implementation 		

Program: Decarbonation of Ships		Use of New Engine Technologies, Hybridation and new Carburants
New ships		Shipyards
<p>Key Challenges :</p> <ul style="list-style-type: none"> - Having ships cleaner (new naval architecture of ships) - Response to the politic of “emission low carbon” - Diversification of the carburant - Post modernization 		
Calendar: Begining 09/2022		End: 09/2024
<p>European Funds :</p> <ul style="list-style-type: none"> - EDF - INTERREG / HORIZON EUROPE - National Funds 		
<p>Teams Involved :</p> <p>Clusters</p> <ul style="list-style-type: none"> - Italy : NAVIGO- DLTM - Belgium : DE BLAUWE CLUSTER - Croatia : HKKOI - France : TVT System Factory 		<p>Mission:</p> <p>Stimulate innovation and identify the best suitable solutions in order to cater to the technological needs of defence forces through the involvement of members of the ecosystem.</p> <p>Collaborative research & development among companies located in the LEVIATAD’s ecosystem area, also hypothesizing patenting processes and shared services.</p>
<p>Means:</p> <ul style="list-style-type: none"> - MEETING - NAVAL SHOWS - <i>ad hoc</i> INQUIRIES 		
<p>Expected results: Sustainability reporting tools measures for co² reduction over the</p> <ul style="list-style-type: none"> - Smart and efficient decarbonized shipping- <ul style="list-style-type: none"> - Sensor development and effective monitoring of co2-reduction. - Smart technologies and the use of data for clean shipping (e.g. route optimalisation, tools to decide on slow steaming, monitoring tools) - New technologies for CO² neutral shipping- Emission reduction through design, technologies and alternative fuels <ul style="list-style-type: none"> o Improvement of frictional resistance of the vessel <ul style="list-style-type: none"> ▪ Antifouling, low friction hull coating ▪ Hull design measures ▪ Hull air lubrication, ... o Ship propulsion systems o Emission control systems - Modifications to marine engines and equipment for new propulsion - The use of alternative energy carriers and power generators 		

Program: Cyber Security		Complex systems with embedded software
On-board Equipment		IT Suppliers
Key Challenges : <ul style="list-style-type: none"> - Fights against threats at all levels (including ports and maintenance activities) - Ensure Continuity of service, - Strengthen authentication on information systems - Increase security oversight - Establish a prioritized list of the entity's critical digital services - Ensure the existence of a crisis management system adapted to a cyberattack. - Urgency of protecting underwater structures - Increase responsiveness to developments in electronic warfare - Need for detection and protection of electromagnetic activities 		
Calendar: Beginning 09/2022		End: 09/2024
European Funds : <ul style="list-style-type: none"> - EDF - INTERREG / HORIZON EUROPE - National Funds 		
Teams Involved : Clusters <ul style="list-style-type: none"> - Italy : NAVIGO- DLTM - Belgium : DE BLAUWE CLUSTER - Croatia : HKKOI - France : TVT System Factory 		Mission: Stimulate Innovation and identify the best suitable solutions in order to cater to the technological needs of defence forces through the involvement of members of the ecosystem. Collaborative research & development among companies located in the LEVIATAD's ecosystem area, also hypothesizing patenting processes and shared services.
Means: <ul style="list-style-type: none"> - MEETING - NAVAL SHOWS - <i>ad hoc</i> INQUIRIES 		
Expected results: <ul style="list-style-type: none"> - Tools to counteract cyber threats, taking into account information security, network security - Safe network architecture and on-time monitoring of critical and weak spots - Cyber security solutions - Security information and event mgt tools - Tools for underwater survey/ protection of vulnerable structures 		

5. Actions requested by the SME s

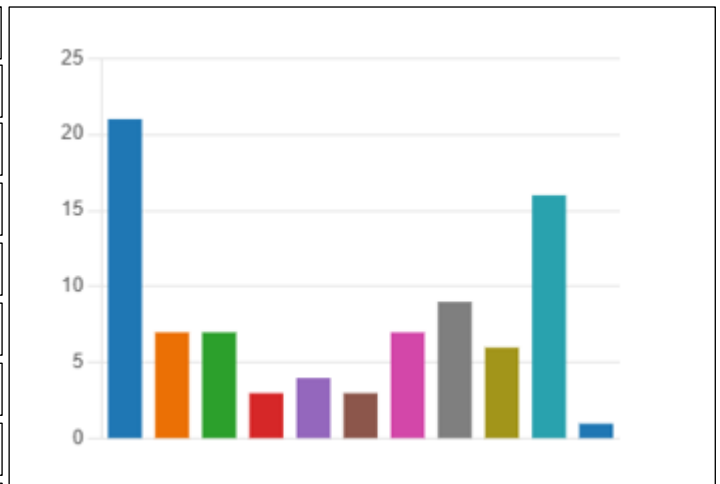
a. Expectations and blocking for developing collaborations

In order to evaluate the interests and obstacles in the implementation of collaborations between cross-border SMEs, we asked them two questions:

- The first: **“Regarding your needs as a company, what are you looking for in a collaboration with a foreign company?”**

The answers are:

	Access to new markets and technologies
	Increased efficiency and cost savings
	Access to capital and resources
	Reduced risk and improved access to resources
	Improved customer service
	Reduced labor costs
	Sharing of expertise and intellectual property
	Exchange of technology and know-how
	Improved quality and product development
	Increased innovation and competitive edge
	Other

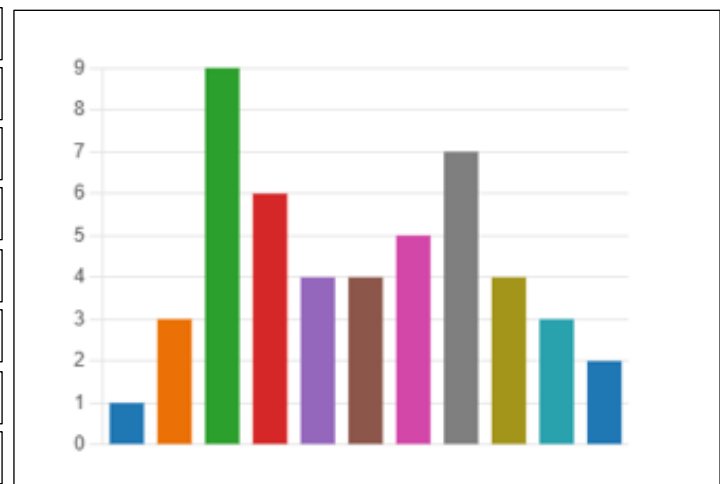


With two main topics:



-  - Access to new markets and technologies
-  - Increased innovation and competitive edge

- The second: **“What could be blocking for you in a collaboration with foreign companies?”**

	Language and cultural differences
	Different business practices
	Risk of intellectual property theft
	Difficulty in establishing trust
	Long terms commitment issues
	Limited access a technology and resources
	Legal and taxation issues
	Lack of resources and financial capacity
	Difficulty in enforcing contracts
	Unfamiliarity with international trade rules
	Other



With two main topics:

-  - Risk of intellectual property theft
-  - Lack of resources and financial capacity

b. Services to be developed

If we previously identified their motivations and obstacles for developing collaborations, we sought to know what services they might need.

So, we asked them **“Which services could you request in a collaboration with foreign companies?”**
And the answers are:



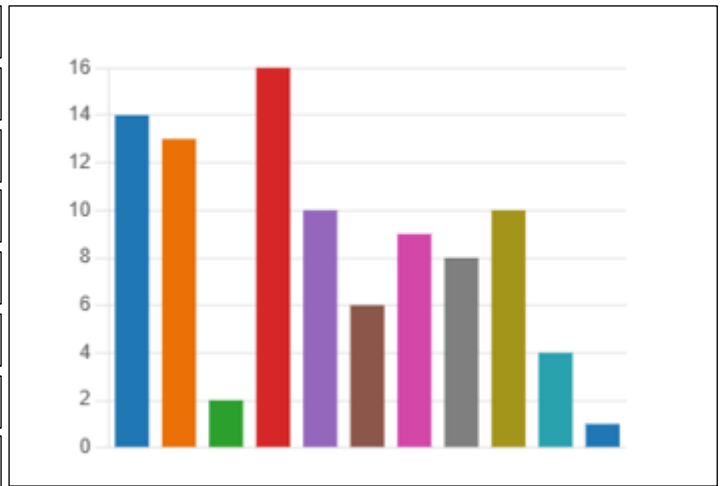
c. Actions helpful to enhance their development

First of all, we tried to know what they expect from the clusters actions. We distinguished the “innovation clusters” from the usual “European clusters” and asked two questions:

- The first: **“Which type of European clusters actions do you consider as very helpful for you to enhance your collaboration actions with other foreign companies?”**

And the answers are:

- Interregional and transnational cooperation programmes
- Cross-border and transnational projects
- Internationalization programmes
- Joint venture programmes
- Mentoring and coaching programmes
- Strategic research and innovation projects
- Networking and knowledge sharing initiatives
- Joint marketing and promotional activities
- Joint production and technology transfer activities
- Collaborative research and development projects
- Other

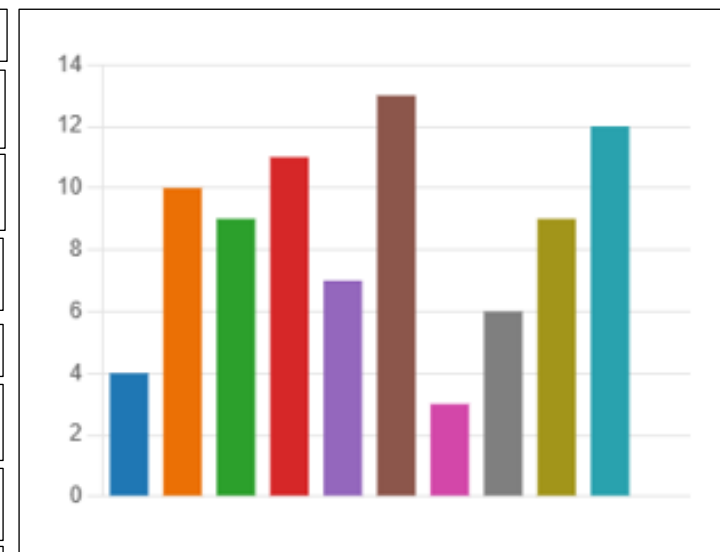


The three helpful actions considered by the SME s:

- - **Joint venture programmes**
- - **Interregional and transnational cooperation programmes**
- - **Cross-border and transnational projects**

- The second: **“Which help would you prefer to ask to an innovation cluster to enhance your collaboration actions with other foreign companies?”**
And the answers are

- Engage in cross-border mentorship programs
- Develop a dedicated website or platform to facilitate collaboration and communication
- Host collaborative events such as workshops and webinars to encourage knowledge exchange
- Develop virtual networks to connect companies with potential partners and resources
- Develop a strategy for international marketing and promotion
- Create joint research and development projects with other companies located abroad
- Establish a dedicated international advisory board to provide guidance, support and advice
- Establish an international accelerator program to provide resources, mentorship and support
- Develop a strategy for identifying, selecting and engaging with foreign companies
- Utilize international trade shows and conferences as a platform to promote collaboration
- Other



The three topics preferred by the SME s:

- - **Create joint research and development projects with other companies located abroad**
- - **Develop virtual networks to connect companies with potential partners and resources**
- - **Develop a dedicated website or platform to facilitate collaboration and communication**

The analysis of the first three topics selected (by the participants) in these graphics shows three types of requests:







- The search for Joint-Venture partnerships
 - o “Joint venture programmes”
 - o “Create joint research and development projects with other companies located abroad”

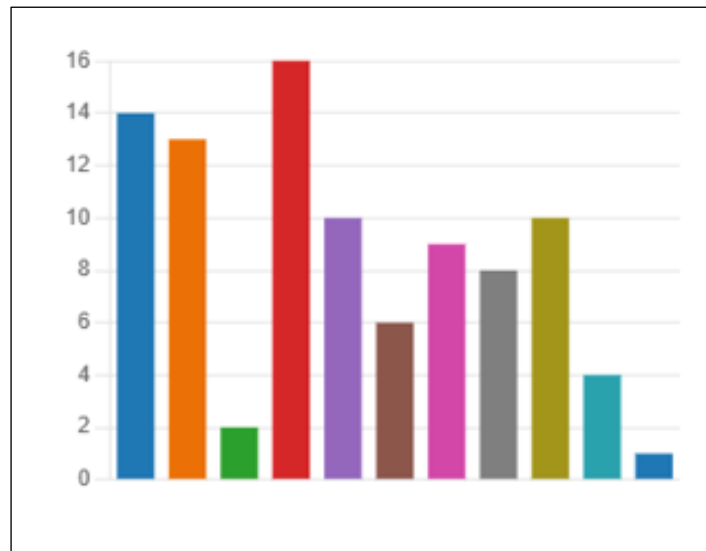
- The willingness to cross borders
 - o “Interregional and transnational cooperation programmes”
 - o “Cross-border and transnational projects”

- The development of networks
 - o “Develop virtual networks to connect companies with potential partners and resources”
 - o “Develop a dedicated website or platform to facilitate collaboration and communication”


b. Vouchers to be helpful to enhance collaboration with foreign companies


In order to focus the actions taken in the framework of vouchers, we proposed different topics with the following results:


	Access to financial support and services from government agencies
	Access to business networks
	Access to advice on international trade
	Access to funding and grants
	Support for international collaborations
	Travel vouchers providing with a convenient and cost-effective way to travel
	International Trade vouchers- These vouchers provide assistance to help with the costs associated with international trade activities, such as marketing, export promotion and international business development
	Business Travel Vouchers- Business travel vouchers can be used to cover the cost of airfare, hotel accommodations, meals and other expenses associated with international business trip
	International Business Networking Vouchers- These vouchers help to connect SMEs with potential partners, suppliers and customers in other countries
	Cultural Exchange Vouchers- These vouchers can be used to fund trips and activities that help to promote cultural understanding and collaboration between different countries and businesses
	Other



The three topics preferred by the SMEs:

-  - Access to funding and grants

-  - Access to financial support and services from government agencies

-  - Access to business networks

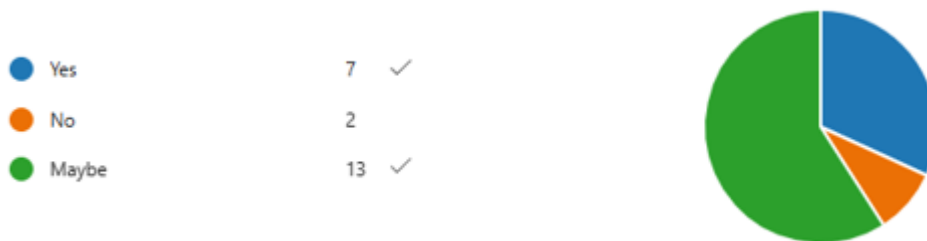
c. Financial partnership

In a technology sector like the “Naval Defence” with real growth opportunities, the question of the financial support for growth is a fundamental issue.

Indeed, a too low level of financial capacity will very quickly limit its growth and/or damage its financial balance.

So, we wanted to know if they had anticipated new solutions based on the participation of investors, like “Business Angels”.

We asked them if they “Could be interested by fundings from “Defence Business Angels” and their answer is dispatched in three parts:



there is a good level of “yes” votes with a progression zone linked to the responses “May Be”.

Conclusion:

The results of this survey provide concrete evidence of the issues perceived as important by the players in the naval defence value chain.

Firstly, understanding the current and future challenges of “Naval Defence” is fundamental. Indeed, the implementation of significant budgets and technical and human resources requires a clear strategic vision.

Engineering and design remain a priority for industrialists, even if a large number are orienting their choices towards the supply and integration of civil and military equipment, for which the technological aspect remains essential.

Priorities and collaboration must find their balance for a sustainable development of the “Naval defence sector” companies. The clusters established in the four countries involved in the LEVIATAD programme have an important role to play as facilitators by implementing targeted actions.

The current international situation has brought to light new challenges that can be transformed into opportunities through a joint drive of complementary European energies.