



**INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)**

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Item 9.3 of the Provisional Agenda

**PROGRESS IN THE IMPLEMENTATION
OF THE INTEGRATED COASTAL AREA MANAGEMENT (ICAM) STRATEGY,
INCLUDING MARINE SPATIAL PLANNING, SUSTAINABLE BLUE GROWTH
AND LARGE MARINE ECOSYSTEMS**

Summary

This document provides an overview of the activities implemented by the Marine Policy and Regional Coordination Section of IOC (IOC/MPR) during the last biennium, in support of the ICAM programme strategic objectives endorsed by the IOC Assembly in 2011, including technical advice and support to Member States on marine spatial planning, sustainable blue growth and large marine ecosystems.

Decision proposed: The proposed decision under this item reinforces the existing strategic objectives in order to cover new components in line with the implementation role of IOC/MPR section in relation to the 2030 Agenda and Sustainable Development Goal 14. The proposed decision is referenced as IOC-XXIX/Dec.9.3 in the Provisional Action Paper (document IOC-XXIX/2 Prov.)

Introduction

1. Following the endorsement of the ICAM Strategy (Document IOC-XXVI/2 Annex 11), the Assembly at its 26th Session endorsed the following three programmes objectives for the IOC/ICAM Programme:

- (i) [O1] Increase our collective capacity to respond to change and challenges in coastal and marine environments through further development of such science-based management tools as Integrated Coastal Area Management, Marine Spatial Planning, Ecosystem-Based Management, and the Large Marine Ecosystem Approach;
- (ii) [O2] Build on IOC's and UNESCO's coastal programmes in developing Member States' capacity in the application of ecosystem-based management tools; and
- (iii) [O3] Promote the integration of climate change adaptation and coastal hazards preparedness through the use of area-based management approaches.

[O1] Increase our collective capacity to respond to change and challenges in coastal and marine environments through further development of such science-based management tools as Integrated Coastal Area Management, Marine Spatial Planning, Ecosystem-Based Management, and the Large Marine Ecosystem Approach

Regional ICAM Activities

2. The ICAM Programme continues its mission to strengthen the institutional capacities of IOC Member States. In October 2015, IOC staff actively participated at the Latin American Congress on Marine Sciences (COLACMAR/Senalmar) in Santa Marta, Colombia, the same month contributed to an OceanTeacher Training Course on Marine GIS for the Regional Training Centres. In February 2016, co-organized with the OceanTeacher Global Academy (OTGA), a training course on ocean governance and blue growth in Ostend, Belgium, with high-level speakers from the European Commission, the Government of Belgium, the Government of Flanders and officials from Chile, Colombia, Ecuador, Panama and Peru. In April 2016, IOC led the participation of the Southeast Pacific at the Iberoamerican Congress on Integrated Coastal Area Management in Florianopolis, Brazil, presenting the outputs and key results of different projects led by the MPR Section. In May 2016, IOC was invited by the European Commission to participate at the MSP Conference for regional stakeholders organized in Azores, Portugal and in November 2016, the VASAB Secretariat invited IOC to lead the keynote speech on MSP and Blue Growth during the 2nd Baltic MSP Forum organized in Riga, Latvia.

Marine Spatial Planning

3. Since June 2016, IOC has been implementing the project on global assessment and dissemination of marine spatial planning funded by The Betty & Moore Foundation. Through this project, IOC has been documenting the international practices of marine spatial planning (MSP) advances through: (1) documentation of ocean planning practice world-wide, through a detailed survey in English, French, Spanish and Portuguese that was sent in January 2016 to more than 300 national experts involved in marine policy making, (2) a summary of "lessons learned" from over 40-50 global initiatives and an online update of the UNESCO Guide to MSP (2009), including the update of the UNESCO website (<http://msp.ioc-unesco.org/>) and a joint publication on the Open Channels website. This project is allowing IOC to strengthen the international network of MSP practitioners through the organization of the 2nd International Conference on MSP in 2017 and subsequent documentation and publications.

4. Together with the European Commission - Directorate for Maritime Affairs and Fisheries (DG MARE), IOC organized at UNESCO HQ, the 2nd International Conference on Marine/Maritime Spatial Planning from 15 to 17 March 2017 (www.msp2017.paris). This conference brought together

more than 300 users of the ocean from 73 different countries—including energy, industry, government, conservation and recreation sectors—invited to make science-based coordinated decisions about how to use marine resources sustainably.

5. The Conference highlighted the different levels of implementation of MSP processes in the world, including areas where MSP is in its infancy and where joint learning, improved cooperation or capacity building is needed, or areas where arrangements for MSP may exist but a strategic approach to facilitate coordination would be beneficial.

6. In the interest of both institutions to move forward the global agenda on the oceans, in particular promoting maritime spatial planning at global level, IOC-UNESCO and DG/MARE agreed on a Joint Roadmap (Appendix 1) defining the priority areas and strategic objectives to be implemented through mutual cooperation. This roadmap encourages the development of MSP in all seas and oceans of the globe with the objective to triple the area of territorial waters benefiting from MSP effectively implemented by 2030, reaching a coverage of one third of the total surface area of waters under national jurisdictions.

7. The five priority areas and subsequent key actions of this roadmap focus amongst others on developing guidance on transboundary MSP, developing the “blue economy” in the context of the 2030 Agenda, enabling ecosystem-based MSP, pursuing capacity building, and building a mutual understanding for communicating MSP.

8. This new collaboration framework is supported by the Council of the European Union (representing the executive governments of the European Union’s Member States) which adopted on 3 April 2017 the conclusions on "International ocean governance: an agenda for the future of our oceans" that *inter alia*:

WELCOMES the increasing worldwide interest in maritime spatial planning (MSP) and the experience gained by the EU and its Member States in particular through the implementation of the Maritime Spatial Planning Directive.

LOOKS FORWARD to engaging with IOC-UNESCO to further support the international guidelines on MSP in the appropriate institutional context and to collect and exchange experiences and best practices on MSP.

ENCOURAGES the Commission and the Member States to continue to promote and implement ecosystem-based MSP, *inter alia* through the development of relevant policies and partnerships in the appropriate institutional context.

Supporting the Large Marine Ecosystem (LME) Community of Practice

9. IOC-UNESCO is acting as Secretariat for the Large Marine Ecosystems’ Community, IOC-MPR organized the 17th Annual LME Meeting in September 2015 and the 18th Annual LME Meeting in December 2016 in Paris with the participation of 92 and 127 experts and LME practitioners from Africa, Arctic, Asia, Latin America, the Caribbean and Pacific SIDS respectively.

10. A dedicated technical secretariat has been established at IOC to facilitate the sharing of knowledge related to transboundary water management, the building of technical capacity, as well as supporting South-to-South and North-to-South learning through effective regional networks of freshwater and marine practitioners in the context of the LME:LEARN project led by IOC and UNDP and funded by the Global Environmental Facility. (See Document IOC/INF-1350)

[O2] Build on IOC's and UNESCO's coastal programmes in developing Member States' capacity in the application of ecosystem-based management tools

11. The countries involved in the project SPINCAM (www.atlasspincam.net), funded by the Government of Flanders of the Kingdom of Belgium, recognized the benefits of the project and the importance on formulating new regional indicators and consolidating the indicators previously identified to support policy making in the Southeast Pacific Region.

12. During the implementation of the second phase of SPINCAM (2012-2016), IOC counted with the invaluable support of the Permanent Commission for the South Pacific (CPPS), the updating of products and information from the first phase continued, including the integration of national indicators in the national atlases and the intensive national capacity-building initiatives to implement information systems and products to support coastal and marine management. Under the coordination of the IOC staff seconded by the Government of Flanders of the Kingdom of Belgium, the partners of SPINCAM have commonly developed indicators on population dynamics, efficiency on traditional fisheries sustainability, coastal infrastructures, key coastal ecosystems, coastal economy and coastal vulnerability to support the implementation of national and regional coastal management policies.

13. The SPINCAM Regional Atlas (www.atlasspincam.net) has become the main pillar of the project's communication strategy together with the social and expert networks. The SPINCAM Atlas is member of the International Coastal Atlas network (ICAN).

14. IOC and CPPS jointly coordinated the SPINCAM publications on [Coastal and marine indicators for the Southeast Pacific](#) and the publication on [Local experiences on integrated coastal area management](#) within the five pilot case studies of SPINCAM. From a global perspective, SPINCAM 2 provided an excellent opportunity to contribute to the establishment of an information mechanism on the state of the coastal and marine environment in the region, as required by the national reporting mechanism for coastal management in the region. The work done by national institutions in the context of SPINCAM provides the basis to support the countries in the implementation of the 2030 Agenda and their institutional and scientific interactions.

15. The ICAM Programme implemented through the MPR Section led and coordinated more than 20 trainings in support of the development of institutional capacities of the IOC Member States in Latin America, Caribbean and Africa, through further development of science based management related to integrated coastal area management, marine spatial planning and governance of large marine ecosystems. Additional university courses on EBM tools and GIS were organized together with the International University of Andalusia in Spain and the IBERMAR – Iberoamerican Network for Integrated Coastal Area Management.

16. The Government of Flanders of the Kingdom of Belgium continues the support of the ICAM Strategy with a third phase of SPINCAM III (2017–2019) and small scale activities to initiate the bilateral work with the Permanent Commission for the Southeast Pacific (CPPS) to evaluate the regional and national institutional needs, the lessons learnt from previous phases of SPINCAM in the region and the definition of reliable mechanisms and procedures for the implementation of SPINCAM 3 from 2017 in connection with other project initiatives funded by the Government of Flanders in the region, such as, the OceanTeacher Global Academy (Regional Training Centre for Latin America hosted by INVEMAR Colombia), the Caribbean Marine Atlas (coordinated by IODE Project Office), BRESEP (coordinated by the UNESCO Man and Biosphere). In addition, IOC, CPPS and the Government of Flanders are reviewing and evaluating the potential new interactions of SPINCAM with other FUST Projects in the region in order to align the new products of SPINCAM 3 to the needs of national institutions implementing new biosphere reserves or managing transitional and coastal waters.

17. The European Union funded project AQUACROSS (www.aquacross.eu) aims to support EU efforts to enhance the resilience and stop the loss of biodiversity of aquatic ecosystems as well as

to ensure the ongoing and future provision of aquatic ecosystem services. It focuses on advancing the knowledge base and application of the ecosystem-based management concept for aquatic ecosystems by developing cost effective measures and integrated management practices. IOC is leading the design and implementation of the information platform as a support to the scientific knowledge pillar of the project by providing a single point of access to both the internally produced and external data compiled by project partners, scientists and general public. The information platform adheres to both the INSPIRE Directive and the Open Geospatial Consortium (OGC) principles regarding interoperability.

18. IOC has timely delivered the Data Management Plan of the project which describes the data management life cycle for all datasets that will be generated by the project, the GIS Guidelines to support, instruct and guide the partners on data production, report publication and web dissemination. The Technical Report on the implementation of the Spatial Data Infrastructure which contains a general description of the SDI in the context of INSPIRE Directive by reviewing the functional levels of interoperability, those aspects related to data and metadata and the elements under implementation within the AQUACROSS Information Platform architecture. Finally, the Technical report and beta version of the Information platform that has achieved an important development with the release of the Beta version by the end of December 2016.

19. Within AQUACROSS, IOC is leading the case study at the Intercontinental Biosphere Reserve of the Mediterranean Andalusia (Spain) - Morocco with the aim to uncover best practice examples of nature-based solutions for aquatic ecosystems through the development of direct recommendations to increase the establishment of green and blue infrastructures in the management and planning of transboundary water ecosystems within natural protected areas. Technical workshops were organized by IOC with the excellent support of the Government of Andalusia of the Kingdom of Spain and the Municipalities of the Intercontinental Biosphere Reserve in Sevilla, Malaga and in Tarifa (Spain), and in Morocco with the excellent support of the Ministry of Energy, Mines, Water and Environment of the Kingdom of Morocco in Tangier (Morocco) in order to define the work plan of the case study, identify existing policy instruments, identification of major pressures, review the proposed methods and data needs. A second joint Andalusian/Moroccan workshop will take place in Andalusia in between July and December 2017 to support the development of scenarios and the identification of conservation targets that will be used to define the new priority areas for investments in restoration actions, this meeting will also serves as preparatory for the Biosphere Reserve's Annual Committee Meeting that will take place in Morocco in January/February 2018.

20. The Executive Secretary of IOC and the Regional Minister for Environment of the Government of Andalusia (Spain) signed in December 2015 (COP21) a Memorandum of Understanding (MoU) providing to IOC full access to the Environmental Information Network of Andalusia (REDIAM) as partner, this MoU also includes the compromise of the Government of Andalusia to use the results of the IOC work in the context of AQUACROSS by integrating the case study's information platform in the REDIAM and to consider the policy recommendations potentially applicable within the regional legal framework.

21. At global scale, the MPR Section has contributed to workshops and initiatives led by other UN Agencies and International organizations on international ocean governance in the context of the UN Environment Regional Seas Programme with CPPS, the Abidjan Convention, Nairobi Convention, with the European Commission and the European Parliament.

IOC is hosting the internship of students from the Erasmus Mundus Master Course on Marine Spatial Planning led by the Universities of Venezia (Italy), Sevilla (Spain) and Açores (Portugal). During the last biennium 15 students from Africa, Asia and Europe have spent their six months' internship in the premises of UNESCO HQ, IOCARIBE, IOCAFRICA, IOC Perth Project Office and IOC IODE Project Office. The Government of Quebec (Canada) and the Government of Flanders (Kingdom of Belgium) have also supported the ICAM Strategy financing the internship of four young experts.

22. IOC has also contributed to the preparation of new project proposals related to ICAM, MSP and Large Marine Ecosystems. Together with the Finnish Environment Agency (SYKE), the European proposal to enabling multi-use of sea areas that can result in significant increase of economic, spatial and environmental efficiency of the blue economy and the decrease of coasts and demand for space. IOC also contributed to the European proposal led by the Research Institute for Development of France to explore the needs and potential impact of MSP on societal, political and ecological dynamics in the Tropical Atlantic and disseminate innovative tools and platform for knowledge based tropical MSP that was finally funded. A small scale activity dedicated to ocean governance in Mozambique and the Mozambique Channel was jointly prepared by MPR, IODE, IOCAFRIKA and the authorities of Mozambique in response to the project proposal call of the Government of Spain. The project was not retained and is being shared with other potential donors.

[O3] Promote the integration of climate change adaptation and coastal hazards preparedness through the use of area-based management approaches.

23. One of the priorities in the context of the ICAM Strategy is to build the capacity of national and local coastal management agencies in designing and implementing coastal hazards mitigations, through the use of best practices advocated within new guidelines, as well as access to resources on the topic of hazards mitigation and climate change adaptation.

24. IOC led the Technical Working Group in order to complete the drafting process of these new guidelines and also supported the undertaking of the editorial process that were needed in to meet IOC publication standards.

25. These guidelines have been developed in the context of the “Sendai Framework for Disaster Risk Reduction 2015–2030: Making the difference for poverty, health and resilience” (UN/ISDR, 2015). Integrated Coastal Area Management (ICAM) framework needs to integrate disaster risk reduction into relief, development and coastal management policies and practices. IOC Manuals and Guides n°50 and 61 were developed in the context for earlier “Hyogo Framework for Action 2005–2010: Building the resilience of nations and communities to disaster” (UN/ISDR, 2005) and covered respectively hazard awareness and risk mitigation in ICAM from a scientific perspective, and coastal management approaches for sea level related hazards through different case studies and practices.

26. It has been developed in accordance with Resolution XXIV-14, “Tsunamis and Other Ocean Hazards Warning and Mitigation Systems (TOWS)”, in the 24th Session of the IOC Assembly (June 2007). Subsequently, in the seventh TOWS working group (TOWS-WG) meeting held in Paris (February 2014), the need to “promote education and awareness strategies as well as accredited community preparedness programs” was emphasized. This new guidelines complements and builds upon these previous Guides, and together with multi-hazard early warning systems (MHEWSs), provides a community based Step-by-Step Approach for reducing coastal hazard risk and building resilience and sustainability.

27. These guidelines were built around 4 main sections and 10 specific steps: 1) Working with your community How can our community work together to manage coastal risk? 2) What coastal risks does your community face Understanding hazards, vulnerability and risk 3) How should your community manage the coastal risks you face? Prepare an agreed community risk management plan and implement it 4) How will your community know if you are succeeding? and 5) Prepare a community-based risk monitoring programme, review and adapt.

28. The output publication will be of interest to all communities facing coastal hazard risk and, in particular, community leaders and practitioners who are involved in developing and implementing practical measures to reduce direct and indirect loss and damage due to marine related hazards, including climate change impacts. It will also be of interest to those who have responsibilities for developing and implementing the laws, policies and plans beyond the local level that are intended to reduce vulnerability at the local community level. The publication will be translated into Spanish

and Portuguese with the support of the IBERMAR Network and the Federal University of Rio Grande do Sul (Brazil).

29. MPR and the Tsunami Unit are currently developing the basis for a regional training course on coastal disaster reduction through awareness, preparedness and prevention mechanisms in Latin America and the Caribbean that will potentially take place in between October 2017 and March 2018. This training course will make use of the new guidelines.

Financial aspects and partnerships

30. IOC/MPR has strengthened the collaboration with the European Commission and will continue the implementation of the Joint Road Map on MSP, the development of International MSP Guidelines, including transboundary aspects, the development of the sustainable ocean economy (blue economy) in the context of the Agenda 2030, enabling ecosystem-based MSP and pursuing capacity building for mutual understanding and for communicating MSP. An *ad hoc* grant to support the work of IOC in implementing some of the Joint Road Map elements, is currently being negotiated with the European Commission and will allow to extend IOC MSP work in all regions.

31. In order to respond to the needs of IOC Member States, the IOC/ICAM programme will seek extra-budgetary resources to continue to facilitate training on marine spatial planning, sustainable blue growth and decision support tools in the context of the OceanTeacher Global Academy, particularly in the Africa, Latin America and Caribbean, South and Southeast Asia.

32. Collaboration with IODE and the International Coastal Atlas Network (ICAN) will be increased in the context of SPINCAM 3 project and wherever else possible, with regards to the development of coastal and marine atlases as decision support tools in ICAM and MSP.

33. The GEF funded project “Strengthening Global Governance of Large Marine Ecosystems and their Coasts through enhanced sharing and application of LME/ICAM/MPA knowledge and information tools” (LME:LEARN) will continue providing an essential platform for implementing MSP activities and training at the level of LME Projects.

34. Collaboration with the UNESCO Man and Biosphere Programme has been strengthened in the context of the Flemish funded project “Biosphere Reserves as a Tool for Coastal and Island Management in the Southeast Pacific Region (BRESEP), in which IOC has an important role in terms of ICAM, MSP and capacity development.

35. The collaboration with the UNESCO International Hydrological Programme will also be reinforced with the new GEF funded project on LME Global Governance (LME:LEARN), as a close and complementarity activity to the International Waters Learning Exchange and Resource Network Project (IW:LEARN), to benefit from its rich history, and to feed LME information into IW:LEARN for the continuation of the mission as portal for information on international waters (both freshwater, coastal and marine).

Proposal for ICAM objectives reformulation

36. A review of the objectives of the ICAM Strategy Implementation (explanatory table in Appendix 2) was proposed in order to include aspects related to the integrated management of coastal and marine ecosystems and resources in line with the implementation of Agenda 2030 and specifically, the sustainable development goal 14.

37. The new proposal introduces three themes each substantiated by one main objectives as described below:

THEME 1: COASTAL AND MARINE ECOSYSTEM-BASED MANAGEMENT AND PLANNING

38. NEW OBJECTIVE 1: Build collective capacities to respond to emerging ocean issues through ecosystem and area-based management tools such as Integrated Coastal Area Management, Marine Spatial Planning and Sustainable Blue Growth initiatives, including transboundary and large-marine ecosystem approaches for the sustainable use of marine resources and with a view to achieve a healthy and a productive ocean.

THEME 2: COASTAL AND MARINE HAZARDS ADAPTATION AND PREPAREDNESS THROUGH EBM/AREA-BASED MANAGEMENT TOOLS

39. NEW OBJECTIVE 2: Promote the integration of ocean-related hazards and climate change adaptation within coastal and marine management and planning tools in order to improve preparedness and resilience of coastal communities

THEME 3: COASTAL AND MARINE DATA, INFORMATION AND DECISION SUPPORT TOOLS

40. NEW OBJECTIVE 3: Increase collective knowledge supporting management actions on the status and change of coastal and marine ecosystems and sustained services through use and dissemination of data, information and decision support tools.

41. The three new components and objectives aim at supporting the implementation of SDG14 (Conserve and sustainably use the oceans, seas and marine resources for sustainable development) of the Agenda 2030 and specifically the targets identified below:

14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans;

14.7 By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism;

14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries.

Proposed decision:

42. The proposed decision related to this item is presented in the Action Paper as IOC-XXIX,Dec.9.3, Integrated Coastal Area Management Programme (ICAM) Strategy Implementation.

APPENDIX 1:

Joint Roadmap to accelerate Maritime/Marine Spatial Planning processes worldwide (MSP) Conclusions of the 2nd International Conference on Marine/Maritime spatial Planning

Introduction

Oceans have an essential role for life on earth, sustainable development, employment and innovation. However, there are increasing pressures facing oceans: climate change, acidification, eutrophication, biodiversity loss, pollution, over-exploitation and illegal activities. Many countries have undertaken the transition to move towards a more integrated and ecosystem-based management of the marine environment, in the pursuit of sustainable development of the ocean and seas.

The Joint Communication on International Ocean Governance by the High Representative of the EU for Foreign Affairs and Security Policy and the European Commission identifies priority areas for EU action; in particular action 10 on maritime spatial planning.

The objectives and programme of work of the IOC/UNESCO are aimed at promoting ecosystem based management, including through the development and dissemination of the marine spatial planning approach and building of related technical capacity within Member States.

There are different levels of implementation of marine/maritime spatial planning (MSP) processes in the world, including areas where MSP is in its infancy and where joint learning, improved cooperation or capacity building is needed, or areas where arrangements for MSP may exist but a strategic approach to facilitate coordination would be beneficial.

The Directorate General for Maritime Affairs and Fisheries of the European Commission, (DG MARE) and the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO) are committed to support the implementation of the universally agreed Agenda 2030 for Sustainable Development, and in particular the dedicated goal SDG 14, in a comprehensive, consistent and holistic way, both within the EU and beyond at the international level, and the Strategic Plan for Biodiversity 2011-2020 and its 20 Aichi Biodiversity Targets.

In the interest of both sides to move forward the global agenda on the oceans - in particular promoting maritime spatial planning at global level - this Joint Roadmap defines priority areas and strategic objectives for mutual cooperation. It will contribute to sketching out a vision and a role for MSP in implementing Agenda 2030.

Within UN agencies there is already important experience regarding marine spatial planning to build further on. In order to accelerate MSP globally, we believe that we should join efforts together towards protecting the oceans and seas, in particular promoting the conservation and sustainable use of the oceans and their resources.

Priority areas and key actions

Priority area 1: Transboundary maritime/marine spatial planning

Strategic Objective:

In the European Union, a key requirement of the Directive on Maritime Spatial Planning (MSP Directive) and one that should contribute to the overall coherence of ecosystem-based MSP is the obligation for the EU Member States to cooperate within a sea-basin. It is a very challenging requirement implying coordination within a sea-basin between Member States and cooperation with relevant third countries. In the context of implementing the 2030 Agenda for Sustainable Development, the next logical step for the EU is to encourage and strengthen transboundary MSP

globally. This is also convergent with the efforts of the international community and various UN agencies to promote the development of strategic action plans at transboundary to scale to achieve long-term sustainable use of ocean resources.

Action I: Developing guidelines on transboundary MSP

Ongoing MSP transboundary initiatives, especially cooperation between responsible national agencies, have contributed to increasing knowledge, experience and data sharing among neighbouring countries. They have helped building capacity or even triggered a political drive in certain countries.

Based on these experiences, IOC-UNESCO and DG MARE will aim at developing, together with the involvement of their Member States and other UN agencies, guidance to facilitate the implementation of transboundary MSP.

Action II: Transboundary projects

DG MARE supports the establishment of lasting mechanisms for cross-border cooperation by providing grants covering all EU sea-basins until 2020. However, cooperation between EU Member States and third countries should be strengthened. In that context, DG MARE will launch a pilot project in 2018 to test practices of cross-border cooperation with non EU Member States.

At global level, IOC-UNESCO will act as the technical support agency for Large Marine Ecosystem (LME) partnerships aimed at establishing transboundary management frameworks at regional level. In particular, through the GEF/UNDP/IOC LME: LEARN Project, and in collaboration with other UN agencies, IOC will implement pilot activities in 2 or 3 LME projects in Africa, South America/Caribbean region, and South East Asia.

Action III: International conference

The final output of the cross-border projects as well as the final guidance document on transboundary MSP will be presented at an international conference on transboundary MSP foreseen end of 2020/early 2021.

Priority area 2: Blue economy

Strategic objective:

Most countries and regions are currently rethinking their ocean ecosystem based economies. The ocean economy is the sum of the economic activities of ocean based industries, and the assets, goods and services of marine ecosystems. Preliminary analysis and evaluations are being developed on the impact of MSP to increase the stability, transparency and predictability of the investment climate.

MSP processes are expanding worldwide. EU Member States are gradually advancing in their implementation of the EU Directive on Maritime Spatial Planning (MSP). Investment in ocean-based businesses becomes less risky with proper maritime spatial planning.

Action IV: Studies on MSP and Blue Growth

In 2017, DG MARE will launch two studies on MSP and Blue Growth. The first study will focus on how MSP processes and plans may underpin Blue Growth. The second study will focus on the economic benefits of having MSP processes.

IOC-UNESCO will build on the results of these studies to review their common set of principles to design and implement MSP processes for Blue Growth, with emphasis on end-users' knowledge needs in terms of science, data and information requirements.

Action V: MSP and Blue Growth Conferences

In October 2017, DG MARE will organise its first conference on MSP for Blue Growth to share best practices on how MSP can lead to certainty and sustainability of our ocean economies and can facilitate cross-sector integration. Thematic sessions will focus on vision development processes, current needs, conditions and conflict resolution between sectors, opportunities for environmental/social/economic enhancements, synergies via collocation of uses and the inclusion of future developments in MSP processes. A manual could be developed for possible indicators to assist maritime spatial planners in meeting their sustainable blue economy planning objectives and support MSP review processes.

IOC-UNESCO will contribute to the organization of this conference, by facilitating the participation of non-EU Member states and will promote the use of science-based approach and decision support tools to facilitate MSP implementation and Blue Growth approach.

Priority area 3: Ecosystem-based maritime/marine spatial planning

Strategic objective:

Coherent planning at the (sub) regional sea scale should require sharing of MSP-relevant information. National authorities face the double challenge of measuring cumulative effects on ecosystems and assessing the needs of interconnected ecosystems (including relevant EU and international legislation) across borders. In Europe, the Marine Strategy Framework Directive requires the Good Environmental Status of marine environments in Europe's regional seas. The MSP Directive requires the use of an ecosystem-based approach, which should ensure that the collective pressure of maritime activities is kept within levels compatible with the achievement of good environmental status. Yet, maritime activities, including sources of marine degradation, are diversifying and intensifying worldwide. By resolving conflicts and regulating maritime activities, MSP can make a significant contribution to achieving Good Environmental Status.

Action VI: Strengthen knowledge on environmental pressures across borders

DG MARE has been launching projects and collecting a series of good practices on ecosystem based MSP. It will pursue its work with its Member States and the Regional seas conventions to translate this into practical decision making. In particular DG MARE will launch a study in 2018 to strengthen knowledge on cumulative impacts, on levels compatible with the achievement of good environmental status, on the valuation of ecosystem services.

IOC-UNESCO will contribute through the provision of indicator-based assessment tools focusing on ecosystems health, socio-economic impacts, and governance processes, building on the results of the Transboundary Water Assessment Programme and work on SDG 14 indicator development.

Priority area 4: Capacity building

Strategic objective:

Whilst the concept of MSP is relatively recent, several countries in the EU and beyond have embarked in the development of marine/maritime spatial plans within their national waters, and are starting to work across borders as well. However, the degree of implementation of MSP is not uniform, nor is the level of institutional, technical and human capacities at national level. In order to accelerate MSP implementation around the world, a demand-driven training programme on MSP is required taking into account regional and socio-cultural contexts as well as existing training activities from other UN agencies.

Action VII: raining for planners around the world

With a view to building the technical and institutional capacities of nations around the world, the IOC-UNESCO has documented international MSP practices around the world. DG MARE has achieved similar work in the EU with the creation of the EU MSP Platform. Lessons learnt and technical guidance on various aspects of MSP design and implementation have been synthesized.

IOC-UNESCO and DG MARE will join efforts and complement each other in providing training worldwide, in cooperation with other UN agencies. To identify specific training needs, a global survey will be implemented as a first step of this activity with a view to tailor MSP training to regional needs. IOC-UNESCO will make available its training platform, the Ocean Teacher Global Training Academy, to deliver training in all regions.

Action VIII: Pilot project to build capacity for MSP

DG MARE will launch a pilot project in 2018 in the Pacific region to kick off MSP between non EU MS and start building capacity for MSP in that region.

IOC-UNESCO will propose that a 'Twinning programme' is put in place with a view to facilitating the exchange of MSP expertise between European institutions and those from other parts of the world. This could be modelled on the IW:LEARN twinning approach that IOC-UNESCO is currently implementing.

Priority area 5: Building Mutual understanding and communicating MSP

Strategic objective:

With the objective of achieving overall coherence of ecosystem-based MSP in our seas and oceans, it is crucial to obtain a better mutual understanding of maritime spatial planning processes undertaken in the world and to learn from each other's experience through exchange of views and best practices.

Action IX: Creation of an international forum for MSP

DG MARE and IOC-UNESCO will launch the creation of an international forum for all stakeholders involved in MSP. The platform's overarching objective would be to empower a new generation of planners, sectors, businesses and civil society to identify solutions and commit to cross-sectoral actions to conserve our ocean and to use its resources in a sustainable way. The first workshop will be held the course of 2018.

Action X: Developing communication strategies for MSP

Building on existing initiatives to communicate better on MSP and on the MSP Communication workshop held in March 2017 in Paris, IOC-UNESCO and DG MARE will support and develop further communication tools and materials on MSP.

Way forward: MSP for implementing Agenda 2030

There is a growing recognition that MSP is an important means to achieve global ocean governance goals and Agenda 2030. Healthy seas which are sustainably managed will contribute to economic growth.

This Joint Roadmap brings a clear forward looking and global perspective towards 2030. All the above-mentioned actions integrate the perspective that MSP should be a means for implementing Agenda 2030 and should demonstrate how MSP deliver on economic, social and environmental values in that context.

In order to highlight the contribution of MSP to the implementation of the Agenda 2030, IOC-UNESCO and DG MARE will submit this roadmap as part of a joint voluntary commitment to the UN Conference on the SDG 14, 5-9 June 2017. It is proposed to hold a special joint side event on MSP at the Conference.

APPENDIX 2: Proposal for ICAM objectives reformulation

<p>ICAM STRATEGY (Document IOC-XXVI/2 Annex 11)</p>	<p>IOC MEDIUM TERM STRATEGY 2014–2021</p>	<p>MAIN ACTIVITIES INCLUDED</p>	<p>PROPOSAL FOR NEW OBJECTIVES</p>
<p>[O1] Increase our collective capacity to respond to change and challenges in coastal and marine environments through further development of such science-based management tools as Integrated Coastal Area Management, Marine Spatial Planning, Ecosystem-Based Management, and the Large Marine Ecosystem Approach;</p>	<p>1)Healthy ocean ecosystems and sustained ecosystem services 4)Enhanced knowledge of emerging ocean (science) issues.</p> <p>Priorities:</p> <ol style="list-style-type: none"> 1) Foster ocean research to strengthen knowledge of ocean and coastal processes and human impacts upon them; 2) maintain, strengthen and integrated data and information systems; 3) Support assessment and information to improve the science-policy interface. 	<ul style="list-style-type: none"> - Indicators on the state of the coast and the ocean - Knowledge and analytical tools to support ocean management and planning and coastal and marine hazards adaptation and preparedness. - Stressors (cumulative impacts and human activities). - Data and information for coastal adaptive planning 	<p>THEME 3: COASTAL AND MARINE DATA, INFORMATION AND DECISION SUPPORT TOOLS</p> <p>NEW OBJECTIVE 3: Increase collective knowledge supporting management actions on the status and change of coastal and marine ecosystems and sustained services through use and dissemination of data, information and decision support tools.</p>
<p>[O2] Build on IOC's and UNESCO's coastal programmes in developing Member States' capacity in the application of ecosystem-based management tools;</p>	<p>1)Healthy ocean ecosystems and sustained ecosystem services 4)Enhanced knowledge of emerging ocean (science) issues.</p> <p>Priorities:</p> <ol style="list-style-type: none"> 1) Enhance ocean governance through a shared knowledge base and improved regional cooperation 2) Develop the institutional capacity in all of the functions of the Strategy, as cross-cutting function. 	<ul style="list-style-type: none"> - Ecosystem-based management approaches applied to the integrated management and planning of coastal and marine areas (ICAM, MSP) - Sustainable use of coastal and marine resources (Blue growth) - Transboundary / Regional Approaches - Large marine ecosystems - Evaluation/Assessments of ecosystem resilience - Assessment of Human activities vs conservation vs. sustainable development 	<p>THEME 1: COASTAL AND MARINE ECOSYSTEM-BASED MANAGEMENT AND PLANNING</p> <p>NEW OBJECTIVE 1: Build collective capacities to respond to emerging ocean issues through ecosystem and area-based management tools such as Integrated Coastal Area Management, Marine Spatial Planning and Sustainable Blue Growth initiatives, including transboundary and large-marine ecosystem approaches for the sustainable use of marine resources and with a view to achieve a healthy and a productive ocean.</p>

<p>[O3] Promote the integration of climate change adaptation and coastal hazards preparedness through the use of area-based management approaches.</p>	<p>2) (Effective early warning systems and) preparedness for (tsunamis and other) ocean-related hazards 3) Increased resiliency to climate change and variability and enhanced safety, efficiency and effectiveness of all ocean-based activities through scientifically-founded services, adaptation and mitigation strategies.</p> <p>Priorities:</p> <ol style="list-style-type: none"> 1) Contribute to the development preparedness measures to mitigate the effects of coastal risks and ocean-related hazards through the use of area-based and ecosystem-based management approaches. 2) Enhance ocean governance through a shared knowledge base and improved regional cooperation. 	<ul style="list-style-type: none"> - Promote the inclusion of effective mitigation measures within coastal and marine EBM - Coastal hazards preparedness and adaptation to climate change through area-based management approaches. - Capacities to develop climate impact mitigation and adaptation strategies in the context of this strategy. 	<p>THEME 2: COASTAL AND MARINE HAZARDS ADAPTATION AND PREPAREDNESS THROUGH EBM/AREA-BASED MANAGEMENT TOOLS</p> <p>NEW OBJECTIVE 2: Promote the integration of ocean-related hazards and climate change adaptation within coastal and marine management and planning tools in order to improve preparedness and resilience of coastal communities.</p>
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The three new components and objectives aim at supporting the implementation of SDG14 (Conserve and sustainably use the oceans, seas and marine resources for sustainable development) of the Agenda 2030 and specifically the targets identified below:

14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans;

14.7 By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism;

14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries.