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MED MS Cluster Methodology

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Executive Summary

The deliverable **"3.4.2 MED MS Cluster Methodology**" aims at defining the guidelines for the collaboration of the national nodes at transnational level (Cluster) through specific activities and processes. In particular, the present methodology aims to provide and underline the key features of the transnational MED Marine Surveillance Cluster which will be developed during project implementation.

In this context, the report presents the state of the art regarding the MS Sector of the countries that will host the national Nodes, the proposed structure, framework and operation of the Cluster, as well as its performance indicators, critical success and sustainability factors which will secure a long and successful life of the Cluster.

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Introduction

The deliverable **"3.4.2 MED MS Cluster Methodology"** aims at defining the guidelines for the operation of the national nodes at transnational level with the establishment of a cluster through specific activities and processes. The present document is an output of the activity 3.4 Maritime surveillance Network. The findings of the previous mapping activities will offer the necessary input to proceed with the elaboration of a Methodological tool for the launching of the MED MS Cluster, fostering the internationalization approach of the project. In particular, deliverables: "3.2.2 Identification of common challenges and opportunities for synergies in MED area", "3.2.3 Prerequisites for a MS Clusters" and "3.2.4 MS Clusters Best Practices" (along with other bibliography) are assessed and taken into consideration in order the methodology for the establishment and the operation of the MED MS Cluster to be designed. The application of the implemented Methodology will be tested during the pilot activities of the following phase.

1 Structure of the MED MS Cluster

On early 90s, Michael E. Porter (American professor on Harvard School, known for his theories on economics, business strategy, and social causes) gave one of the first common definitions about the Cluster:

"*A Cluster is a geographical proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and externalities*".

Although there are many approaches world-widely about the clusters, this initiative shares common objectives such as competitiveness through increased innovation capacity, the emergence of collaborative projects, the stimulation of entrepreneurship and the international visibility.

Generally, the **benefits of a cluster** can be briefly presented as:

- High sustainable competitiveness to the enterprises of the Cluster compared to those that do not belong to a cluster
- Access to expert personnel
- Networking, collaboration, sharing knowledge, experiences and information
- Creation of scale economies in production, reaching the critical mass of demand which is required for the construction/design of a particular products or services
- Cope with joint issues, obstacles & opportunities that cannot be addressed individually
- Further development of the members enterprises

(PORTER, 1998)

The proposed structure of the MED MS Cluster is presented on the following chapters.

1.1 MED MS Cluster Framework

The cluster is presented as a concept defining a particular mode of organization and a new form of collaborative development. The cluster vision and activities reflect the actors' predespositions and values and their will to develop not only in a spirit of competition but also of cooperation and exchanges.

While remaining competitive in the same market, companies can and do have an incentive to develop cooperation between them. Clustering allows them to deploy a more ambitious strategy than if they remain isolated.

The innovations are the result of collaborations that are formed on the territory between companies and other institutions of the knowledge economy: technical support organizations, research and training in particular. Geographical proximity becomes an asset by promoting the rapprochement between these different players and by creating opportunities for innovation.

1.1.1 General Framework of operation

Briefly, the Framework of operation of the MED MS Cluster is presented in figure 1. The Legal Framework of the MED MS Cluster will be in accordance with these of the 6 countries that will host the national Nodes (Cyprus, France, Greece, Italy, Portugal and Spain). The Cluster members will consist of actors from the quadruple-helix sector of the countries of reference such as Universities/Research institutions, Enterprises (SMEs, Startups etc.), Governmental authorities,

Citizens related to MS sectors focusing mainly on the identified prominent sectors of every country of reference. The resources will arise from service providers, subcontractors and funds from banks (e.g. loans), Venture Capital, business angels etc. The cluster will be supported by the states of the 6 countries, their local authorities and by the existed hardcore infrastructures and ICT tools such as transport means, high speed internet and other innovative equipment. More details are presented in the following sections.

Figure 1. Cluster Components

(Pôle Mer Méditerranée, 2017)
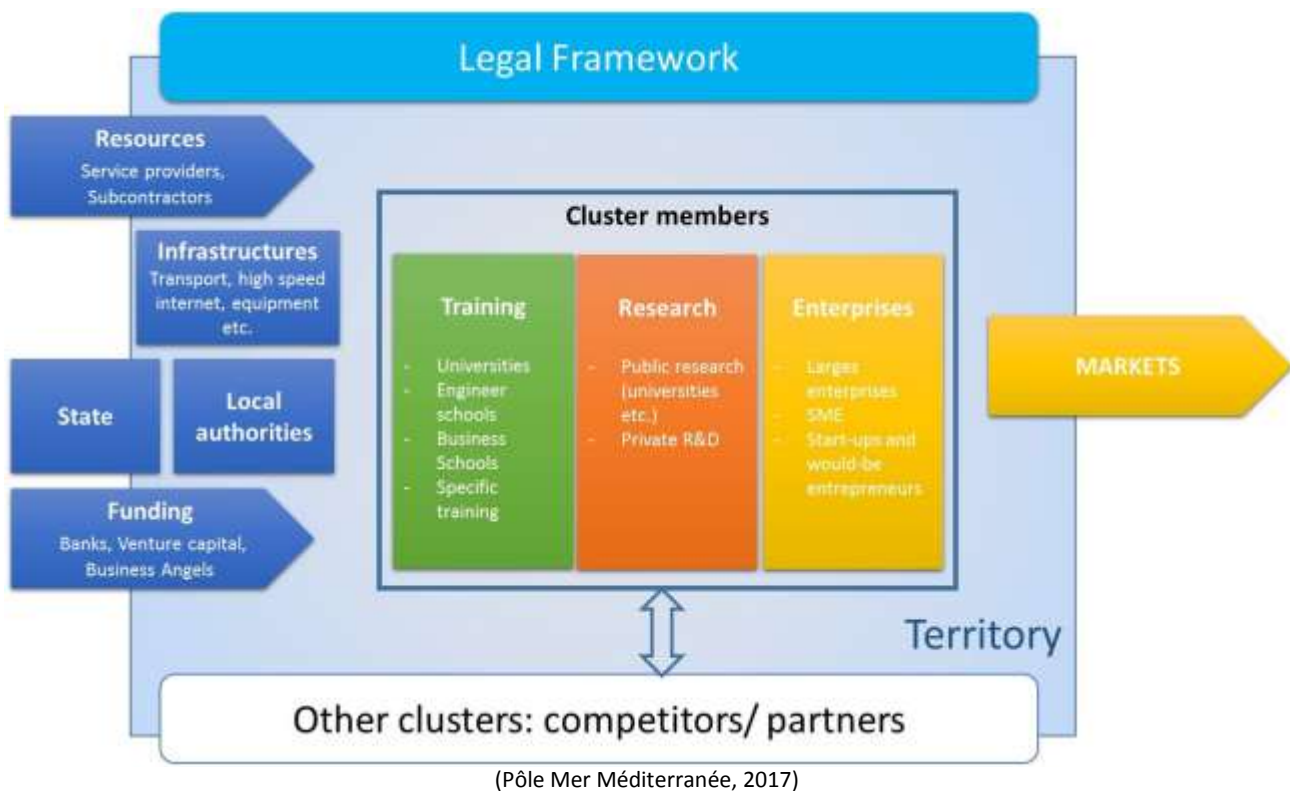
1.1.2 Legal Framework

The European Law has not established any official legal framework or directives for the creation/operation of a Cluster which would require the harmonization of EU member's state national legislation.

For this reason, the legal framework that governs a Cluster should take into account different factors. These factors could be:

- The objectives, the mission, and activities/services, type of members and generally the strategy of the Cluster

- The access to the available financial schemes for the operation of the Cluster and the achievement of its objectives

- National law and Tax system of the country that the cluster is based

The selection of an appropriate legal form for MED MS Cluster is essential as this will define:

- The number of business members & partners
- Communication, rules of engagement & rules for cooperation
- Structured to ensure transparency, fair play to all members

Since the MED MS Cluster will be a transnational one, its legal form will need to take into consideration all the terms and limitations of the 6 countries that will host the national Nodes. So, after the vision, mission, goals and strategy of a Cluster are identified and agreed, legal advice should be sought on the issue of legal formation.

The main identified Legal Forms of a Cluster are the following:

- **Association (non-profit or for-profit):** <u>This the most common used legal form of a Cluster within EU.</u> This form is used when the focus of Cluster organization is to provide "soft" services to its members, such as support to networking and specialization, training or up-grading Cluster members' skills and capabilities, presentation of a Cluster at international conferences, organization of international conferences to make Cluster known to the international community, lobbying, market intelligence or other not for profit activities. As a non-profit organization, Cluster and Cluster members are eligible to receive national and/or EU grants.
- **Cooperative:** The focus of this legal form is on the promotion of individual and joint economic interest of all members. Membership is voluntary and open to everyone. It can undertake commercial activities for itself but also for the members. It cannot receive the EU grants when cooperative makes profit. It is VAT liable and subject to corporate taxation.
- **Partnership:** Formally it is not a legal entity but a set of entities.
- **Private limited company:** <u>Organized with the purpose of undertaking commercial i.e. profit oriented activities</u> Cluster organization takes this legal form if Cluster members are or would like to be engaged in commercial activities. It is subject to value added tax and taxation. It can access national grants (differs according to the countries' rules) and in some cases also EU grants.
- **Hybrid forms:** <u>Mix of association and public or private limited company</u>. Hybrid is the form in which some or exceptionally all Cluster (association) members have been involved and own (owners as members not as association as legal entity) a limited liability company. In majority of the cases hybrid form refers to both: (i) Clusters registered as association for conducting non-profit activities and (ii) business organizations primarily LLC for conduction profit oriented activities. <u>The hybrid form is considered the most cost – effective one, because it allows for a combination of commercial and non - commercial activities</u>.
- **Economic interest group:** Cluster organization takes this legal form when its activities concentrate on providing "soft" services to Cluster members. Cluster companies remain independent business entities. Economic interest group is registered at a court, activities and operations of Cluster organization and Cluster

members are regulated by the founding contract/statute. It is a legal form which provides easy entry of new members into a Cluster and excellent environment for open innovation. Cluster activities can be funded by national and/or EU grants. This form is quite similar with association form.

(Centre for European Education and Studies et UNIDO, 2014)

1.2 MED MS Cluster's objective, Added Value & Vision

1.2.1 Objective

Generally, the objective of a cluster is to strengthen the networking opportunities between its various players in the perspective of stimulating innovation, project development, technology transfer and economies of scale.

The aim of setting up a cluster is therefore to create "economic value", according to an approach backed by the institutional prerogatives of public authorities that support it and by means of private actors, on a common geographical perimeter. Its actions are related to technical and commercial innovation:

- Marketing
- Collaborative initiatives (associations of companies linked to a product / customer value chain)
- Knowledge transfer
- Mutualization of services
- Training of existing or new staff

This notion of "animation" in order to create exchanges, and especially projects, implies two main consequences:

- The first is a dedicated, animation and governance team capable of initiating and detecting projects, choosing them and orienting them according to global economic policies
- The second is the ability to provide technical means (through the provision of expertise or funding, through the implementation and management of technical research and technology platforms, pooling of rare technical means) and financial (by supporting part of the cost of the collaborative projects implemented) to these projects.

(Pôle Mer Méditerranée, 2017)

In this context, the objective of MED MS Cluster could be:

To strengthen the networking opportunities between the key players related to MS in the perspective of stimulating innovation, project development, technology transfer and economies of scale & to create "economic value" according to an approach backed by the institutional prerogatives of public authorities that support it and by means of private actors, on a common geographical perimeter.

1.2.2 Added Value

The MED MS Cluster will enhance cooperation, linkages and internationalization through the implementation of **pilot activities at both National and Transnational levels.** More specifically, the MED MS Cluster will contribute and support

- **Exploration of market opportunities at transnational level:** As a fist set of services, the Cluster's coordinator in collaboration with the Node's coordinators and the Management team could identify and evaluate with the support of the scientific partners (UoA, MARINEM) a series of products, services, technologies and applications offered or developed by their members, regarding their efficiency and their linkage to MS. The 2nd set of services could focus to business ideas and emerging technologies, aiming at evaluating them regarding their level of potential exploitation. The results of the evaluation will drive in the identification of new market opportunities and the elaboration of Business and Exploitation plans. The Cluster will disseminate, transfer and promote all these outputs at transnational level.

- **The enhancement of the members' capacity building**: The cluster will promote and disseminate the results/best practices at transnational level from 2 Technical events and 1 Capacity building seminar organised by each national node addressed to SMEs, start-ups, technology providers, entrepreneurs, researchers, RTOs, as well as the provision of coaching and mentoring services, supporting the members in their business skills.

- **Support in international Trade & Funding Opportunities**: the cluster will support its members in international trade opportunities and funding sources to boost the internationalization of the tested model. The offered services will result in the creation of a Market Place and a matching service that will take place through the MS Platform, while the Nodes will have the opportunity to interact in the framework of the International Funding Opportunities Workshop, introducing the aspect of financial resources in the Cluster's services.

- **Promote Transnational Collaboration (synergies & projects)**: The cluster will foster and support transnational collaboration between actors for the quadruple-helix participating in joint activities and collaborative projects through the development of working groups.

- **Develop a Transnational Networking:** The cluster will support and foster a transnational networking on its members sharing the same area of interest through the organisation of technical events, b2b events, conferences, development of transnational Forum etc.

- **Exchange Innovative Technology:** The cluster will transfer and share innovative knowledge between its members related to MS sector reaching the requirements and the expectations of its members through study visits, technical events, the MS platform and the developed transnational Forum.

Generally, the aim of MED MS Cluster's services is the exploration of the opportunities that arise for the cooperation at a transnational level, by creating synergies between the members of the Nodes/Cluster and joining forces in MS sectors that present common challenges and opportunities.

(Cluster Navigators Ltd, 2011; National Observatory for Small and Medium Enterprises; PORTER, 1998)

1.2.3   Vision

The vision of MED MS Clusters is to be a favourable eco-system, promoting competition and cooperation among actors of quadruple-helix with different industrial backgrounds, technological and business expertise but sharing the vision for an efficient MS in Mediterranean Sea. Its mission is to:

- Create and facilitate collaborative projects/ activities between its members.

- Support SMEs in the MS value chain though an integrated innovation support system and impact financing to build their innovation potential and scale up their growth potential by linking-up to knowledge, technologies, market and expertise.

- Promoting interactions between value chains and other industries in order to develop and capitalize emerging MS industry. This will be achieved by fostering the collaboration of the SMEs with other actors of quadruple helix such as universities, research centres, public authorities and civil society in order to develop innovative ideas and collaborative synergies.

- Develop a favourable environment for open innovation in SMEs facilitating cross-country and cross-sectoral connection, collaboration and acceleration of MS Innovation.

1.3   Structure & Governance Scheme of the MED MS Cluster

In this section is defined the structure and both the governance mechanism, managing rules and regulations of the MED MS Cluster.

1.3.1   MED MS Cluster's Structure

The structure of the MS Cluster can be presented in the following figure following a typical structure of a cluster:
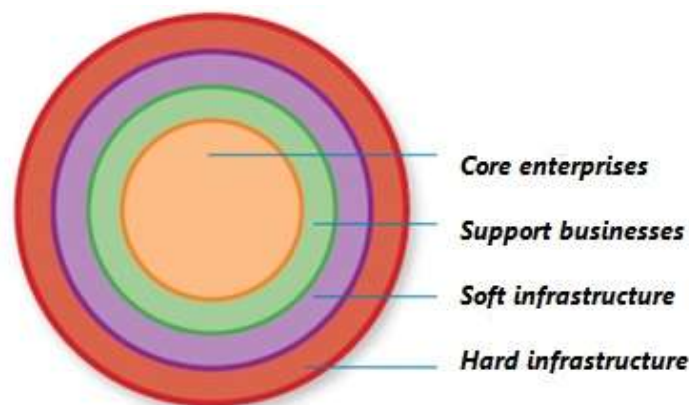
Figure 2. *Structure of MED MS Cluster*

Core Enterprises: Constitute the lead members of the cluster that their main income arises from customers beyond the cluster's limits.

Support businesses: Enterprises that are directly or indirectly support the core ones.

Soft infrastructures: They are key ingredients for a successful Cluster and could consist of schools, universities, polytechnics, local trade and professional associations, business support organizations, chambers, economic development agencies etc. supporting through their activities the core enterprises.

Hard (physical) infrastructure: These are roads, ports, communication links etc.

1.3.2 Governance Scheme

The governance team shall be responsible for defining the strategic lines of action in consonance with the cluster membership priorities. Usually, it consists of the Cluster's Coordinator, the Management Team, an Advisory Board and the Working Groups.

The **Cluster governance structure** should be developed after taking into consideration the following issues:

- The vision and the role of the MED MS Cluster and definition of the key challenges for its operation and sustainability.
- Definition of clusters activities and its stages such as design, organisation, implementation etc.
- Definition of the role, the duties and the responsibilities of the members related to Cluster's objectives and vision.

The proposed Structure scheme is described in the following figure:
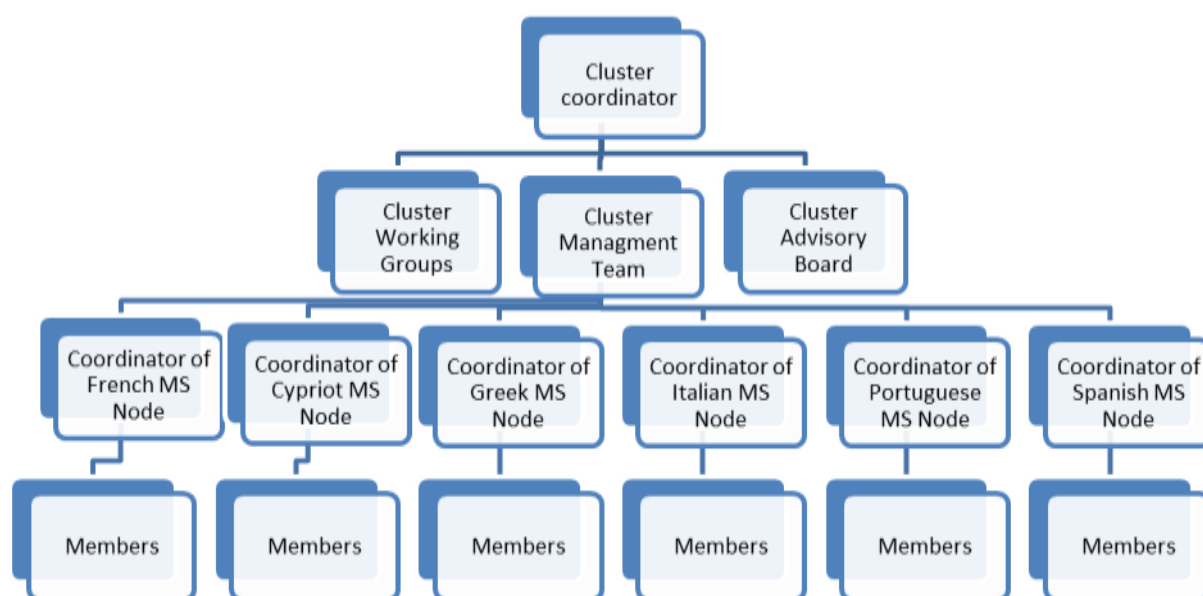
Figure 3. *Proposed MED MS Cluster Governance Scheme*

Cluster Coordinator: He will be responsible for the day to day co-ordination of the cluster and he will be supported by the Cluster Management team. He will responsible for operation, coordination and implementation of MED MS Cluster under the framework of the MED PROteuS project. The Cluster Coordinator should be an individual with a deep understanding of the sector and the cluster development process. The Cluster coordinator could be a skilled and experienced staff member of one of the Project's partners.

Proposed Duties:

- Define project priorities at any given project time.

- Motivate and Support, the members of the Cluster Management Team to work together effectively and try to maximize the anticipated benefit for Cluster members.

- Secure the coordination with Node Coordinators of the countries of reference.

- Lead and work on behalf of the Cluster as a whole, facilitating all Cluster activities and maintaining a strategic vision.

- Monitor overall Cluster's performance, evaluation and sustainability

- Ensure that the information/communication is well managed and shared, predict and address possible risks, identify and valorise available opportunities and secure the efficient operation/collaboration between the management team, the working groups and the advisory board.

- Promote MS principles at transnational level.

Cluster Management team: This management team should be experienced and work full-time for the whole life of the Cluster. The team will be responsible for undertaken the expected results of the Cluster. The team will also advice the Cluster and its Nodes on issues of strategic positioning, controlling and monitoring of activities and evaluating the already completed activities. It is suggested that the Cluster Management Team will consist of 9 members, one from each partner including the Lead Partner (Cluster Coordinator).

Proposed Duties:

- Support the overall targets of the MED MS Cluster at both regional and international level.

- Responsible for the financial management and fair allocation of the funds to the projects. (The financial manager could be a member of the management team).

- Inspire international practices and know-how to local environments.

- Responsible for the communication activities of the Cluster (The Communication manager will be a member of the Management team).

- Exchange experiences for Cluster activities, organize joint activities, identify the needs of the members, and design/elaborate plans and guidelines tailored to cluster's members.

Advisory Board: The board will consist of expert organizations from Europe whose role is to provide to the Cluster Coordinator and the Cluster Management Team their expertise and knowledge over the Cluster development and implementation. The advisory Group could be composed by 5-8 members and they could be staff from the associated partners of MED PROteuS project.

Proposed Duties:

- Consult the Cluster and provide monitoring activities (including deliverables' approval)

- Provide evaluation and quality control contributing to Cluster's sustainability

- Engage actors from quadruple-Helix

- Consult about key technology and market trends

- Promote the Cluster concept and build-up international collaborations/synergies

- Search for alternative funding resources

- Provide and ensure political support at regional and international level whenever this is required

Cluster Working Groups: Support the Cluster Management Team and assist in the formation of strategies and proposal actions. These groups will constitute a useful mechanism to help build consensus, they may be sector orientated or thematic, depending upon the approach adopted. They should be given specific terms of reference or timetable for delivery of results. It is recommended to include a member of the Advisory board in each working group together with a member of the management team. The members of the Cluster should participate in at least one working group of the Cluster.

Proposed Duties:

- Exchange ideas, information and diffusion of results

- Validation and discussion, analysing the results

- Collect ideas/experiences in order to develop Cluster activities and propose synergies and joint concepts

- Proposed joint synergies and collaborative projects

In order to secure that all stakeholders share the Cluster objectives, the governance scheme should be flexible enough in order to let each actor to have a role and eventually take the lead in specific phases of project design, according to actors' characteristics, background, and capacities.

When actors are many and different, it might be very difficult for them to find their own way to collaborate and manage potential conflicts. In order to tackle this potential problem, the governance scheme should include 'boundary spanners', that is to say, people with interdisciplinary knowledge or proven experience in interaction with different actors (they could be chosen by the advisory board), and who can hence help moderate the process.

1.4 The potential members that have to be reached to achieve the critical mass

Each one of the 6 Nodes should at least have 30 members from quadruple helix, so the potential members of the MED Ms Cluster that have to be reached to achieve the critical mass is **180 members**

1.5 Communication approach between members

An information and communication mechanism should be established for the MED MS Cluster's purposes. This mechanism should include:

- A person that will be the communication manager of the cluster. This may be an elected member from the management team who will ensure the efficient communication with the Node coordinators.

- Specific norms, standards and principles that should be followed for effective information management.

- A communication plan facilitating the effective and easy communication with members of the Cluster Management Team including: communication channels, contact list, cloud applications, meeting schedules, who does what where information etc.

- Managing and communicating the decision timeline process is an important skill required to ensure the Cluster progresses as planned. Given the duration and the nature of the main tasks (events, services etc.) Node Coordinators need to be aware of the impacts of delays on other outputs/activities and communicate them.

Generally, the efficient internal information and communication strategy is essential for the successful operation of the MED MS Cluster. Ideally an internal communication and dissemination method and strategy should be defined at the outset and prior to the main Cluster launch, to decide which tools would be used, and how. Some of these tools are:

- **Ordinary Cluster Management Team meetings**: These could be physical meetings or regular online-meetings (through Skype or other platform) aiming to ensure each Node commitments, face joint obstacles and issues, present the progress and the results of joint projects or activities and discuss future actions. The Cluster Coordinator together with Communication Manager will define the content of the meetings and coordinate the discussion, ensuring the participation of the Management Team or other members.

- **Standard internal reports:** These reports are strongly recommended and they are related to activities, project/activities progress and results. These can be elaborated from each Node Coordinator with the contribution of the Management team once an activity has been completed.

- **Internal dissemination tools:** These tools are essential for collecting information, reports, outputs etc.

(National Observatory for Small and Medium Enterprises; European Cluster Observatory; MARINEM, 2017)

2   MED MS Cluster's Support Services

This section presents the proposed support services of the MED MS Cluster. The services aim at encouraging collaborative projects/activities between cluster's members and synergies with other clusters and providing support for networking opportunities, training, presentation of the cluster at international conferences, organization of international conferences etc. A brief model of Cluster's operation is also presented in the chapter 3.3.

Generally, the MED MS Cluster's Management Team (including Cluster Coordinator) will facilitate and support the coordinator and collaboration of the 6 National Nodes and will be responsible for organizing their transnational activities.

2.1 Main Activities

2.1.1   Develop interactions & synergies between cluster members

The management team (including the cluster coordinator) supported by the advisory board will take into consideration the state of the art of the areas of reference regarding the MS sector as well as the needs and the opportunities that arise between the selected members of the cluster and will propose synergies and interactions between them.

The management team will consider both collaborative activities to all companies to strengthen intra-cluster solidarity and it will set up an organization in thematic groups related to prominent MS sectors. The team will manage these groups whose activity will be turned towards the definition of projects with innovative content. The thematic groups could be divided to:

- Maritime Security & Safety activities
- Maritime Environment
- Fisheries Control
- Customs
- Defence
- General Law Enforcement

Each thematic group will propose interactions and synergies related to the theme of the group and will facilitate and advise the actors that are interested to enroll in. The proposed interactions and the synergies will be designed after taking into consideration the state of the art of the market and the identified opportunities that arise. These interactions could be:

- Training events (conferences, seminars etc.) that will improve the capacity building of the members
- Study visits, ex-changing knowledge and experiences
- Thematic events and exhibitions over the application of MS technologies in key market sectors
- Creation of a transnational Forum related to MS sectors

2.1.2   Support the emergence of collaborative projects

The main activities of the cluster governance in order to support the emergence of collaborative projects will be:

- to establish and coordinate an efficient network of actors & members

- to trigger the members to participate in collaborative projects
- to identify financial sources
- to identify market opportunities
- to support the development of a collaborative project

Considering that collaborative projects allow companies to carry out projects that they cannot do on their own and that innovations can no longer emanate from a single player but from cooperation between different players of quadruple helix, the establishment and coordination of a flexible, experienced and skilled network of actors is a challenge that has to be faced successfully by Cluster governance.

Generally, there are different types of collaborative projects. For instance, these can be carried out by two or more companies and a research center in order to introduce new products on the market in the short to medium term or a research project which can be carried out by research organizations with the support of private companies. The MED MS Cluster will promote and support all kind of collaborative projects. The following process presents the indicative steps for the creation of a collaborative project:

1. **Creation of an innovative idea:** In a collaborative context, the core members of each thematic group will design new products or services. Creativity and collaborative ideas will be fostered by bringing together industrialists and representatives of the scientific community, researchers and academics, also members of the public and NGO sectors in working groups led by experts (management team).

2. **Preparation of the project**: it is a matter of moving from the idea to the formalized project with a precise description of the objectives sought. The labeling of the collaborative projects by the governance of the cluster is also recommended. It translates the formal agreement of the members of the cluster and allows a hierarchy of the projects emanating from the cluster, appreciation of which the financiers will be used.

3. **Project management**. The aim is to consolidate the project and to structure its initial results.

2.1.3   Proposed Synergies with other clusters

Cluster's Management team will seek for synergies with existing successful clusters where complementarities have been identified. Based on the findings of Del.3.2.4 MS Clusters Best Practices, the countries that will host the national nodes have already developed successful cluster related to the maritime industry. These clusters can support directly the establishment and the operation of the MED MS Cluster and their representatives can be invited in order to share and exchange experiences and knowledge.

2.2   Support Services in the context of PROteuS project

This section describes the MED MS Cluster's support Services which were defined and described in the Application Form of the MED PROteuS project. The MED MS Cluster will collect and present (through the MED MS Platform) the outputs produced by each national Node in order to promote collaboration between its members at transnational level.

1. Exploration of Market Opportunities

Beneficiaries	The members of the 6 National Nodes (selected actors from quadruple helix: SMEs, start-ups, enterprises, RTOs, Policy makers and citizens)
Partner's involved	All Project Partners.
Aim	▪ Mapping of products, services, technologies and applications offered or developed by their members, regarding their efficiency and their linkage to MS at transnational level. ▪ Elaboration of Business ideas and emerging technologies' capabilities, aiming at evaluating them regarding their level of potential exploitation at transnational level. ▪ Identification of new market opportunities at transnational level.
Output	A transnational coverage Report related to available mature technologies/ applications/ products offered by the members. A transnational Report with identified ideas/technologies and the assessment of their potential exploitation. A transnational Report with identified New market/business opportunities linked to MS. The transnational reports will be the outcome of the 6 relevant national reports.
Activities Description	The 1st set of services offered to the Cluster's members will be provided with the support of MS Platform. Through the provided services, the Nodes' coordinators will identify and evaluate with the support of the scientific partners (UoA, MARINEM) a series of products, services, technologies and applications offered or developed by their members, regarding their efficiency and their linkage to MS. The 2nd set of services will target business ideas and immature technologies, aiming at evaluating them regarding their level of potential exploitation. The results of the evaluation will drive in the identification of new market opportunities and the elaboration of Business and Exploitation plans.

2. Enhancement of Member's capabilities

Beneficiaries	The members of the 6 National Nodes (selected actors from quadruple helix: SMEs, start-ups, enterprises, RTOs, Policy makers and citizens)
Partner's involved	All Project Partners.
Aim	The provision of a mix of services targeting the enhancement of the MED MS Cluster members' capabilities.
Output	Coaching of Clusters' members in Business skills
Activities Description	Coaching MED MS Cluster members in basic business skills consisting of innovation management, HR, networking, finance, decision making, marketing, according to their needs and weaknesses.

3. Support in International Trade & Funding Opportunities

Beneficiaries	The members of the 6 National Nodes (selected actors from quadruple helix: SMEs, start-ups, enterprises, RTOs, Policy makers and citizens)
Partner's involved	All Project Partners.
Aim	Support of MED MS Cluster's members in international trade opportunities and funding sources to boost the internationalization of the tested model.
Output	▪ Creation of a special section of the MS Platform "the Market place" that will host offer & demand of MS applications, services & products at transnational level, promoting international trade & cooperation among providers & potential customers. ▪ Transnational matching service among offer and demand of MS technologies and applications that will be included in relevant reports based on the identified MS technologies uploaded in "the Market place". ▪ Proceedings' report for funding at transnational level (transnational workshop)/ offering to cluster's member the opportunity to get in touch and create synergies for funding.
Activities Description	The offered services will result in the creation of a Market Place and a matching service that will take place through the MS Platform, while the Nodes will have the opportunity to interact in the framework of the International Funding Opportunities Workshop, introducing the aspect of financial resources in the Cluster's services. The aim of these services is the examination of opportunities to cooperate at a transnational level, by creating synergies and joining forces in MS sectors that present common challenges and opportunities.

4. Promotion of Cooperation to enhance Internationalization

Beneficiaries	The members of the 6 National Nodes (selected actors from quadruple helix: SMEs, start-ups, enterprises, RTOs, Policy makers and citizens).
Partner's involved	All Project Partners.
Aim	To promote the cooperation among MS members and enhance the Internationalization of the MED MS Cluster operation.
Output	2 International events focusing on Knowledge, Technological and Experience exchange among Maritime Surveillance experts, with the participation of PPs, ASPs and members of the Cluster.
Activities Description	Organization of 2 International exchange events of Maritime Surveillance experts that will be hosted by Pole Mer in France and Piraeus Port Authority in Greece that will include on-site visits and presentation of MS systems, achieving knowledge and technology transfer among the experts of the sector, the PPs, the ASPs and members of the National Nodes.

5. Elaboration of 2 Action Plans

Beneficiaries	The members of the 6 National Nodes (selected actors from quadruple helix: Business Support Organizations, enterprises, RTOs and Public Authorities).
Partner's involved	All Project Partners.
Aim	Elaboration of two Med Region Action Plans, one aiming at enhancing the operation of Maritime Security Industry and one aiming at fostering synergies among the MED MS Cluster and other international Networks and Clusters.
Output	2 Action Plans.
Activities Description	The 1st Action Plan will be based on the results of Studying and Testing phases including specific growth potential of Maritime Surveillance sectors and the 2nd will set the steps and concrete actions that MED MS Cluster will follow aiming at enhancing the transnational character of the Cluster.

6. Mainstreaming of results

Beneficiaries	Business support organizations & Higher education and research actors
Partner's involved	All Project Partners.
Aim	The valorization of the developed and tested model of Maritime Surveillance Cluster in other Blue Growth sectors that have common characteristics to make use of relevant technologies and applications.
Output	1 Plan
Activities Description	Adaptation of the developed and tested operation model to other Blue Growth sectors that could be fostered through the creation of the transnational MED MS Cluster and the provision of relevant services to their members. In addition, the mainstreaming will focus on the valorization of the identified technologies and applications by other sectors, opening new horizons to research and technology activities of RTOs.

7. Policy recommendations

Beneficiaries	National Public Authorities.
Partner's involved	All Project Partners.
Aim	Identification of a "niche" on the international market that corresponds to the specific needs of the regional public and private economy, the demands of international economy and the potential and needs of MED area.
Output	2 Reports: Policy Recommendations & Policy Paper.
Activities Description	Collection of findings from studying and testing activities of PROteuS project and propose operational recommendations to overcome existing difficulties, tackling challenges, further deployment of the available technologies, products, services and applications, financing tools as well as development of competences all along the supply chains.

2.3 Cluster Model of operation

In this section is presented the operational model of the Cluster which has as a main scope to ensure its sustainability.

The Cluster members will consist of actors from the quadruple-helix sector of the countries of reference (Cyprus, France, Greece, Italy, Portugal and Spain) such as Universities/ Research Institutions, Enterprises, Governmental Authorities and Citizens related to MS sectors focusing mainly on the identified prominent sectors of every country of reference. The MED MS Cluster's members will be the selected members of the 6 National Nodes (at least 30 per Node. As mentioned on Section 2, the structure of the MED MS Cluster is divided in:

- **Core Enterprises:** (The lead members of the cluster, usually their main income is from customers beyond the cluster's boundary).
- **Support Businesses:** (Businesses that are directly or indirectly supporting the core enterprises of the cluster).
- **Soft Infrastructure:** (Local schools, universities, polytechnics, local trade and professional associations, economic development agencies and others supporting through their activities the core enterprises and support businesses. They are key ingredients for a successful Cluster).
- **Hard (physical) Infrastructure**: (roads, ports, waste treatment, communication links etc. The quality of this infrastructure needs to at least match competitive destinations, be they local or further afield.

The budget of the Cluster will be exclusively dedicated to the governance, its operational activities and the associated costs in terms of salaries and non-staff costs. For the clusters that have a dedicated team to support the member's activities, the following resources of funding are identified:
- Funds from banks
- Venture Capital
- Business Angels
- Public funding (including operational programs)
- European Funding
- Membership fees
- Fee-based services (services offered to cluster members or outside)
- Private sources of funding as in-kind (non-cash) contributions (e.g. seconded staff from members)

The cluster will be supported by the states of the 6 countries, their local authorities and by the existed hardcore infrastructures and ICT tools such as transport means, high speed internet and other innovative equipment. As mentioned on Section 2, the Cluster Governance scheme will consist of:

Cluster Coordinator: He will be responsible for the day to day co-ordination of the cluster and he will be supported by the Cluster Management team.

Cluster Management team: This management team should be permanent, experienced and work full-time for the whole life of the Cluster. The team will be responsible for undertaken the expected results of the Cluster.

Advisory Board: The board will consist of expert organizations from Europe whose role is to provide to the Cluster Coordinator and the Cluster Management Team their expertise and knowledge over the Cluster development and implementation.

Cluster Working Groups: Support the Cluster Management Team and to assist in the formation of strategies and proposal actions. These groups will constitute a useful mechanism to help build consensus, they may be sector orientated or thematic, depending upon the approach adopted. Each member should at least participate in 1 working group.

In general, the governance scheme will be flexible enough in order to let each member to have a role and eventually take the lead in specific phases of project design, according to actors' characteristics, background, and capacities.

For the efficient internal information and communication of the MED MS Cluster, a Communication plan will be defined at the outset and prior to the main Cluster launch, to decide which tools would be used, and how. Some of these tools are:

- Regular Cluster Management Team meetings

- Regular internal reports

- Internal dissemination tools

(European Cluster Observatory; European Cluster Collaboration Platform; National Observatory for Small and Medium Enterprises)

3   Benefits & Responsibilities of the MED MS Cluster's members

This Section presents the benefits and the responsibilities of the MED MS Cluster's members. To be mentioned that the MED MS Cluster's members consist of the members of the National Nodes. Once each National Node should have at least 30 members according to the initial schedule (project's application form), the potential stakeholders that should be reached is 30x6 = 180 members.

3.1   Benefits of MED MS Cluster's members

As already referred on Section 2, the benefits of a cluster are:

- Increased & sustainable competitiveness to those firms that are based in Clusters instead of similar not belonging in the Cluster by integrating core competencies and capacities
- Better access to skilled labour
- Reduction of transaction costs
- Sharing of knowledge and information, and learning through networking, interaction and collaboration
- Utilization of complementarities in the input of resources, which may create scale economies in production and chances to reach critical mass of demand necessary for the production of a particular goods or service
- Deal with common problems & opportunities that cannot be addressed individually
- Development of leader firms

More specifically, depending on the legal status and the type of the actor, the cluster can offer the following benefits:

Main Benefits of MED MS Cluster members:

- **Access to advanced database of information** related to MS sectors through the on-line MED MS platform such as: market trends, opportunities, relevant technology & innovation, available funding channels etc.
- **Access to strategic transnational collaborations** exploiting the opportunity to establish contacts with key players of the MS sector in an open and flexible context within the MED MS Cluster and participate in collaborative innovative projects.
- **Access to complementary skills & expertise** among the members of the Cluster being able to speed-up their innovation's time to market, paths to new sources of funding and access to new markets, exploiting the synergies and the network effect.
- **Build up skills & competences and develop capabilities** to face entrepreneurial challenges, innovative products, services or strategies, access to international markets, training of their staff, exchange scientific knowledge & information and develop partnerships through participating in training seminars and events.
- **Promotion of their technologies and services** to potential recipients, co-developers and investors in the MS area through transnational network.

- **Participation in active technology transfer activities**, promoting selected technologies identified in order to reach technological needs of the MS Industry, through direct visits and participation in exhibitions/conferences.
- **Opportunities to actively participate in Match-Making Events at transnational level** aiming to bring together companies, technology centres, research and development institutes, research laboratories, universities and private researchers offering innovative technologies and know-how, looking for technological solutions or searching for partners for the European R&D projects.
- **Strong marketing through** the MED MS Cluster increasing their recognition and exposure in the market of being one of the pioneer organizations in MS sector.

(European Cluster Observatory; National Observatory for Small and Medium Enterprises; European Cluster Collaboration Platform; Pôle Mer Méditerranée, 2017; PORTER, 1998)

3.2   Responsibilities of Cluster's Members

The responsibilities of the Cluster's members will be defined by the Cluster's coordinator in collaboration with the Management Team and the Node's coordinators. These should be designed by taking into consideration Cluster's sustainability and successful operation (short and long term) and more specifically taking into account the critical success factors and the performance indicators (see section 5). Indicatively, a set of proposed responsibilities for MED MS Cluster's members could be the following:

- Participation in Cluster's organized networking events such as B2B events, conferences, exhibitions etc. (the member should participate at least in 3 events every year in order to be active).
- Participation in Cluster's organized training events: training seminars, study visits etc. (participation in 2 events at least).
- Provide an annual membership fee **(to be decided).**
- Enroll at least in one working group of the Cluster.
- Propose at least 2-3 joint activities/synergies/collaborative projects during the year.
- Reach the deadlines set in the working group according to their defined roles and duties.

4 Performance indicators of the MED MS Cluster

This Section presents the performance indicators for the operation of the MED MS Cluster. The proposed indicators are quantitative and qualitative ones based on other successful Cluster models in order to monitor MED MS Cluster operation. The assessment of the factors will define whether any modifications/interventions are needed for securing cluster's sustainability.

4.1 Critical success factors

From successful cluster analyzes, lessons can be learned about the conditions to be met in order to achieve the targeted objectives, namely to create the economic value mentioned above by generating innovations which will bring a competitive advantage to the companies' members.

Between the time of the creation of the cluster and its maturity, several years can elapse. This is the time needed to shape its strategy, establish trust between companies and to develop and implement collaborative innovation projects. It is shorter in cases where the industrial community has been marked in the past by professional solidarities. The critical success factors for the MED MS Cluster could be the following:

4.1.1 Conditions related to size, organization and motivation

- **A critical mass of members** from the quadruple helix sector should be defined. Once the members of the National Nodes should be at least 30, then the members of the MED MS Cluster **should be at least 180** (30 members x 6 Nodes). The size of actor is not very important. However, SMEs should be the core component of the Cluster and should be facilitated in their innovation endeavors. Generally, Cluster's members should mainly consist of SMEs.
- Involvement of industrial personalities with the capacity and willingness to mobilize the community and represent it outside (**extroversion**).
- One (at least) experienced **Cluster coordinator** (see section 2).
- A **Management Team** (see section 2)
- An **Advisory Board** (see section 2)
- **Working Groups** (see section 2)

4.1.2 Conditions related to the activity

- **Expanding sector**: if no sector is to be excluded a priori, the growth sectors will give tangible results faster. The confidence in a system based on pooling and sharing, is all the more important as there are prospects for increasing market share for all members. If the sector is emerging, the presence of researchers and financiers is essential, since the cluster has to encourage the creation of innovative new companies. Identification of the market, the technologies and the opportunities arise is part of the provided to the members services (see section 3).
- **Potentialities for innovation and perspectives to upgrade in productivity and innovative content** (see section 3).

4.1.3 Conditions related to the geography

- A location serviced by quality (physical and virtual) communication infrastructures, from which it is possible to easily access research centers, transfer centers, technical centers (or other sources of innovation).

▪ Support from the ecosystem and in particular from local and regional authorities.

4.1.4   Conditions related to the definition of clear objectives

▪ Having clear objectives for cluster development (see section 2).
▪ Define governance approach, instruments and indicators to assess its efficiency (see section 2).

4.2   Define the performance indicators

Before the selection of the performance indicators, it is essential to be taken into consideration the advantages and the key characteristics of the MED MS Cluster. The key characteristics both with the critical success factors will define an efficient set of indicators for monitoring MED MS Cluster's performance.

4.2.1   Advantages and key characteristics

▪ **SMEs and Start Ups are an important factor for renewal within the industry** as they often end up in smaller niche markets where they can assess new ideas and product concepts. SMEs play an important role as suppliers to large companies and need to be at the core of the Cluster activities.

▪ **A Positive environment for all players:** Clusters provide a positive environment for new firms, enabling access to customers, supply chains, to skilled labour and to information. Large firms benefit from specialist suppliers enabling them to focus on their core competencies, and benefit from SMEs that are experimenting at the cluster's periphery. Clusters enable SMEs to tackle issues that would be difficult to address in isolation. Large firms act as important partners and customers for SMEs.

▪ **Foster innovation:** Within a strong cluster there is rivalry and intense competition. This is central to fostering innovation. Close interaction and exchanges amongst co-located firms underpins competition and stimulates innovation. Moreover, cooperation and linkages among competitive core firms and new firms, often exploring new markets, new processes, new technologies, support firms and service providers, government departments and other foster innovation.

▪ **Focus in internationalization:** in particular in small countries, internationalization should be at the centre of the cluster development approach. Developing the cluster's brand can be an element of export development and added value for small actors.

▪ **Fosters cross-sectoral cooperation:** Successful clusters provide an important bottom-up input to the establishment of region's economic strategy involving also players from other sectors that may have positive impact on the target sector.

▪ **Focus on results and impact and adopts continuous evaluation processes:** A continuous evaluation processes should be established and adopted from the cluster including: satisfaction questionnaires, assessment and benchmarking with other similar clusters etc. The cluster is engaging on activities that have noticeable impact on the cluster's firms and other members and the local economic impact as well.

▪ **Provides added-value:** In order to effectively engage all the key players, the cluster should provide an added-value to them and a win-win process targeted to their needs.

▪ **Sector-specific methodology**: No one-size fits all. The design will be in line with the sector and region's specific needs, taking into account both the maritime specific culture and MS specific idiosyncrasies.

- **Emphasis on all the different Phases:** covering Establishment, Building, Implementation and Evaluation.
- **The Human factor:** cluster is about leadership, personal relationships and trust building. Selection of appropriate people for the Governance Scheme is of key importance.

(Pôle Mer Méditerranée, 2017)

4.2.2   Performance indicators

- Total number of projects undertaken by clusters
- Number of collaborative projects undertaken by clusters
- Number of companies adhering to the clusters
- Number of companies involved in projects
- Number of companies involved in collaborative projects
- Number of research-technology bodies working in cluster projects
- Spending on the financing of the activity of the cluster (excluding collaborative contracts) borne by the member companies
- Number & quality of the actors involved
- Presence of funders
- Formalization of economic, technological and scientific objectives
- Number of jobs created

Additionally, some other indicators for measuring the impact on business sectors represented by the cluster could be based on the evolution of the macroeconomic indicators of these sectors such as:

- Production / productivity indicators
- Share of exported production
- The relative positioning of the business sector of a country compared to competing countries

(National Observatory for Small and Medium Enterprises; Pôle Mer Méditerranée, 2017)

5 Sustainability Factors

This section presents the sustainability factors that should be taken into consideration in order the MED MS Cluster to operate sustainably.

5.1   Funding Schemes

The funding of the Cluster is one of the main factors for its sustainability. The budget of the Cluster should be exclusively dedicated to the governance, its operational activities and the associated costs in terms of salaries and non-staff costs. Once the MED MS Cluster has a dedicated team to support the member's activities (Cluster Coordinator, Management Team etc.), sources of funding are required for its operation. These resources could be:

- Funds from banks
- Venture Capital
- Business Angels
- Public funding (including operational programs)
- European Funding
- Membership fees
- Fee-based services (services offered to cluster members or outside)
- Private sources of funding as in-kind (non-cash) contributions (e.g. seconded staff from members)

The European Initiative for Cluster Excellence estimates that at least 20% of the cluster governance budget must come from private sources of funding, in order to ensure its sustainability in the medium and long term. Although most of European clusters have been created with significant public support, however, as these funds are generally limited in time, it is necessary for the clusters to appropriate other sources of financing to ensure their sustainability.

Generally, the increase in the share of private financing within a cluster can be considered as an evidence of a good management of a cluster insofar as paid products or services are proposed and accepted by the cluster members or other actors. This model implies that the added value is recognized by the cluster members.

The Governance of the MED MS Cluster must be based on stable and sustainable financial foundations this will allow to concentrate its efforts on its primary missions. Without sustainable funding, Cluster Governance must devote a large number of resources and time for seeking new funding. These resources are then not used for the development and implementation of services for cluster members.

Clusters require significant investment over a period of time. In all of the cases, cluster development policy had been implemented over a considerable period of time and in a coherent and consistent way.

5.2   Marketing & Advertising Activities

The governance team shall define the business and communication strategy in line with the cluster objectives in order to increase the number of the members involved and attract more investors contributing to the funding of its activities and its operation.

A marketing plan should be elaborated identifying potential market segments, customers and new members and define available promotion approaches and channels which could contribute to product/services valorization.

Additionally, the information, communication, awareness raising and dissemination activities will be based on a communication plan. This plan will be the cornerstone of all communication related activities and it will be internally updated at regular basis by the communication officer who will be a member from the management team of the Cluster. Milestones of the Joint Communication Plan are the following:

    I.   Establishment of the Cluster's identity (Logo, presentation template etc.)
   II.   Define the Cluster's communication approach towards its members and related key stakeholders/players.
  III.   Establish the joint communication channels and means
  IV.   Define and describe relevant communication material

5.3   Evaluation of performance indicators and proceed to changes if necessary

The assessment of the performance of the MED MS Cluster should be based on a review of defined quantitative and qualitative indicators (see section 4) addressing categories such as:

- Formalization of economic, technological & scientific objectives
- Evolution of the cluster perimeter (critical mass)
- Number & quality of the actors involved
- Business-research-training synergies
- Qualities of governance
- International visibility & international projects
- Territorial anchorage
- Presence of funders
- Human Resource & Training

The evaluation of the performance indicators will extract useful conclusions regarding the performance of the Cluster and will define whether the Management Team and the Cluster Coordinator needs to take action and proceed to any modifications. Generally, the evaluation process of the Cluster should provide answers to the following questions:

o   What progress has been made in terms of anticipated activities?

o   Has the Cluster reached its goals in terms of desired results and deadlines? What has gone well and what not well?

o   Does the Cluster coordinator have enough information and data to measure and evaluate the cluster's performance?

o   To what extent members of the Cluster are satisfied with Cluster's results?

o   How has the Cluster itself functioned? What has been the quality of the internal relationships?

- How effective has been the co-operation among the Nodes Coordinators under the framework of transnational Cluster level activities?

- Generally, how effective has been the work and co-operation among the National Nodes?

<div style="background:black; color:white; text-align:center">5.4   Follow up activities</div>

The partners of the PROteuS project should proceed with the elaboration of special agreements (this is planned to be undertaken during project implementation) aiming at ensuring the continuation of their cooperation after the project's end as well as their interaction at transnational level within the MED Cluster. These activities should focus on the MED Maritime Surveillance Cluster, setting specific set of actions and framework that will foster the continuation of its successful operation. The members of the PROteuS project should establish special agreements in the form of a **protocol**, in order to ensure their cooperation at transnational level. Among others, the protocol should include the responsibilities and the privileges of Cluster's members and the terms of the membership including details about member's fee, participation in cluster's regular meetings, conferences, training seminars etc.

A **declaration of participation** should be designed and signed by the MED MS Cluster's members regarding their official commitment and agreement as Cluster's members.

Sample:

DECLARATION FORM (indicative template)

Participating Organization
Organization Name: ……..
Address/City: ……….

Organization's Representative
First name: ……
Surname:………
Position: ………
E-mail: ………..
Tel. No.:………

I hereby declare that the organization I represent will participate in MED Maritime Surveillance Cluster, coordinated by ……………………..

Terms of membership:

Article 1: Membership annual fee: ....

Article 2: Responsibilities/Obligations: ....

Article 3: Benefits: ....

Signature	Date

Additionally, **a sustainability plan** is strongly recommended to be elaborated once the cluster is officially established. This plan will outline the goals, the progress and areas of future focus in accordance with the identified critical success factors and key characteristics that were presented in section 5.

A **questionnaire regarding the member's satisfaction** regarding the Cluster's services should be provided at annually basis in order to be taken into consideration by the management team and the cluster coordinator and to proceed to any changes if this is necessary. In the questionnaire should be allowed from the members to provide any request or proposal regarding cluster operation and provided services.

Sample:

<u>Indicative member's satisfaction questionnaire</u>

<u>Participating Organization</u>
Organization Name: …………………………………………………………………………………………………..
Address/City: …….

<u>Organization's Representative</u>
First name: ………
Surname:……
Position: ……
E-mail: ……….
Tel. No.:……

- Are you generally satisfied by being a member of MED MS Cluster: Yes / No
  If you answer no, please specify:
  ………..
- Level of satisfaction from 1 (very unpleased) – 5 (very satisfied)?
- What changes would you make? (please specify)
  ………..
- Are you generally satisfied with Cluster's Services? Yes / No
  If you answer no, please specify:
  ………..
- Level of satisfaction from 1 (very unpleased) – 5 (very satisfied)?
- Please describe which one you consider the strongest and the weakest activity of the Cluster.

…….

- What changes would you make in the services provided? (please specify)

…….

- Have you identified any collaborations/opportunities as a member of MED MS Cluster? Yes / No
- If you answered yes in the previous question, what were the benefits gained to your organization through these collaborations/opportunities?

…….

- Did you participate in any cluster events this year? (Please specify)

…….

- Did the support of the Cluster contribute to the extroversion of your company? Yes/No (please specify if applicable)

…….

- Do you have any additional Recommendations regarding the operation and the services o the MED MS Cluster?

……

- Would you recommend to another related actor to be a member of MED MS Cluster? Yes / No

---

Signature   Date

(Cluster Navigators Ltd, 2001; European Cluster Observatory; European Cluster Collaboration Platform; Pôle Mer Méditerranée, 2017)

6   References

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Appendix

Preliminary stages for the establishment of MED MS CLUSTER

This section presents the proposed early stages for the creation of the MED MS Cluster.

The MED MS Cluster aims to the coordination and the collaboration of the National Nodes at transnational level through specific activities and processes. In this context, it is essential, firstly, to establish the National Nodes, defining all the required features such as governance scheme, mission, objectives, members, offered services and generally the model of their operation. Once these are defined and agreed, then the next step is the establishment of the MED MS Cluster. The preliminary activities that should be taken into consideration are briefly presented in the following table and described afterwards.

The proposed deadlines for the implementation of the key first steps are indicative and in respect with the deadlines found in PROteuS Application Form.

Table 1. Preliminary stages for the establishment of MED MS Cluster

STAGES	KEY FIRST STEPS
STAGE 1: **Building the MED MS Cluster**	✓ Define the Governance Structure (Cluster Coordinator & Management Team, Advisory Board etc.) ✓ Define the Vision & the Objective(s) ✓ Decide Cluster's legal form ✓ Define MED MS Cluster's premises, initial expenses & the financial resources of the Cluster ✓ Define the Working Groups, the process of operation & the selection of the group leaders ✓ Define core activities/services ✓ Decision signed by Cluster's Management Team & Cluster coordinator & establishment of the statutes for the official founding of the Cluster
STAGE 2: **Define Responsibilities & Communication strategy**	▪ Set Roles & Responsibilities of the governance scheme & the members ▪ Define number & characteristics of members/country ▪ Define the Decision-making processes & management activities ▪ Communication channels (tools) ▪ Define the obligations of members (number of meetings/events participation, other contribution etc.)

STAGE 1: Building the MED MS Cluster

Stage 1 presents the key early steps that have to be undertaken for the building of the MED MS Cluster. It is important to identify and finalize the following Key features of the MED MS Cluster. These features should be discussed and agreed in the following scheduled meetings in order to keep the expenses within the projected budget.

1. **Definition & agreement of the Governance Structure**

The proposed governance structure is the one presented in section 2.3.2. During the first years of cluster operation, the duties and the roles of the governance scheme might slight differ from the ones presented in section 2 (Section 2 presents the Cluster is in a mature stage). In particular:

▪ **Cluster Coordinator (CC)**

This position should be covered (at least for the 2-3 years of the Cluster's operation) by a representative of PROteuS consortium. This person will be responsible for the co-ordination of the cluster and should have strong management skills and experience. **CC could be elected by the project partners or agreed to be a person of common acceptance. However, during the early years of the Cluster's operation, it should be defined whether the CC will be occupied full-time, part-time or voluntary basis.**

▪ **Cluster Management team (MT)**

This should be permanent, experienced & work full-time for the whole life of the Cluster. The team will be responsible for undertaking the expected results of the Cluster. The team will also advice the Cluster and its Nodes on issues of strategic positioning, controlling and monitoring of activities and evaluating the already completed activities. **The MT is recommended to consist of 9 members, one from each partner including the Cluster Coordinator. It should also be defined whether the MT will be occupied full-time, part-time or on a voluntary basis.**

▪ **Advisory Board**

Ideally, the board will consist of expert organizations from Europe whose role is to provide to the Cluster Coordinator and the Cluster Management Team their expertise and knowledge on the Cluster development and implementation. **During the early stages of the cluster operation, the advisory Group could be composed by representatives of the associated partners of PROteuS project.**

2. **Define the Vision & the Objective of the MED MS Cluster**

These should be agreed between the Cluster Coordinator and the Management Team and are similar with the ones presented in section 2.

Proposed Objectives:

❑ To strengthen the networking opportunities between the key players related to MS with the perspective of stimulating innovation, project development, technology transfer and economies of scale.

❑ To create "economic value", according to an approach backed by the institutional prerogatives of public authorities that support it and by means of private actors, on a common geographical perimeter.

Proposed Vision:

Offering a favourable eco-system which encourages both competition & cooperation among firms with different industrial backgrounds, technological and business expertise, but sharing the vision for an efficient MS in Mediterranean Sea.

3. Decision and agreement of Cluster's legal form

This should be agreed by the Cluster Coordinator, the Management Team, the Advisory Board and an experienced Lawer/Law firm (could be an external expert). In order to choose the most suitable legal form, it is stronly reccommended to take into consideration **the labor law** and **the national tax system** of the country where the cluster will be based and of course **the legal status of the members** (quadruple-helix). It also important to take into consideration the legal form that will be choosen for the operation of the national Nodes as this could define the legal form of the Cluster. The available legal forms are presented in section 2.

4. Define MED MS Cluster's premises, initial expenses & the financial resources of the Cluster

The Cluster Coordinator and the Management Team should define whether the Cluster's premises are needed or not during the early years of the Cluster's operation. This should be defined and agreed before PROteuS project is completed**.** If Cluster premises are needed, then during the early stages of its operation there could be 2 possible options:

   i. One of the project partners could host Cluster's offices in his premises (e.g. LIGURIA) until the Cluster's is fully economic independent and can cover its premises cost.
   ii. Cluster's premises could be hosted in a low rent area consisting of 2-3 rooms. (1-2 rooms can be used as offices and 1 room can be used for Cluster's meetings). The location should be in a country which will be easily accessible by all members in terms of distance, flight frequency and transportation cost.

Regarding the operation cost, it is also important to identify the financing resources for the operation cost of the Cluster. The operation cost of the cluster should be predicted in order to identify the budget that is required for the Cluster's sustainability. The early years of its operation, the Cluster might not be economically independent. In this case the operation cost can be covered by a slight fee contribution provided by the National Nodes.

5. Define the Working Groups, the process of operation & the selection of the group leaders

These groups will assist the formation of strategies and proposal actions and constitute a useful mechanism to help build consensus, they could be thematic oriented, depending on the identified key MS sectors (Maritime Security & Safety, Maritime Environment, Defence, Border Control, Fisheries Control, Customs etc.). **It is recommended that the Group Leader be a member of the MT being supported by the Advisory board. All the coordinators and the board of directors of each Node would participate in the Working Groups. The Working Groups will be directly linked with the thematic committees of the Nodes. The proposed duties are presented in section 2.**

6. Define core activities/services

During the early years of Cluster Operation, the core activities could be based on the designed ones of PROteuS project. Over years and depending on members' participation and needs, these activities could be modified and upgraded while new services offered by the Cluster could be designed. The changes should be agreed by the majority of the Cluster's governance scheme. Indicatively Cluster Services (more details presented in Section 3).

7. **Decision signed by Cluster's Management Team & Cluster coordinator and establishment of the statutes for the official founding of the Cluster**

Once the governance scheme, the legal framework, the premises and the core services are defined and agreed by the founders of the Cluster (Project Partners), then an official commitment should be signed and the CLUSTER's statutes for the official founding of the Cluster should be drafted.

STAGE 2: Define Responsibilities & Communication strategy

1. **Set Roles & Responsibilities of the governance scheme**

The proposed duties of the Cluster Coordinator, the Management Team and the Working (Thematic) groups are presented in section 2.

2. **Number & characteristics of members/country**

A critical mass of members from the quadruple helix sector should be defined. Once the members of the National Nodes are at least 30, then the members of the MED MS Cluster **should be at least 180** (30 members x 6 Nodes). However, SMEs should be the core component of the Cluster and should be facilitated in their innovation endeavors. Generally, Cluster's members should mainly consist of SMEs. For the selection of the members regarding the National Nodes, it would be ideal to create a database regarding actors from quadruple helix that are related to MS. Then the selection of the actors could be based on the following factors:

- Level of participation (directly or indirectly) in MS projects/initiatives
- Assessing if the actor is an SME, start-up, LSE
- Extent, level and quality of available information for the actor
- Influence that the actor will have on the Node
- Desire to participate as member of the national Node (sign a declaration of participation)

3. **Define the Decision-making processes & management activities**

A Cluster Committee could be developed composed by the Cluster Coordinator (CC) and Management Team with the tasks to:
- Manage the administrative and financial issues
- Secure the on-going project activities & the fulfilment of the expected outputs and results
- Assess performance and sustainability indicators
- Address obstacles and issues arisen

Communication will be guaranteed by CC while a Financial Manager (could be an external expert or a member from the management team) will be in charge of the monitoring of expenditures of the Cluster. Cluster committee meetings could be organized every 3 months through skype/or in the premises of the Cluster (to be discussed and agreed).

4. **Communication channels (tools)**

The governance team of the cluster should define a communication strategy which must be in line with the cluster objectives and with the communication strategy of the Nodes in order to increase the number of the members involved and attract more investors contributing to the funding of its activities and its operation. The Cluster's platform should be a key tool providing a database and a set of services to the members. Key factors that should be discussed and agreed are:

V.   Establishment of the Cluster's identity (Logo, presentation template etc.)
VI.   Define the Cluster's communication approach towards its members and related key stakeholders/players.
VII.   Establish the joint communication channels and means
VIII. Define and describe relevant communication material

5. **Define the obligations of members (number of meetings/events participation, other contribution etc.)**

Proposed responsibilities/obligations of Cluster's members:

- Participation in Cluster's organized networking events such as B2B events, conferences, exhibitions etc. (the member should participate at least in 3 events every year in order to be active).
- Participation in Cluster's organized training events: training seminars, study visits etc. (participation in 2 events at least).
- Provide an annual membership fee after 3 years of Cluster's operation
- Enrol at least in one working group of the Cluster.
- Propose at least 2-3 joint activities/synergies/collaborative projects during the year.
- Reach the deadlines set in the working group according to their defined roles and duties.