



**European Cooperation  
in Science and Technology  
- COST -**

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**Brussels, 8 December 2011**

**Secretariat**

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**COST 4180/11**

**MEMORANDUM OF UNDERSTANDING**

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**Subject :** Memorandum of Understanding for the implementation of a European Concerted Research Action designated as COST Action IS1105: NETwork of experts on the legal aspects of MARitime SAFETY and security (MARSAFENET).

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Delegations will find attached the Memorandum of Understanding for COST Action as approved by the COST Committee of Senior Officials (CSO) at its 183rd meeting on 30 November 2011.

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**MEMORANDUM OF UNDERSTANDING**  
**For the implementation of a European Concerted Research Action designated as**

**COST Action IS1105**  
**NETWORK OF EXPERTS ON THE LEGAL ASPECTS OF MARITIME SAFETY AND**  
**SECURITY (MARSAFENET).**

The Parties to this Memorandum of Understanding, declaring their common intention to participate in the concerted Action referred to above and described in the technical Annex to the Memorandum, have reached the following understanding:

1. The Action will be carried out in accordance with the provisions of document COST 4154/11 “Rules and Procedures for Implementing COST Actions”, or in any new document amending or replacing it, the contents of which the Parties are fully aware of.
2. The main objective of the Action is to develop a far-reaching advancement in legal research which will promote a better understanding and an improvement of the complex legal framework on maritime safety and security.
3. The economic dimension of the activities carried out under the Action has been estimated, on the basis of information available during the planning of the Action, at EUR 44 million in 2011 prices.
4. The Memorandum of Understanding will take effect on being accepted by at least five Parties.
5. The Memorandum of Understanding will remain in force for a period of 4 years, calculated from the date of the first meeting of the Management Committee, unless the duration of the Action is modified according to the provisions of Chapter V of the document referred to in Point 1 above.

**A. ABSTRACT AND KEYWORDS**

Maritime safety and security have become a matter of concern for many States and for the international community as a whole. However, the existing international legal framework does not yet recognize maritime safety and security as specific and autonomous legal regimes, and the practice also mirrors the weakness and the fragmentation existing in the field. This Cost Action will take an in-depth look at urgent current maritime questions, focusing on four main issues: i.e., shipping and marine environmental protection, new developments in economic activities at sea, international maritime security and border surveillance and, finally, the protection of fragile and semi-enclosed seas. The Action aims to bring together experts on the international law of the sea in order to increase knowledge on these topics and to develop a common conceptual and methodological framework with the goal of contributing to filling the above-mentioned gaps and of transforming scientific results into feasible solutions for ensuring safety and security at sea. The Action is intended to foster the identification and exploitation of synergies between EU policies on maritime safety and security. From this point of view, the Action is complementary to the existing European cross-sectorial initiatives in this area, and acquires added value from its implementation within the COST framework and through its permitting existing knowledge to be shared and enhanced within a structured comparative framework, with a view to a) disseminating findings at national and international level; b) identifying inputs for supporting the decision-making process in the field.

**Keywords:** Maritime safety and security, high seas freedoms, EU integrated maritime policy, ecosystem-based management approach, shipping, surveillance of maritime borders, renewable marine energies, maritime spatial planning, semi-enclosed and fragile seas, inter/cross sectorial perspective.

## **B. BACKGROUND**

### **B.1 General background**

Over the last decades maritime safety and security have become priorities for many States and in several international *fora*, in order to establish a correct balance between, on one hand, the goal of preserving all the freedoms of the seas and, on the other hand, the need for secure and safer seas. Yet the concepts of maritime safety and security can be easily confused, both conceptually and linguistically. In some languages there is only one word (for example “seguridad” and “sicurezza”) to express both ideas. The absence of a clear distinction between safety and security in the international law of the sea is the best proof of the absence of a general established meaning of those concepts. Indeed, it is difficult to find an official definition of either and their meaning depends on the aim for which the language is used. Generally speaking, maritime safety is applicable to procedures aimed at making both the ship and the individuals safer at any stage of its activities. Maritime security, on the other hand, refers to any threats to ships, arising from wars or from wilful assault by other men (piracy, terrorist attacks, illegal immigration, trafficking of drugs, civil and international conflicts). Recent practice has shown the weakness of the implementation of international law instruments when facing current overlapping challenges at sea, including a new use of a diverse range of technologies related to marine renewable resources and nuclear activities while, at the same time, it is important to minimize conflict with other traditional marine activities including fisheries and commercial shipping. Indeed, it would be desirable to launch a structured and coordinated Cost Action to bring together and to consolidate knowledge currently fragmented in polycentric questions on maritime security and safety issues as well as to look into the developing process of their inter-linkages, taking into account the increasing trend of privatization of maritime distress and safety system services.

## Why COST?

The studies for this Action are scattered across different disciplines. The analysis of the current legal and political framework stresses the need for the coordination and consolidation of a large research network flexible enough to adjust to new insights, and able to generate new knowledge by allowing for longer term collaboration. The present Action, indeed, advances both legal and scientific knowledge in addressing a topic of central concern for scholars and professionals, in tackling fragmentation, as well as in supporting cross-fertilization in the maritime safety and security thematic area. The Action finds its own *rationale* under different perspectives: firstly, it pursues the creation of a long-term European research network that will bring together and consolidate knowledge fragmented in different thematic areas and fosters the development of new theoretical insights and the disclosure of avenues for realizing the material application of research; secondly, the Action is aimed at enhancing capacity-building and knowledge-transfer activities of researchers involved in the network that should help to increase stability and coherence at international, regional (particularly, European Union[UE]) and national levels towards new forms of cooperation and integration between and within States and other public and private actors.

### B.2 Current state of knowledge

The existing international legal framework, including the United Nations Convention on the Law of the Sea of 1982 (UNCLOS), does not recognize maritime safety or security as specific and autonomous legal regimes. There are a few UNCLOS provisions that deal with issues such as protection of the marine environment, repression of piracy, prohibition of slavery and suppression of illicit trafficking in narcotic drugs and psychotropic substances. , However, neither these provisions nor the enforcement powers provided for in articles 110 and 111 UNCLOS regarding the high seas, represent a complete answer to the severe pressures from human activities at sea ,which may be qualified as “threat multipliers”, facing today’s need for ensuring safety and security through a cross-sectorial and ecosystem-based approach to maritime governance.

Even the important role played by the International Maritime Organization (IMO), the UN (including the United Nations High Commissioner for Refugees (UNHCR)) and the EU specialized agency on integrated maritime affairs, has recently shown the weakness of the fragmented international system of action and intervention in the several maritime issues concerned, e.g. environment, climate change, energy, transport, industry, research, interception and rescue at sea of asylum seekers, refugees and irregular migrants and many others.

The legal doctrine on such general issues is huge. However, the existing academic efforts need to be coordinated as efficiently as possible in order to find coherent solutions for exploiting all the economic potential of the seas through an ecosystem-based approach. There is a need to promote new excellence in legal studies related to marine technology developments, by bringing together and consolidating knowledge currently dispersed in different maritime clusters, in an integrated approach to cope with the complexity of maritime security and safety-related knowledge and innovations.

In the course of the last decade, the EU has contributed by providing an important input to the on-going debate on cross-sectorial safety and security issues at sea, both internationally and within the Union. In postulating a division in the vast and diverse legal literature as well as between the huge number of “hard” and “soft” law documents in the field, particular attention will be paid to the current state of knowledge with regard to the following four main clusters: *i*) shipping and marine environmental protection, *ii*) new developments in economic activities at sea, *iii*) maritime international security and border surveillance and, lastly, *iv*) protection of fragile and semi-enclosed seas.

- i)* As far as shipping and marine environmental protection is concerned, the Action will take into account previous research, and will focus on the main aspects of environmental concern relating to navigation, such as vessel source pollution (namely, COM (2002) 595; EU Directive 2002/84/EC; EU Directive 2005/35/CE), land-based sources of pollution (namely, EU Strategy for better ship dismantling which complies with EC Regulation on waste shipments) and prevention and control of maritime accidents (EU Erika packages). In addition, apart from the several Communications adopted by the European Commission on the Integrated Maritime Policy strategy (COM (2007) 575 def., so-called the Blue Book), which puts forward a new multilateral safeguard ecosystem-based management view for Europe's oceans and seas, only one Directive was approved in 2008 by the European Parliament and the European Council establishing a framework for European action in the field of marine environmental policy (Directive 2008/56/EC of 17 June 2008). The European Maritime Safety Agency (EMSA) was established by Regulation (EC) 1406/2002. This is a major source of support to the European Commission and the Member States in the field of maritime safety and prevention of pollution from ships, and includes the setting up of a network of stand-by oil response vessels and state-of-the-art equipment. But EMSA has no specific competence relating to maritime security issues.
- ii)* As far as new developments in economic activities at sea are concerned, it is ( would be) very interesting to look at current developments in new marine energy technologies in order to increase energy efficiency and potential emission reduction on one hand, and, on the other, to decrease costs and supply time. In November 2010, the European Commission published its communication "Energy infrastructure priorities for 2020 and beyond – A blueprint for an integrated European energy network". The communication outlines four priority corridors for electricity including an offshore grid in the Northern Seas and a connection to northern and central Europe. On a private level, many naval industries aim to play a role in the emerging field of renewable marine energy (tidal energy, offshore floating wind and ocean thermal energy), including civil nuclear engineering projects. Concerning all these new activities, it is necessary to ask to what extent maritime safety is guaranteed against economic interests. Such questions and other fundamental concerns to which they give rise are the primary concern of the studies related to this second cluster following an inter-disciplinary approach which will take into account other ongoing academic projects.

*iii)* Recently international maritime security and border surveillance have been the object of many legal studies and researches. Piracy cases, terrorist groups, organized economic crimes and migration issues are linked with international security as noted by several UN Security Council resolutions. All these issues are also addressed by the United Nations agencies and by other international organizations. Examples are the Protection Policy Paper on maritime interception operations of the UNHCR and the Guidelines on rescue at sea, adopted by UNHCR and IMO. As for the security sector in general, the Commission has set up a consultative forum – European Security Research and Innovation Forum (ESRIF) - in order to establish research and innovation priorities for the future. The forum brings together all stakeholders in security research, and has as its main task the design of a medium and long term perspective for an EU Security Research and Innovation Agenda. Separate from the ESRIF, Public Private Security Policy Partnerships (PPSPP) are developed where appropriate, involving all relevant stakeholders from public authorities at European and Member States' level, industry, academia, Non-governmental organizations (NGOs) and other entities. As the European Union struggles to cope with the relatively large-scale arrival of mixed migratory flows by boat from Africa, the surveillance of southern borders has become a current regional priority, as shown by the attention of the European Commission in the last years. In particular, in 2007 the Commission produced a study analysing the international legal framework for surveillance of external maritime borders and the obstacles to its effective implementation. The study highlights the shortcomings of the international regime of the sea and, above all, those affecting the search and rescue regime. Although since that time some directives concerning Frontex and the Schengen Borders Code have been adopted, scholars have shown that minimal progress has been achieved. Even the Council of Europe institutions have shown interest in the above-mentioned question with the resolution and the recommendation relating to “the interception and rescue at sea of asylum seekers, refugees and irregular migrants” adopted by Parliamentary Assembly on 21 June 2011. The prevention and fight against trafficking in human beings for whatever purpose – sexual or labour exploitation – and the sexual exploitation of children are also top EU priorities.

Therefore, the Commission has proposed new rules for tougher action against criminals responsible for child sexual abuse and trafficking, as well as better assistance for victims. Operational activities, such as pursuing and prosecuting criminals, remain the responsibility of EU States. The Commission's objective is to assist EU States in fighting organised crime more effectively. The EU's action extends from crime prevention to law enforcement and is based on various tools, such as the gathering of reliable crime statistics and the funding of European projects or specialist networks. By complementing the contribution of other ongoing projects in this field under the FP7 programme, this cluster will pay attention to the presence of "fixed" sea routes where there are several crucial points where security is potentially at risk from various factors. The aim is to foster the foundation of a community of interests in maritime international security, paving the way subsequently for streamlining further initiatives, observation and data networks with a view to developing an integrated management system for the European maritime area. Despite the numerous studies already mentioned, the Action is innovative because it brings together issues such as migration and international security through an integrated approach. Moreover, most of those studies do not take into account the latest developments, as is necessary in a sector facing continual changes.

- iv) Finally, as far as the protection of fragile and semi-enclosed seas is concerned, the Action reflects different approaches to marine regionalism according, on one hand, to the Regional Seas Programme of the United Nations Environment Programme (UNEP) and, on the other hand, the EU Marine Strategy Framework Directive, which will take several steps where possible within regional Sea Conventions (e.g. [The Convention for the Protection of the marine Environment of the North-East Atlantic](#)(OSPAR), Barcelona, Helsinki Commission (HELCOM), Black Sea). The focus will be on marine waters under the sovereignty and jurisdiction of Member States of the European Union which comprise waters in the Mediterranean Sea, the Baltic Sea, the Black Sea and the North-east Atlantic Ocean, including the waters surrounding the Azores, Madeira and the Canary Islands. This approach will include protected areas and will address all human activities that have an impact on the environment, integrating the research activities under the previously mentioned clusters.

In particular, attention will be paid to two interdependent factors: first, the study will look at the great number of international entities concerned, as well as the profound differences between them; and, then it will turn its attention to the several different interests involved, e.g. particular interests of States or other international/ regional entities and general interests of the international community as a whole.

Finally, it is important to underline the fact that this Action aims to identify a novel, human/environmental-orientated approach to maritime safety and security issues in order to allow a cross-fertilisation of different branches of the international law of the sea, filling the current gap between research efforts at EU and national levels.

### **B.3 Reasons for the Action**

There are several reasons for launching this Action:

Firstly, normative aspects of maritime safety and security today are splintered among competing regulations (at international, European and national levels) as well as among competing and overlapping jurisdictions (States *vs.* States, States *vs.* International Institutions, etc.). This situation determines uncertainty and lack of clarity as to which rule should be applied in any specific case, among maritime operators and other relevant stakeholders. From this perspective the setting up of a network of experts in this field is aimed at clarifying also both the normative framework and the applicable law. Indeed, research on maritime safety and security has been fragmented, so far, across different areas of legal discourse; similarly, until now, researchers in the legal disciplines have investigated these phenomena without much interdisciplinary dialogue or cooperation. The Action will fill this gap, also contributing to the creation of new insights on the current state of law in this field. Some conclusions may be drawn from the point of view of International courts, International institutions, domestic legal operators, maritime law experts: all these stakeholders have been dealing with these phenomena, unfortunately without adopting any inter/cross-sectorial coordinated approach. The lack of coordination among the different stakeholders worsens the already difficult task of developing a common knowledge framework. Scientific research can play a crucial role in developing a new common approach shared by all concerned international entities, and may help in finding concrete solutions to practical problems and issues.

Secondly, scientific research networks can foster the dialogue between all the stakeholders involved –e.g. researchers, decision makers, transport and maritime industries, economic and environmental actors and civil society– as outlined by the EU in the Communication “A European Strategy for Marine and Maritime Research. A coherent European Research Area framework in support of a sustainable use of oceans and seas” (COM(2008)534 final). On this side the Action aims to translate theoretical research into applied methodologies for a governance of maritime safety and security issues. e.g. support to public and private decision-making, identification of normative standards and public and private best practices, reformation of corporate management systems in the field of safety and security, etc.).

Thirdly, COST provides the best mechanism for carrying out this activity because its framework allows for multiple research themes to be taken up within an overarching framework. It also allows for numerous networking activities that can be systematically coordinated to achieve maximum benefits. For instance, short-term scientific missions can be combined with regional workshops in order to build up capacity in advance of a conference; similarly, the development of a multimedia technological platform *via* the web accessible by all relevant stakeholders may be employed as a collaborative work space for sharing information and learning in order to build up capacity in the area of maritime safety and security at European and international level.

#### **B.4 Complementarity with other research programmes**

There are currently no other Cost Actions explicitly dealing with the topics of this Action. However, several working groups and specific studies on the legal regime of maritime safety and security have been promoted by the EU, as well as by other international entities. This COST Action would be, under certain aspects, complementary with the other COST Action IS0802 “The Transformation of Global Environmental Governance: Risks and Opportunities”; therefore, once started, the MC of this Action will make every effort to set up co-operation and collaboration with the management board of the former. Furthermore, this COST Action would be complementary to the existing European cross-sectorial initiatives within current action plans accompanying the above - mentioned European Integrated Maritime Policy.

Indeed, while the European Commission is advocating the need for the development and implementation of integrated, coherent, and joined-up decision-making in relation to oceans and seas, the COST Action might foster the identification and exploitation of synergies between all EU policies directly and indirectly relating to the maritime safety and security. Finally, there are a certain number of projects funded within the 7th Framework Programme which deal with issues related to maritime safety and security. The Action will seek to establish forms of interaction and liaison with these projects.

## **C. OBJECTIVES AND BENEFITS**

### **C.1 Main/primary objectives**

The aim of the Action is to develop a far-reaching advancement in legal research which will promote a better understanding and an improvement of the complex legal framework on maritime safety and security.

In detail, the Action intends to establish a network of researchers in the field, in contact with all interested actors, to share knowledge, integrate research and policy-making, develop relevant interdisciplinary skills and promote the involvement of early-stage researchers in the above mentioned thematic area.

### **C.2 Secondary objectives**

**The secondary objectives of the Action are the following:**

1. To establish a research community in the field of maritime safety and security;
2. To design an international research agenda around the topic to be offered to EU and national research institutions and generate other research activities among partners;
3. To involve early-stage researchers in the research field;
4. To enhance the transfer and the circulation of knowledge and the building of capacity in the field area to concerned operators and stakeholders.

### C.3 How will the objectives be achieved?

Action's activity networking will achieve its objectives through the following measurable results:

- **the organization of Workshops, training seminars and conferences** will assure the gathering of scientists, international institutions, public and private stakeholders and all other interested parties , and will provide forums (panels and transversal working groups) for the exchange of knowledge across the field;
- **researchers, as well as young researchers, and other experts** operating in the thematic area will benefit from activities provided in the framework of seminars, roundtables, training and other knowledge-transfer activities;
- **co-operation with other COST Actions** relevant to the subject matter and with other projects in tangential areas will enhance relationships among researchers (including early-stage researchers) and will promote their exchange of information;
- **the transfer and sharing of knowledge, capacity building, and circulation of ideas** will also be facilitated, through innovative means of communication (such as webinars and video-conferences and other distance communication techniques) and dialogue between scientific communities and operators and practitioners: innovative means of communication will include, but not be limited to, the setting up of a web-based technological platform applying web-sharing and knowledge-transfer techniques (cloud computing applications, google-wave documents management, dropbox, etc.);
- **the setting up of a normative database, the compiling of best practice manuals, as well as the design of an international research agenda** in the thematic area will ensure the transfer and the circulation of knowledge and the building of capacity of concerned operators and stakeholders;

- **an advanced website.** The above mentioned web-based technological platform will also perform functions of advanced website operating as a communication centre for all participants as well as for the general public, enabling the publication of working papers, opinions, policy recommendations, announcements, etc. In addition, the site will contain information about databases, links to library catalogues, links to relevant case law and policy documents. Therefore, the website will contribute to the achievement of both the primary and the secondary objectives of the programme;
- **the involvement of early-stage researchers** will fill the gap existing in the thematic area in which studies and research activities are scanty in relation to the increasingly new challenging issues emerging in the area of maritime safety and security. Their involvement will be achieved at any level of the Action and in particular by means of specific training activities such as summer schools and study visits. Early-stage researchers will be granted the possibility to exploit the innovative means of communication and of knowledge sharing offered by the Action;
- **the involvement of decision-makers and other end-users** will be ensured through stakeholder consultation techniques and will enhance the ‘end-of-the-pipe approach’ to networking activities;
- **the dissemination of scientific and other publications** will raise awareness on the topic; these publications will target scientific communities, decision-makers, private operators and any other relevant end-users. Such communications will be ensured by various means and at different levels including *via* the web (newsletters, forums of discussion, and other web-based applications that will be implemented within the web platform of the Action; see the **Web-based Network infrastructure** described under part E. letter B)).

## **C.4 Benefits of the Action**

**In terms of scientific communities**, the Action will produce new knowledge on maritime safety and security, based on systematic mapping of existing research and theoretical approaches, existing norms and regulations, and of a new common conceptual and methodological research framework. In this way, the Action has the potential to strengthen existing European research in the field.

**In terms of problem solving and building of capacities**, the Action will increase the understanding by decision-makers and practitioners (at all levels) of new issues concerning the field area and its interactions; it will implement new legal instruments and solutions to support the decision-making processes and to improve the enforcement of adopted rules and policies and to solve existing international maritime conflicts. From this perspective the knowledge produced by the Action and by subsequent research activities will support the work of different sectors of EU policies as well as international development programmes and Civil Society organizations.

**In terms of networking**, the Action will bring together and foster communication between scholars working in different European countries, in different disciplines and in different areas of social sciences and of other relevant sciences. The Action will facilitate, also, a deeper understanding and the implementation of an increasingly complex normative framework by all stakeholders, and this with a positive impact in terms of the application of theoretical research activities.

**In terms of societal implications**, the Action will enhance scientific knowledge and applied research in the field of maritime safety and security; it will facilitate the detection of solutions for old and new issues and criticalities that may be implemented within the public realm (decision-makers, international institutions, international and national tribunals, EU institutions, etc.) and within the private sector (naval corporate sector, NGOs, Civil Society, etc.).

**In terms of industrial and economic implications**, the Action will enhance the capacity of maritime private sector stakeholders in managing maritime safety and security risks and criticalities, implementing the suitable management processes for applying international norms and standards in the topic area.

## C.5 Target groups/end users

### Potential target groups will be:

- **Decision-makers and administrators** at International (United Nations, International Maritime Organization, International Tribunal on the Law of the Sea), EU (European Parliament, European Commission), national, and local levels;
- **Institutions and Agencies** (European Maritime Safety Agency (EMSA); Frontex, International Union for Conservation of Nature (IUCN), United Nations Environment Programme (UNEP), **Mediterranean Action Plan** (MAP);
- **Scientific communities** (EU, bilateral and national multi- and interdisciplinary research);
- Maritime and naval **private sector** (Maritime operators, Fisheries Federations);
- **NGOs and Civil Society** (Environmental and human rights non governmental organizations);
- **Professionals and practitioners** working in the field of maritime safety and security (maritime lawyers, judges, Coast Guards);

The majority of the participants in the Action will be academic researchers, including PhD candidates. They will benefit from the exchange of ideas, the work of others, comments on their own work, etc. The Action also targets professionals dealing with issues related to maritime safety and security, such as ship masters or shipping agents as well as navigation survey services, search and rescue services and anti-pollution services. The Action targets also experts and civil servants of International Organizations, decision-makers, fishery and industrial actors, environmental NGOs and other civil society organizations and citizens, and practitioners in the field, as well as the general public. Targets groups will be involved, and invited to participate, in conferences and seminars and to contribute to knowledge sharing with the contribution of (policy) papers and other insights, as well as through their participation and commitment within the multimedia web platform of the Action that will be accessible by all relevant stakeholders.

The web platform will operate as a collaborative work space for sharing information and knowledge with the goal of building up (through the application of modern techniques) capacity in the area of maritime safety and security at European and international level.

## **D. SCIENTIFIC PROGRAMME**

### **D.1 Scientific focus**

The scientific focus of the Action is the fragmentation of the legal regimes of maritime safety and security, exploring the feasibility of reconciling an effective and unique ecosystem-based management regime for marine safeguarding with the traditional principle of freedom of navigation. In particular, the scientific programme of the Action focuses on inter and/or cross actions of multilateral agents, as well as on the multilevel application of the law of the sea, by illustrating how specialized regimes can interact synergistically towards the progressive development of international law without necessarily creating conflict. It is open and flexible and will be realized by the creation of a new multidisciplinary network of scientists working in the field of maritime safety and security, involving young researchers and policy makers from various levels, public servants, practicing lawyers and NGOs. It is of prime importance for the understanding and analysis of polycentricity in maritime safety and security regimes at different levels to look into the process of their inter-linkages. Maritime safety and security are interdependent issues. Indeed a secure maritime area is certainly a safer one. In this complex context, the objectives of the Action are pursued through a matrix of mainly preventive, but also reactive, tasks in a number of key areas. The most important research tasks to be coordinated by the Action are:

- The development of a common conceptual and analytical framework, a necessary condition for a wider knowledge and a deeper understanding of maritime safety and security legal regimes;
- The comparative analysis of individual research results, the identification of possible gaps and overlapping as a result of lack of cooperation, and the definition of a shared knowledge-base;

- The identification of critical issues, challenges and objectives relating to the clarification and the enforcement of the evolving normative framework that has emerged in existing research projects;
- The transfer of the scientific findings into concrete normative and policy solutions and the development of shared guidelines and recommendations addressed to decision-makers.

## **D.2 Scientific work plan methods and means**

The scientific work plan of this Action corresponds to the organization of four Working Groups.

The four Working Groups deal with the four main dimensions of the current safety and security regimes: **1. Shipping and marine environmental protection, 2. New developments of economic activities at sea; 3. Maritime international security and border surveillance; 4. Protection of fragile and semi-enclosed seas.**

The main research activities that will be implemented by each of the four Working Groups are as follows:

- Review and analysis of the literature on different approaches to maritime safety and security, including a cross-sectorial regionalism approach.
- Review and analysis of the literature on different forms of precaution and regulation of scientific uncertainties .
- Semantic and conceptual clarification of the notions and the differences between safety and security.
- Historical comparison with previous discussions.
- Case studies on maritime security and safety, including the role of private actors at sea.

- Case studies on the factors contributing to the functional differentiation and the emergence of maritime protected areas.
- Case studies on relatively new areas such as the internet.
- Case studies on the way in which different specialized legal regimes interact, including studies on the differences and possible overlaps between different regimes.
- Case studies on the way in which economic interests at sea are framed and processed in specific institutional settings.

Theoretical and practical insights by one Working Group will nourish the work of all pursuant to the logic-deductive and empiric-inductive methodology, where the latter is a complementary instrument of the former. The Working Groups will provide operational means for a correct homogenisation of the fragmented legislation in the field of maritime safety and security, to monitor its dynamic implementation at different levels and to evaluate the effectiveness of the measures in situ. In addition, Working Groups will provide additional operational means, upon specific request, to assist concerned stakeholders during the normative implementation process. In general terms, all Working Groups will deal with the question of how to ensure secure and safer seas when facing inter-linked issues mainly focused on environmental matters relating to the different uses of the sea (from navigation to new economic activities at sea); on sea-frontier crossing, piracy cases and other threats to international peace and security; and, finally, the sustainable protection and management of all the above mentioned questions in fragile and semi-enclosed seas.

### **Working group I Shipping and marine environmental protection**

“Security anywhere depends on sustainable development everywhere” wrote the UN Secretary General Ban Ki-moon. This statement recognizes that the threats to the security of the international community do not begin and end with armed conflicts; a broader range of threats to human needs and health call for recognition, such as industrial pollution, environmental degradation, as well as threats to human safety and wellbeing.

The concepts “environment and security” and the analysis of their implications for international law are gaining a growing attention from scholars and governments; such concepts reveal the interconnectedness of the tasks the international community faces today and the need for an international legal framework which reflects these linkages (This perspective expands the traditional view of maritime environmental safety. The marine ecosystem faces many threats to its health and viability, including those from oil spills, nuclear and hazardous substances and waste transport and dumping, over-fishing and unsustainable methods of fishing and aquaculture, the warming effects of climate change and pollution from land-based sources and activities. Despite the multiplicity of existing international instruments and the efforts to improve cooperation, the scientific community has recently launched a new alarm regarding the status of the marine ecosystem. Furthermore, marine pollution may also have important implications for food security (as the accident in Fukushima has dramatically demonstrated). At the European level, environment is a key component of the EU Integrated Maritime Policy (IMP); the Marine Strategy Framework Directive (2008/56/EC), the environmental pillar of the IMP, aims at the “Good Environmental Status” of all marine waters of the European Union by 2020. The success of the Marine Strategy depends largely on the effective integration of marine environmental concerns in EU legislation and policies; the Directive aims to achieve this by providing a long-term policy view of the seas and enhanced cooperation in marine regions and internationally. One of the major issues concerning the protection of the marine environment is vessel source pollution; in this perspective, the EU has adopted a strategy to reduce atmospheric emissions from seagoing ships (COM (2002) 595) and a Directive (2002/84/EC) aiming to improve the implementation of EU legislation on maritime safety, on the prevention of pollution from ships and on shipboard living and working conditions; finally, the EU Directive 2005/35/CE states that ship-source polluting discharges of oil or other noxious substances constitute in principle a criminal offence. Despite the EC Commission stressing that, if the present trend continues, maritime transport could be responsible for more pollution than land-based sources by 2020, at the moment it is the land-based sources of pollution that account for the greatest percentage of marine pollution. Despite a few soft law instruments (such as the UNEP’s Global Programme of Action for the Protection of the Marine Environment from Land based Activities) and some binding instruments adopted at global and regional levels (such as the Protocol on this issue adopted within the Barcelona system), this issue still engenders less comprehensive regulation, and these regimes have much work ahead of them.

## **Working group II: “New developments in economic activities at sea”**

Working Group II looks at new economic interests at sea which arise, on one hand, from current developments in new marine energy technologies and, on the other hand, from the new trend of privatisation of maritime (security and) safety. While the freedom of the seas doctrine –i.e. the seas were proclaimed to be free to all and belonging to none– prevailed into the twentieth century pursuant to a “horizontal” perspective of the surface use of the seas, namely navigation and fisheries, by mid-century there was an increase in the over-exploitation of fisheries, along with increasing technological developments towards the exploration and exploitation of the seabed and its resources pursuant to a “vertical” perspective of the use the sea. Furthermore, the port sector was also affected. During the 19th century and the first half of the 20th century, ports tended to be instruments of State. Port access was regarded as a means of controlling markets in line with the current need of shifting between the public and private sectors. At the moment, ports, terminals, insurers, ship managers and other maritime industry operators use private ship vetting services to identify and manage risks as well as to monitor information about their own vessels, including oil tankers. From the point of view of economics, exploring and exploiting the natural wealth of the oceans, as well as regulating –to some extent–international seaborne trade transport routes, have become a necessity for the sustenance of the world's economies.. Human societies and technological innovations are continuously developing. The UNCLOS was not formulated with specific regard to the new economic interests at sea of naval industries in the emerging field of marine renewable energy (tidal energy, offshore floating wind and ocean thermal energy), including civil nuclear engineering projects. In November 2010, the European Commission published its communication “Energy infrastructure priorities for 2020 and beyond – A blueprint for an integrated European energy network” outlining four priority corridors for electricity including an offshore grid in the Northern Seas and a connection to northern and central Europe. However, despite the EU effort in leading such issues as a global actor, at the moment there is a legal vacuum on the regulation of the exploration and exploitation of such marine renewable energy. It is a commonly accepted idea that «Every time scientists produce a major invention, politicians have to *invent* a new institution to cope with it». Within this legal vacuum, the Working Group is deeply concerned at the effects of the new exploitation of marine renewable energy, as well as those of the new trend to allow private companies to provide global maritime distress and safety system services.

### **Working group III: “Maritime international security and border surveillance”**

Working Group III studies the human dimension of maritime security and attempts to improve security system integration, interconnectivity and interoperability at international, European and national levels. The main tasks are concentrated on threatening aspects of transnational importance in the face of, for example, the security implications of climate change –which include issues related to the opening of new navigation routes caused by environmental changes and melting sea ice that may alter the global geopolitical status quo (see Paper of the High Representative and the European Commission to the European Council, S113/08); costs and benefits of sea-frontier crossing and the impact of smuggling, clandestine maritime migration and trafficking activities; piracy cases, terrorist groups and other threats to the peace and security of the international community as a whole. Piracy, for example, is as old as maritime navigation itself, even though in modern times the rise of piracy has been connected to the increase of maritime commerce and to the use by States of private vessels (privateers or “prize-takers”). In addition, the maritime environment is suitable for terrorist actions because of the presence of “fixed”/ “preferred” sea routes, characterized by a number of choke points such as, among others, the Suez Canal linking the Red Sea to the Mediterranean. At the same time, while speaking of security in the maritime space we cannot neglect the phenomenon of migration that has emerged in the last fifteen years, especially in the Mediterranean Sea. Migration raises a variety of problems, known to the stakeholders in the sector, but which are far from being resolved. They are those associated with the navigation of migrants in unsafe boats; with the responsibility of searching for and rescuing persons in danger at sea, and with finding a *safe place* to disembark them (, e.g. the frequent disputes between Italy and Malta on such issues); with the respect for human rights as recently shown by the European Court of Human Rights; with the smuggling and trafficking in human beings. In addition, at regional level, it would also be of interest to examine the role of EU Agencies such as EMSA and Frontex and the deployment of operational projects, such as maritime border surveillance or patrol operations in the Mediterranean Sea. Interestingly enough, however, there is no reference to environmental migration due to climate change. It would be of interest to give some more thought and background to this aspect within the Working Group. A series of capabilities of are indeed required in the component members of Working Group III to cope with such matters, many of which are primarily related to research on how to ‘identify’, ‘prevent’ ‘prepare’ and ‘respond’ to international threats at sea.

The final aim of the Working Group is to provide new legal and practical instruments both for the avoidance of international crises and to mitigate their potential consequences. In the present geopolitical asset, the sea is, from an economic perspective, a fundamental good; in fact, the shipping routes remain the most viable for their low cost.

#### **Working Group IV: protection of fragile and semi-enclosed seas**

By mapping industry-academia pathways and partnerships, Working Group IV on the protection of fragile and semi-enclosed seas focuses on the interplay between all the three above mentioned issues of the respective Cost Action Working Groups following a marine regionalism approach. Attention will be directed to key problems and interoperability issues that emerge in the field of the safeguarding/ management of semi-enclosed seas in accordance with Part IX (articles 122-124) of the UNCLOS, which provides an opportunity for cooperation in semi-enclosed (and enclosed) seas between the coastal States, either directly, or through an “appropriate regional organization” open to other interested entities. In addition, the Working Group will take into account the fact that fragile and vulnerable marine ecosystems present various characteristics and are found in areas which may be under different legal regimes. The Regional Seas Programme of the United Nations Environment Programme (UNEP) provides the general context for the review of marine regional initiatives,, while the EU Marine Strategy Directive, jointly with the EU Integrated Coastal Zone Management [(COM(2007)308)], introduces more specific marine planning and management units in the form of European Marine Regions and Sub-regions, i.e. the Mediterranean Sea, the Baltic Sea, the Black Sea and the North-east Atlantic Ocean, including the waters surrounding the Azores, Madeira and the Canary Islands. The *ratio* for improved cooperation in a European regional sea context has been laid, for instance in the form of the maritime cross-border and trans-national cooperation spaces as part of the Cooperation objective under the Cohesion Policy (Council regulation (EC) No 1083/2006, OJ L210 of 31.7.2006). This aspect is already being factored by certain regional seas conventions which will have a key role to play in coordinating implementation of the Directive at regional sea level. The Helsinki Commission on the Protection of the Baltic Sea, the Oslo and Paris Conventions on the protection of the Northeast Atlantic and the Barcelona Convention for the Protection of the Mediterranean Sea have recently taken important steps to integrate maritime spatial planning considerations into their existing or planned activities. This will constitute an essential building block for further work on maritime spatial planning in the context of the proposed Marine Strategy Directive.

It is against this background that Working Group IV on the protection of fragile and semi-enclosed seas seeks to provide a more general analysis for this Cost Action, based on two interdependent factors: first, the great number of international entities concerned, as well as the profound differences between them; and, second, the several different interests involved, i.e. particular interests of States or other international/ regional entities and general interests of the international community as a whole. The areas of regional seas cooperation within and across sectors are characterized by a disordered interaction between hard and/or soft law. This interaction seems to lead to a legal impasse: on one hand, there is the existing patchwork of general hard law which, while binding, does not deal with the unique characteristics of the semi-enclosed seas, and principally ensures coastal State sovereignty, sovereign rights, and jurisdiction. On the other hand, the impasse is embodied in the soft law approach to common concerns which, while dealing specifically with the particular conditions and needs of semi-enclosed seas and their impact at a general level, is not legally binding. However, despite the legal impasse, or perhaps because of it, the international significance of the soft law approach lies in the fact that it immediately provides diverse instruments for regulation which, to some extent, lead to the proliferation of international actors in the fragile and semi-enclosed seas, under a “de-formalized” law with various plans of action, including those of the European Union in accordance with the *ratio* of the Integrated Maritime Policy, as well as through the EU Marine and Maritime Research Strategy coordinated by DG Research in the framework of the Europe 2020 strategy.

## **E. ORGANISATION**

### **E.1 Coordination and organisation**

#### **A) Structure and Bodies**

**The organizational structure of the Action comprises the following bodies:**

*The Management Committee (MC).* The MC consists of representatives of each partner State and is chaired by the Action Chair. The MC is responsible for the coherence of the programme as a whole. It monitors and supervises the activities of the Working Groups and communicates their progress and results to the other participants. The MC will meet once a year at one of the conferences. The MC will be responsible for organizing a general start-off meeting as well as a final, general conference where the outcomes of the different Working Groups are presented and linked to a more broader theoretical framework.

**Steering Committee (SC).** The SC is an operative body responsible for preparing proposals for the MC (e.g. regarding the planning of symposiums and meetings, the coordination of research tasks, publications and research agenda). The SC may invite additional experts from the MC to deal with specific issues.

**The Working Groups (WGs).** The WGs are chaired by a senior researcher. The WG leader brings together a group of researchers (senior and junior) and professionals who are working on one of the subtopics of this Action. The WG leader is responsible for (a) the organization of yearly conferences (b) promoting communication between the members of the workshop, and the publication of the outcomes of the conferences (c) ensuring the coherence of the scientific work. The WG leader is responsible directly to the MC.

**The Training Coordinator Board.** The Training Coordinator Board will be responsible for the overall supervision and monitoring of training activities including seminars, round tables, workshops, summer schools, and PhD courses if appropriate. The coordinator will interact closely with the Management Committee.

**Scientific Publications Coordinator Board.** The Scientific Publications Coordinator Board will supervise the scientific publications of the network researchers, ensuring the high quality of research outputs. The coordinator will interact closely with the Management Committee.

**The Web-based Network Infrastructure Coordinator Board.** The Web-based Network Infrastructure Coordinator Board will supervise the overall functioning and implementation of the Internet Platform of the Action Network as well as its periodical updating. The Board will assess and monitor the flow of information and communication towards the participants, including the publication of working papers, opinions, policy recommendations, announcements, etc. The Board will control the correct implementation and functioning of databases, catalogues, links to relevant case law and policy and documents that would be expected to be included in the web-platform.

## **B) Activities, Means and Milestones**

The Action will be implemented through diverse types of activities and means, some of which will represent crucial milestones in the progress towards the achievement of objectives.

**On-line interaction.** This will be the principal means of communication, coordination, and exchange within the network, through the use of e-mail newsletters, conference communication, and interaction through the website.

**Web-based Network Infrastructure.** The Web-based Network Infrastructure will be a major tool of the Action both in terms of dissemination and in terms of knowledge sharing. The main features of the web-platform will include Cloud Computing and virtualization; BtoB and BtoC Portals (*i.e.* Business to Business and Business to Customers); Document management system; E-learning and virtual classroom, video news and video events; Research support tracking system; Multilingual interfaces. To ensure the high quality and efficiency of the web-platform, as well as its continuous updating to match the Action's scheduled activities and progress, the Action will require the support of a web administrator. A plan for the periodic monitoring and updating of the website will be drawn up by the Web-based Network Infrastructure Coordinator Board.

**Coordination meetings.** These events will be devoted to the organization and coordination of the activities of the network.

- Management Committee meetings. Besides the 'Kick-off' meeting, there will be at least one annual meeting of the MC, devoted to finalizing the annual reporting, monitoring the progress of the Action and launching the following year's programme.
- Steering Group meetings. The SG will interact mostly electronically; meetings will be held according to need.
- WGs meetings. These meetings, aimed at planning and coordinating the WGs activities, will be held at least once a year.

**Workshops, Conferences, seminars and trainings.** These are structured ‘working’ events, organized for knowledge exchange and sharing as well as for capacity building, both internally and externally.

- WG workshops are workshops involving mostly the WG parties (with or without invitees e.g. external experts, privileged witnesses, representatives from other EU-funded projects); it is expected that at least one workshop per year per WG will be held.
- Local workshops are parallel working events organized by parties at the national/local level, mobilizing local stakeholders, i.e. those involved in the planning, production and delivery of social services as well as users, in order to gather, exchange and validate diverse forms of knowledge. These workshops will be organized by each WG.
- Seminars and Conferences are enhancement and dissemination events, organized to ensure dissemination of Action’s outputs to the scientific and broader communities. There will be both local and international seminars and conferences.
- Summer Schools are training and knowledge sharing events organised to train early-stage researchers and other practitioners in the field area.
- Short-Term Scientific Missions. A number of STSMs from one country to another of researchers taking part in the Action are envisaged: these will be programmed depending on resources and opportunities.

**Milestones.** These will coincide with selected and qualifying deliverables, within each of the Action’s tasks.

The chief milestones will be:

- the Kick-off meeting
- the mid-term comparative synthesis report for each WG;

- the normative Database that will be implemented during the third year of the Action;
- the Best practice manual that will be produced during the last year of the Action;
- the final comparative synthesis report at the end of the Action;
- the international conference presenting the results of the Action during the last year of the Action;
- the establishment of an ongoing Web-based Network Infrastructure, set up in the first months of the Action and continually updated throughout the duration of the Action.

## **E.2 Working Groups**

The Action consists of four Working Groups. Each Working Group is composed of a core of approximately six researchers participating in the Action. These researchers have regular contact via the website as well as in informal annual meetings where they discuss the progress of the Working Group. Once every year the Working Groups will organize a conference which is open to all participants in the Action as well as to other interested researchers and professionals. Moreover, the chair of the Working Group will present (provisional) outcomes at the annual general (plenary) conference of the Action as a whole.

Summarizing the main objectives of the four WG:

The objective of WG1 is to analyze the main aspects of environmental concerns relating to vessels sources of pollution (looking at the stand-by oil spill response vessels and the state of the art equipment), land-based sources of pollution, and the prevention and control of maritime accidents complementing the EMSA activities.

The objective of WG2 is principally to improve the knowledge of the linked questions of human and international security in the maritime dimension, in order to have an accurate and comprehensive legal framework useful to address the multiple threats arising from, mainly, climate change, migration, trafficking in human beings, war and turmoil, terrorism and piracy.

The objective of WG3 is to focus on current developments in new economic activities at sea, as well as the new trend of privatization of maritime services, filling the legal gap in the regulation of exploration and exploitation of new marine renewable resources.

The main objective of WG4 is to identify best practices and the shortcomings of the existing regional institutional frameworks, in order to trace the emerging institutional and policy propensities in semi-enclosed seas.

### **E.3 Liaison and interaction with other research programmes**

There are no other COST Actions currently addressing the specific topic of this Action. COST Action IS0802 “The transformation of global environmental governance: risks and opportunities” is the only Action tangential to the present one. The best ways for exchanging and sharing relevant knowledge with this Action will be explored.

With regard to other EU programmes, as mentioned in section B.3, there are a certain number of projects funded within the 7th Framework Programme. The Action will seek to establish forms of interaction and liaison with these projects. In the first place, some of their components might be contacted to join this Action as participants, in order to improve the Action’s networking extension. Then, exchanges of information will be organized, by inviting selected researchers from those projects to attend WG workshops and conferences, and also through STSMs. Lastly, reciprocal access to the working material posted on the respective websites will be sought.

#### **E.4 Gender balance and involvement of early-stage researchers**

This COST Action will respect an appropriate gender balance in all its activities and the Management Committee will place this as a standard item on all its MC agendas. The Action will also be committed to considerably involve early-stage researchers. This item will also be placed as a standard item on all MC agendas.

The current list of involved experts is evenly balanced in terms of gender. The Action will maintain this even gender balance throughout the whole project by making sure that there is a gender balance between speakers at conferences, between chairs of Working Groups, training programme coordinators and the academic exchange coordinator. It will also ensure equal participation at conferences and training schools. As to the involvement of Early-Stage Researchers (ESR), a major inspiring principle of the network is to ensure the participation of as many junior researchers as are available. In any event, the MC ensure that the participation of ESR in workshops and conferences is maximized, subject to budget constraints. However, ESR can increase their capacity building thanks to the possibility of taking part in new and more attractive research programmes, possibly funded under EU-Cordis.

The involvement of young researchers will fill the gap existing in the thematic area in which studies and research activities are scanty in the face of the increasingly new challenging issues emerging in the area of maritime safety and security.

#### **F. TIMETABLE**

The Action will start with the MC meeting and a general conference. This general conference will be aimed at introducing the Action and at collecting ideas and suggestions from the participants as to the realization of the activities. However, the set-up of the Action will be adjusted throughout the four-year period, according to the suggestions made by researchers, practitioners, and stakeholders. Moreover, given the dynamic nature of the topics under discussion, the Action should allow for some flexibility in terms of planning.

With these caveats in mind, the plan for the Action may be summarized as follows:

1. General plenary conferences will be held each year, with a start-off meeting during the first year and a final dissemination conference at the conclusion of the Action;
2. Working Groups will organize a conference each year, open to both participants and a wider audience. Moreover, they will come together in smaller and more informal meetings to discuss the development of the project, the results of the project, possibilities for publication and the dissemination of results, interaction with other working groups, etc;
3. Training Schools (TS) and Summer Schools (SS) will be organized alternately (TS years 1 and 3; SS years 2 and 4);
4. Academic exchanges will be possible throughout the year, depending on the schedules of the participating institutions.
5. Interaction and publication of papers on the website will take place throughout the whole period

<b>YEAR/MONTHS</b>	<b>NAME OF THE EVENT/ACTIVITY</b>	<b>OBJECTIVES</b>	<b>OUTPUTS</b>
<b>Year 1</b>			
<b>Month 1</b>	MC meeting;	Organisation and planning of the Action	- Individuation of persons members of the SC; - evaluation plan of the Action
<b>Months 1-2</b>	Start-off meeting ( <b>milestone</b> ); WG meetings	Identification of expertise related to the topic; Detailed planning of the work of the WGs during the years 1 and 2 of the Action;	- Publication on the website of meetings documentation; - other dissemination products

<b>Months 1-4, to 48</b>	Implementation of the Action website and of the Web-based Network Infrastructure WbNI ( <b>Milestone</b> ); Functioning of the WbNI all along the entire length of the Action ( <b>Milestone</b> )	Beginning of the communication and of dissemination and of knowledge sharing	- Appointment of the WbNI Coordinator Board; - Individuation of a web-administrator; - Web-based Network Infrastructure created and implemented regularly
<b>Months 3-9</b>	WG Conferences; Training Schools;	Knowledge exchange and sharing	- Realization of 4 WG conferences and 4 Training Schools; - collected publications and other dissemination products
<b>Months 9-12</b>	WG STSM (length -3 months )	Knowledge exchange and sharing	- Realization of 4 WG STSM; - Scientific articles and other dissemination outputs
<b>Months 3-12</b>	Local workshops, seminars and other similar events	Knowledge exchange and sharing	- Articles, collected publications - Other dissemination products
<b>Month 12</b>	SC meeting	Planning of the activities of the next year	- Proposals for the MC to be discussed and agreed
<b>Year 2</b>			
<b>Month 1-2</b>	MC meeting:	Evaluation of the first year, planning of the second year	- Plan of the Action for the second year
<b>Month 2</b>	WG meetings	Concluding the first year's activities and starting of the second year's activities	- Drafts of the state of the art reports (4)
<b>Months 3-9</b>	WG Conferences; Summers Schools;	Knowledge exchange and sharing	- Realization of 4 WG conferences And 4 Summer Schools; - collected publications and other dissemination products
<b>Months 3-12</b>	Local workshops, seminars and other similar events	Knowledge exchange and sharing	- Articles, collected publications and other dissemination products

<b>Months 6-12</b>	WG STSM (length-3 months )	Knowledge exchange and sharing	- Realization of 4 WG STSM; scientific articles; - other dissemination outputs
<b>Month 11</b>	General plenary Conference	Communicating and disseminating the first results of the Action to the stakeholders	- State of the art reports; - Conference proceedings
<b>Month 12</b>	SC meeting	Planning of the activities for the next year	- Proposal for the MC to be discussed and agreed
<b>Year 3</b>			
<b>Month 1</b>	MC meeting	Evaluation of the second year, planning of the third year	- Plan of the Action for the third year
<b>Month 1-2</b>	WG Mid-term comparative synthesis reports ( <b>milestone</b> ); WG Meetings	Analysis of work done and results obtained; -proposals for the second half; Detailed planning of the work of the WGs for year 3;	- Publication on the website of WG Mid-term reports and relevant documentation; - other dissemination products; - Plan of activities for year 3
<b>Months 3-9</b>	WG Conferences; Training Schools;	Knowledge exchange and sharing	- Realization of 4 WG conferences And 4 Training Schools; - collected publications and other dissemination products
<b>Months 3-12</b>	Local workshops, seminars and other similar events	Knowledge exchange and sharing	- Articles, collected publications and other dissemination products
<b>Months 6-12</b>	WG STSM (length -3 months )	Knowledge exchange and sharing	- Realization of 4 WG STSM; scientific articles; - other dissemination outputs
<b>Month 10</b>	- Normative Database release ( <b>milestone</b> )	Knowledge exchange and sharing; Capacity building	- Publication of Normative Database on the Website and on the WbNI
<b>Month 11</b>	General Plenary Conference	Communicating and disseminating the first results of the Action to the stakeholders	- State of the art reports; - Conference proceedings

<b>Month 12</b>	SC meeting	Planning of the activities for the next year	- Proposal for the MC to be discussed and agreed
<b>Year 4</b>			
<b>Month 1</b>	MC meeting	Evaluation of the second year, planning of the third year	- Plan of the Action for the third year
<b>Months 1-2</b>	WG Meetings	Detailed planning of the work of the WGs for year 4;	- Plan of activities;
<b>Months 3-9</b>	WG Conferences; Summer Schools;	Knowledge exchange and sharing	- Realization of 4 WG conferences And 4 Training Schools; - collected publications and other dissemination products
<b>Months 3-9</b>	Local workshops, seminars and other similar events	Knowledge exchange and sharing	- Articles, collected publications and other dissemination products
<b>Months 3-9</b>	WG STSM (length- 3 months)	Knowledge exchange and sharing	- Realization of 4 WG STSM; scientific articles; - other dissemination outputs
<b>Month 10</b>	- Best practice manual release ( <b>milestone</b> )	Knowledge exchange and sharing; Capacity building	- Publication of Best practice Manual on the Website and on the WbNI
<b>Month 12</b>	Final Conference ( <b>Milestone</b> )	Results and outputs communication and dissemination	- Final Comparative synthesis report of the Action ( <b>Milestone</b> ); - Final reports of the WGs - Conference proceedings

## G. ECONOMIC DIMENSION

The following COST countries have actively participated in the preparation of the Action or otherwise indicated their interest: BE, EL, ES, FR, IT, MK, NL, NO, PT, TR, UK.

On the basis of national estimates, the economic dimension of the activities to be carried out under the Action has been estimated at 44 million € for the total duration of the Action. This estimate is valid under the assumption that all the countries mentioned above, but no other countries, will participate in the Action. Any departure from this will change the total cost accordingly.

## H. DISSEMINATION PLAN

### H.1 Who?

- **Researchers, university teachers and research institutes** working in the field of maritime safety and security;
- **Policy makers** at European, national and regional level;
- **NGOs, Civil society** and other entities representative of collective interests;
- **Civil servants and officers** of international Institutions operating in the maritime safety and security field at transnational, national and regional levels (e.g. UN, World Bank, National authorities, etc.);
- **Maritime private sector entities** or entities representing interests of these categories
- the General public.

### H.2 What?

- **State-of-the-art reports** (at least 3 electronic publications);
- **Final reports of the four WGs** (4 printed publications);
- **Symposium proceedings** (2 printed publications);
- **Guidelines and Best Practice Manual** (2 e-publications);
- **Web community interactions** will represent a model of community-based, evolutionary knowledge creation that researchers dispersed across organizational and geographical boundaries may exploit, in order to collaborate via the Internet in the production of knowledge-intensive, and high quality research outputs;

- **Internal platform** *via* the web for exchange of knowledge/publication, discussion, partnership creation;
- **External website** with the principal documentation relating to the Action and links to publications and BtoC solutions;
- **Discussion forum** on the topic;
- **Newspaper articles** (national representatives are responsible for writing these articles in their own countries, 1 article/country);
- Outcomes of the Action will also be published in **selected journals** in the field;
- **Participation in future workshops** and conferences gathering researchers, policy makers and administrators, NGOs and entrepreneurs.

### **H.3 How?**

In addition to the conventional one-way means of dissemination (printed and electronic publications), various methodologies will be used to facilitate an efficient interaction between the researchers and the various stakeholders, including, but not limited to, interactive web-pages and internet-based discussion forums, webinars and other distance-learning events. In addition, seminars and Working Group meetings will use, for example, participatory and future research methodologies and various kinds of panel, providing possibilities for gathering researchers, policy makers, administrators, NGOs and representatives of the private sector to discuss and debate the key topics of the Action. These working methods will generate new knowledge on the topic and promote dissemination. The members of the Action will attend major conferences and meetings in the Action field areas as well as non-academic events where they will present the results from the Action and will receive feedback from the practitioners.