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Introduction

Organized by the Intergovernmental Oceanographic Commission of UNESCO (IOC) and the Directorate-General for Maritime Affairs and Fisheries of the European Commission, the 2nd International Conference on Marine/Maritime Spatial Planning brought together more than 350 experts from all regions of the world.

Marine/Maritime Spatial Planning is described as the process that consists in regulating human activities in the waters bordering coastal areas in order to preserve marine ecosystems, avoid conflicts between sectors of commercial and industrial activity, and promote international cooperation.

The conference provided an opportunity to take stock of existing experiences in marine spatial planning (MSP), exchange of best practices, encourage cooperation among countries sharing coastal and marine waters and establish priorities for the years to come.

On the sidelines of the conference, participants were able to take part in a role-playing game led by the Ministry of Environment and Infrastructures of the Kingdom of the Netherlands, by taking on the role of an environmental advocate, an industry representative or a decision-maker, in order to better understand the stakes involved in this planning process.

Intensified activities in coastal and marine waters increasingly require the implementation of marine spatial planning. Traditional activities such as fishing and navigation have begun competing in recent decades with practices such as the extraction of marine aggregates, offshore aquaculture or renewable marine energies, which can lead to overexploitation of resources and conflicts between different users. MSP aims to bring together the different users of the ocean in order to make coordinated decisions that allow for a more sustainable use of marine resources. Marine spatial plans now covers almost 10% of the world's exclusive economic zones.

Since 2006, through its Marine Spatial Planning initiative, IOC is assisting countries in implementing this type of ecosystem-based management of marine areas. In 2009, IOC published [Marine spatial planning: a step-by-step approach to ecosystem-based management](#) [available in English, Spanish and Vietnamese], a guide to support countries implementing management plans for their marine regions.

In 2014, the European Union adopted [legislation to create a common framework for maritime spatial planning in Europe](#). The European Commission is funding cross-border planning projects worth € 18 million for the period 2014–2017.

At the end of the conference, the Intergovernmental Oceanographic Commission of UNESCO and the Directorate-General for Maritime Affairs and Fisheries adopted a roadmap to encourage marine spatial planning in all seas and oceans. The objective is to triple the area of territorial waters benefiting from marine spatial planning by 2025, reaching a coverage of one third of the total surface area of waters under national jurisdictions.



SESSION 1

Welcome session

High-level representatives of UNESCO, IOC, and the European Commission welcomed all participants showing the institutional support to the conference and the importance of marine/maritime spatial planning in the context of ocean governance.

SPEAKERS

-  **Getachew ENGIDA**, Deputy Director-General of the United Nations Educational, Scientific and Cultural Organisation (UNESCO), Paris, France
-  **Vladimir RYABININ**, Executive Secretary, Intergovernmental Oceanographic Commission, UNESCO, Paris, France
-  **Jürgen MÜLLER**, Head of Cabinet on behalf of **Karmenu VELLA**, Commissioner, Environment, Maritime Affairs, and Fisheries, European Commission, Brussels, Belgium





SESSION 2

Keynote: The World-wide Status and Trends of MSP

An overview of the recent developments of Marine/Maritime Spatial Planning and how to achieve and accelerate successful MSP worldwide.

SPEAKER

 **Charles EHLER**, Marine Planning Consultant to the Inter-governmental Oceanographic Commission (IOC), UNESCO, Paris, France

Charles EHLER opened the technical program of the conference with an overview of progress in MSP since the first international MSP workshop organised by IOC in November 2006. Over the past 10 years MSP has matured from a concept to an operational approach for moving to sustainable development of the ocean. Integrated marine spatial plans have already been implemented in about 20 countries. If current trends continue, by 2030 at least a third of the surface area of the world's exclusive economic zones (EEZs) could have government-approved marine spatial plans.

Prior to 2006 only about seven countries were experimenting with MSP, mostly in western Europe's densely-used seas, but also including China (marine functional zoning) and Australia (regional marine planning). Canada (1997), China (1997) and Australia (1998), were the first countries to have integrated ocean management legislation that eventually led to MSP in those countries.

In 2006 the IOC held the first international workshop on MSP in Paris followed by publication of a guide to "Marine Spatial Planning: a step-by-step approach to ecosystem-based manage-

ment" of marine areas. In 2007 the European Commission published a "blue paper" proposing an Integrated Maritime Policy for the European Union and an Action Plan that identified MSP as a key instrument for implementing the policy. A "Roadmap for MSP" that identified 10 principles for MSP followed in 2008. A sea change in ocean legislation occurred when the EU in 2014 passed the MSP Directive that established a framework for MSP and requires Member States (22 have marine waters) to develop approved marine spatial plans by 2021. Today almost half of the MSP initiatives in the world are located in western European countries.

Of the 60 MSP plans that have been initiated just over a third are in the pre-planning stage, about a third have advanced to the development of marine plans, and about a fifth have implemented marine spatial plans. Ten percent of the plans developed have already gone through one round of plan revision. Just over half of the plans cover the entire EEZ, about 40% cover only the territorial sea, and 10% have been developed at the municipal or local level. Forty percent of the plans are statutory or regulatory; 60% are strategic or advisory.

Today only a few countries have legislation that explicitly authorises MSP; most countries rely on existing legislation or other arrangements to undertake and implement MSP. Most MSP plans take about 3-4 years to complete. The costs of MSP vary widely depending on resources available. No rule of thumb exists for estimating the costs of MSP. One conclusion is clear—MSP is not free. The costs vary from hundreds of thousands to several millions of dollars for the first round of marine planning. Most countries rely on national government funding from general revenues.

Almost all MSP initiatives claim stakeholder engagement. However the definition of stakeholder engagement is widely variable across countries, so its scope and effectiveness is difficult to validate. While MSP should be comprehensive and integrated, fishing is often not included in marine spatial planning. Marine protected areas are also often identified and implemented through a separate planning process. It would be more effective to integrate MSP and MPA planning in the same process.

Almost all MSP initiatives claim to be “ecosystem-based”, but this is difficult to validate since there is no standard definition of what EBM is. Management objectives are often poorly specified and management actions are not linked to objectives—this makes plans difficult to evaluate—monitoring and evaluation of MSP plans remains elusive. Very few transboundary MSP examples exist in practice, although the European Union is encouraging a regional, transboundary approach among its Member States and all its sea basins.

While substantial progress has been made in MSP in many countries, much remains to be done, for example:

➤ **Integrating MSP into the larger planning and management process**

How can we coordinate and cooperate better with authorities responsible for land use planning, economic development, water quality management, sectoral management authorities, and the private sector?

➤ **Moving toward a “Blue Economy” while maintaining essential ecosystem services**

How can we ensure that investments and other management actions toward a sustainable “Blue Economy” will include restoring and maintaining ecosystem services that support economic development?

➤ **Incorporating the future in MSP**

Planning is a future-oriented activity. How can we better think about “where we want to go”, e.g., spatial scenarios, and “how do we get there” in MSP?

➤ **Monitoring and evaluation of MSP plans**

How can we better define and measure “successful” MSP? How can we better determine the equity of MSP plans?

➤ **Transboundary MSP**

Management actions in one jurisdiction often affect neighbouring jurisdictions. How can we manage these interactions through MSP?

➤ **MSP in the Arctic Ocean**

Climate change is opening the Arctic Ocean to development pressures—without an integrated spatial plan. Once infrastructure is in place, it will be difficult to change. Can we develop a transboundary marine spatial plan for the Arctic before development takes place?

➤ **MSP in the High Seas**

60% of the World Ocean lies in the High Seas or Areas Beyond National Jurisdiction—how can we demonstrate MSP as an effective area-based management process in the High Seas?



More information of the world-wide status of MSP can be found at the IOC-UNESCO website on MSP: msp.ioc-unesco.org



SESSION 3

Lessons Learnt from Countries

This session discussed lessons learned from national experiences with MSP.

THE PANEL

- 👤 **Leo DE VREES**, Senior Advisor, Ministry of Infrastructure and the Environment (Rijkswaterstaat), The Netherlands
- 👤 **Steve DIGGON**, Regional Marine Stewardship and Planning Coordinator, Coastal First Nations-Great Bear Initiative, British Columbia, Canada
- 👤 **Anja KREINER**, Senior Fisheries Biologist, Ministry of Fisheries and Marine Resources, Swakopmund, Namibia
- 👤 **Alain DE COMARMOND**, Principal Secretary, Environment Department, Ministry of Environment, Energy and Climate Change, Victoria, Seychelles
- 👤 **Jungho NAM**, Research Fellow, Marine Policy Research Department, Korea Maritime Institute, Seoul, Korea
- 👤 **Wei XU**, Professor, Deputy Director of Sea Area and Islands Office, National Marine Functional Zoning, Expert Committee Office, National Ocean Technology Centre, State Oceanic Administration, Tianjin, China
- 👤 Facilitator: **Jacki DAVIS**, Meade Davis Communications, Brussels, Belgium
- 👤 Rapporteur: **Damon STANWELL-SMITH**, NIRAS Consulting, Cambridge, UK

Leo DE VREES began the discussion of lessons from experiences with MSP by reviewing the start of work in the Netherlands in 2005 when traditional and new marine activities really began to compete for space. Prior to 2005 only marine transport, commercial fishing, and oil and gas activities were in the sea—and everyone was happy. When planning took place, it was on a sector-by-sector approach. However, when “new kids on the block”, especially offshore wind farms and offshore aquaculture, wanted to locate in the North Sea, space conflicts arose. The government received about 75 applications for wind farms, but subsidies were available for only three. Discussions with applicants brought the proposals down to 17, but how to decide who should get permits and where? The need for planning was quickly recognised by government. Where does the government and society want developments to take place? The first plan (2005-2015) focused on finding space

for offshore wind and identifying areas for sand mining required for responding to sea level rise. The plan created certainty to developers where priority activities are going to take place. The plan also provided an assessment framework for deciding about proposed activities and if and where and when they should be located. Priorities included oil and gas, offshore wind, shipping lanes, sand mining areas, and marine protected areas. The second plan (2009-2015) got down to the more detailed specification of the operations of different activities, e.g., how much distance between wind farms and shipping lanes? The third plan (2016-2021) added an ecosystem-based approach. Little discussion has taken place across borders with our neighboring states, but we are now committed to improve this situation in future planning efforts. We have gotten to know each other well (Brexit will likely complicate future planning for the North Sea).

Steve DIGGON mentioned the failure of the Canadian national government to develop MSP as the stimulus for Coastal First Nations to meet the challenge of determining what it wants to develop or not develop in the marine areas under its jurisdiction. The Coastal First Nations initiative involved community-level engagement in four communities and the province of British Columbia—the federal government did not engage in this process with the consequence of the Coastal First Nations process not engaging in fishing and marine transport. The MSP process produced four sub-regional plans and an over-arching “action framework” that lays out how the sub-regional plans can work together. The plans have monitoring and evaluation components. The Coastal First Nations communities and the Province of British Columbia now have a common vision. Each of the plans have a zoning plan, including marine protected areas. The current emphasis is on developing an incident response plan for each community-level plan. The plans are continuing and are adaptive on a five-year cycle.

Anja KREINER emphasized that Namibia is only starting its MSP process. The 1500 km of Namibian coast is already protected by national parks except for a few coastal areas of small communities and ports. Principal activities include fishing, marine diamond mining, tourism, and ports (that expect to expand in the future). The government of Namibia has decided to undertake MSP under its National Biodiversity Strategy and Action Plan. A National MSP Working Group was formed in August 2016 and has begun stakeholder engagement and data/information for planning and decision making. The Namibian MSP process is supported by the MARISMA (Marine Spatial Management and Governance Process) of the Benguela Current Commission with the financial support of the German government’s Ministry of Environment through the German financial aid agency and GIZ.

Alain DE COMARMOND stated that the Seychelles government started MSP two years ago, under an initiative of its former

president. It set an aspirational target of declaring 30% of its EEZ as marine protected areas—three times the Aichi target of the CBD. The Seychelles is the smallest state in Africa with the second largest EEZ in Africa. Donor and technical support for the initiative has come from the Global Environmental Facility and The Nature Conservancy. The stimulus for MSP came from concern about the interactions and conflicts between fishing, tourism, marine transport, and security, including piracy. The interest of the Seychelles is in conserving marine resources—it is a biological hot spot—while developing its “blue economy.” A management structure is in place that ensures stakeholder involvement and an interim target of designating 15% of the EEZ and MPAs is on track.

Jungho NAM began by stating that confusion exists about concepts in Korea about MSP. Is it the same as ocean planning, integrated coastal zone management, ecosystem-based management. In Korea, MSP is considered the same as coastal zone management with its boundary extended to the EEZ. However, Korea only applies management to its territorial sea, not its EEZ. A problem also exists in implementation since the agency responsible for CZM does not have authority to manage sand and gravel mining, etc. Korea would also like to apply the value of ecosystem services to its approach to ICM (and MSP). The challenge is to develop the methods and data that would quantify the value of ecosystem services at the micro-level.

Wei XU stated that in China marine functional zoning is the same as MSP and has been underway for almost 30 years. MFZ in China is now in its third generation and covers 2011-2020. MFZ is now developed at three nested levels: national, provincial and municipal. Goals are established at the national level, specific objectives are set at the provincial level, and local priorities set at the municipal level. Marine activities are divided into eight classes, including MPAs, with 22 subclasses for sectoral zoning.

QUESTIONS BY THE FACILITATOR

What has been the biggest challenge for your MSP process?

NAM: It has been identifying who is responsible within government for each component of MSP, especially to resolve conflicts, e.g., sand mining is under the Ministry of Land Use, and Fisheries the under Ministry of Oceans and Fisheries.

DE COMARMOND: Getting the sectors together on a common purpose; many new techniques to learn and limited data available, with limited capacity since Seychelles is a very small country.

KREINER: The lack of understanding of MSP at a senior governmental level; relatively few Namibians live near the coast so few relate to the ocean.

DIGGON: Canadian marine planning was originally a national top-down approach. Since 1996, there has been a

legacy of a lack of political will at the national level to undertake spatially-driven planning especially across sectors; MAPP tackled problems at the community level.

DE VREES: User conflicts were the major challenge, until users started looking “across” sectors and boundaries, e.g., oil and gas, offshore wind and nature conservation sectors have recently started working together to explore cooperative work. Another challenge is how to incorporate the fishing sector who are “hunters” and are frustrated by spatially-bound activities.

What are your National experiences in target setting for MSP?

DIGGON: Targets are set by government and are usually in contentious areas, that can make them an issue with other, apprehensive, governmental departments.

DE VREES: Prefer to identify a “shared vision”, before setting targets per se for the shorter term.

KREINER: Agree that a vision is important, that is being developed together.

NAM: Identify cause and effect, in order to specify targets.



What are the key success ingredients to MSP?

XU: Ensure different departments and ministries are all involved in stakeholder engagement.

DE COMARMOND: Political commitment needed, as well as human and financial resources in order to implement an MSP plan. Starting on a high point (e.g. presidential involvement) has been useful.

What aspects of your MSP might be applicable, and what is unique?

KREINER: “Learn by doing” approach is more practical than “don’t start before legislation” approach—the focus should be on what can be done.

DE COMARMOND: “Learn as you go”, and “implement as you go”, and keep an open mind.

DE COMARMOND: Stakeholders must feel invested or MSP process will fail, even if high levels of commitment are initially experienced.

What are the new threats?

XU: In order to respond to new threats, the Chinese Sea Area law allows local government to revise reporting every two years.

NAM: The new threat is resource depletion.

DE VREES: Important to learn from one another, and similar processes, e.g., 20 yrs of ICZM has developed principles which also apply to MSP, but are not always used.

TAKE HOME MESSAGES: ONE PRIORITY FOR THE FUTURE

“ **XU:** An MSP platform should be developed for use by a “community of practice”.

“ **NAM:** Reliable data linking MSP and Blue Growth.

“ **DE COMARMOND:** “Don’t reinvent the wheel”... share knowledge and adapt processes.

“ **KREINER:** Embed MSP into an impartial institution, not a project.

“ **DIGGON:** Increase capacity to undertake MSP, creating “champions”/MSP ambassadors for the future.

“ **DE VREES:** “Keep it Simple”, “learn by doing”, and undertake planning for high-priority issues initially as subsequent plan cycles become easier.



SESSION 4

Engaging Stakeholders in MSP

A panel of experts discussed lessons learned from engaging stakeholders in MSP.

THE PANEL

-  **Jacek ZAUCHA**, Professor of Economics, University of Gdansk, Poland
-  **Anne LANGAAS GOSSÉ**, Senior Advisor, Norwegian Environmental Agency, Oslo, Norway
-  **Joanna SMITH**, MSP Science Manager, TNC Canada, British Columbia, Canada
-  **Laurent VIGIER**, Director, ACTIMAR, Brest, France
-  **Maria DELIGIANNI**, Senior Policy Advisor, European Community Shipowners Associations, Brussels, Belgium
-  Facilitator: **Jacki DAVIS**, Meade Davis Communications, Brussels, Belgium
-  Rapporteur: **Damon STANWELL-SMITH**, NIRAS Consulting, Cambridge, UK

Jacek ZAUCHA described the emphasis of Baltic engagement as “caring about people” as well as “caring about environment”. We like to debate and we have many networks. “MSP thinking” in Poland started in 2003. Lots of talking together was undertaken, including through two regional bodies: HELCOM (Baltic Marine Environment Protection Commission) and VASAB (Vision and Strategy around the Baltic Sea), to understand each other. Most challenging networks to establish have been with commercial/private business. The key issue was how to build trust among stakeholders, especially when interest compete with one another.

Anne LANGAAS GOSSÉ identified Integrated management plans for three ocean areas of Norway: Barents Sea, Norwegian Sea, North Sea. The first plan (Barents Sea) was started in 2003 and completed in 2006, updated every four years and revised every 12 years. In Norway, MSP is steered by a round-table

group of seven ministries, with a round-table management group of 10 agencies, informing an openly accessible knowledge base. All stakeholders in official positions are at the table, and other stakeholders contribute in consultations. Final decisions are made by the governance/steering group. Significant effort and time is put into describing/communicating MSP. A key issue is that transparency and predictability are essential.

Joanna SMITH spoke for The Nature Conservancy (TNC) which has 600 scientists, in 72 countries. NGO’s (like TNC) can play a supporting role to MSP processes, providing “good practices” guidance. TNC plays multiple roles in MSP processes, including facilitation, fund-raising, planning, technical products, advisor, and developing financial mechanisms, currently fulfilling this in 22 countries, representing 9 million km². TNC looking to encourage, enhance and improve “communities of practice”. “MSP a Tween”—it is only 11 years old! We are still

learning. Mindful of the sensitivities working with both data-rich and data-poor environments. A key Issue is that it's Important to understand the decision-making culture in each specific MSP location. Understanding MSP is understanding culture.

Laurent VIGIER represented the SUEZ group of private companies. SUEZ has a major water treatment and coastal development portfolio, together with oil & gas exploration and production. Spatial planning and managing its impacts on the ocean is essential for its work. A “desperate need” exists to move into remote areas, in a sustainable manner, that mitigates risk to complex environmental issues/potential impacts. Example of engagement with other planning sectors through IPIECA

(International Petroleum Industry Environmental Conservation Association), as it is important to coordinate with other marine users. A key Issue is the importance of distilling data into useful knowledge.

Maria DELIGIANNI represented ship owners associations across the EU and Norway. Engagement differs from country to country. Important for MSP authorities and stakeholders in MSP processes to understand the specific challenges of shipping, including the UNCLOS principles of safe navigation. Conflicts occur with stationary infrastructure, e.g., offshore wind farms and the resultant potential modifications expected in shipping routes. A key Issue is that MSP can assist in conflict resolution.

QUESTIONS BY THE FACILITATOR

What does stakeholder engagement mean to you?

DELIGIANNI: An understanding of what benefit accrues (to the stakeholder) from each stakeholder's involvement.

VIGIER: Essential to involve stakeholders from the beginning, so that they are “engaged”, rather than simply having information “imparted” to them.

SMITH: MSP is about people—and culture, so engagement refers to understanding the stakeholders' professional/working culture and being informed about the practice and needs of particular marine industries.

SMITH: Being respectful of stakeholder input, e.g., confidential/proprietary data provided by commercial sectors.

ZAUCHA: Engagement means “ownership”, so stakeholders must be able to (1) influence and (2) must be listened to.

ZAUCHA: MSP is not a “win-win” situation, rather it is all about trade-offs, and so the necessary setting of priorities must be discussed.

SMITH: Presenting maps or other spatial representations is the best way to engage stakeholders to “get a reaction.”

DELIGIANNI: For trust to be enhanced, an objective approach from the competent authority is important. “Engagement” is a learning process.

Which stakeholders should be involved?

SMITH: Good idea to ensure any potential conflicts are represented.

SMITH: Stakeholders can range from very large industries to recreational kayakers. A process can be very inclusive, alternatively take a targeted approach to involve only stakeholders directly affected – depending on the scope and objectives of the planning process.

GOSSÉ: There can be different levels of stakeholder involvement, with authorities from relevant sectors using working time to develop basis, which can then be supplemented by voluntary engagement from other stakeholders.

ZAUCHA: To encourage swift MSP adoption a smaller group of stakeholders, representing the most influential, should be involved; however if the plan is to be of high quality and implemented, then important to consider those stakeholders who do not have a loud voice.

ZAUCHA: The smaller stakeholders should be considered (e.g., ensuring costs covered, sensitive to fishing times for small-scale fishers, etc.).



What are your top three indicators of stakeholder engagement?

ZAUCHA: (1) Stakeholders want to share information; (2) At end of consultation, stakeholders still want to remain involved; and (3) the level of political commitment.

SMITH: (1) the percent of sectors attending every meeting = enduring attendance value; (2) calculate the number of new issues arising in an “advice log”, looking to reach an asymptote (when no longer getting new issues); and (3) qualitative indicator: closed, reserved body language at beginning of a consultation becomes open, positive and friendly body language by the end.

How to share information?

DELIGIANNI: Important to understand sectoral rules/limitations on data sharing.

SMITH: Funding support should be available to assist under-resourced stakeholders to share information and respond to the MSP process outputs.

GOSSÉ: Data, “not only maps”, that can be divisive at the beginning of a consultation by highlighting conflicts, before trust has been encouraged between stakeholders to communicate.

SMITH: Information sharing can start small and simple, and be expanded in subsequent planning cycles.

ZAUCHA: MSP platforms are a useful online resource to assist information sharing.

ZAUCHA: Numerous/regular roundtable meetings suggested, to encourage information sharing.

SMITH: When facilitating information sharing among stakeholders, single topic engagements can be more fruitful than trying to cover all topics in one attempt.

SMITH/ZAUCHA: Lessons can be learnt from failures and successes elsewhere.

TAKE HOME MESSAGES: ONE PIECE OF ADVICE TO OFFER A NEW MSP PROCESS ON STAKEHOLDER ENGAGEMENT

“ **DELIGIANNI:** Competent MSP authority should understand stakeholder needs, set tangible goals, concrete timeframe, underpinned by good evidence.

“ **VIGIER:** MSP needs a good manager – with leadership and responsibility, rather than a coordinator or administrator.

“ **SMITH:** Ensure both current and future priorities are mapped/planned.

“ **SMITH:** Since MSP is a team process, ensure the decision-making process is agreed from the outset, to ensure efficiency with the hundreds of decisions required during any MSP process.

“ **GOSSÉ:** Cooperation is more important than dialogue – so clarity of objectives and roles is important.

“ **ZAUCHA:** Ensure a stage in the planning process is included when stakeholders have to perform different roles, to encourage understanding of each other's issues.

“ **ZAUCHA:** Stakeholder engagement can be a parallel process to the planning process, rather than one being contingent upon the other.

“ **THE FACILITATOR'S CONCLUSION:** “Ownership” of an MSP plan is what effective stakeholder engagement can deliver, which is central to successful MSP implementation.



SESSION 5

The Connection between MSP and Global Governance Goals

A panel of experts discussed the connection between MSP and global governance goals.

THE PANEL

- 👤 **Julian BARBIÈRE**, Head of Marine Policy and Regional Co-ordination Section, IOC-UNESCO, Paris, France
- 👤 **Felix LEINEMANN**, Head of Unit Blue Economy Sectors, Aquaculture and Maritime Spatial Planning, Directorate General for Maritime Affairs and Fisheries, European Commission, Brussels, Belgium
- 👤 **Lisa Emelia SVENSSON**, Director for Ocean and Marine Programmes, UN Environment (DROP PROGRAMME), Nairobi, Kenya
- 👤 **Jihyun LEE**, Coordinator for Marine and Coastal Biodiversity, Environmental Affairs Officer, Secretariat of the Convention on Biological Diversity (CBD), Montreal, Canada
- 👤 Facilitator: **Ida REUTERSWÄRD**, Ministry of the Environment and Energy, Sweden
- 👤 Rapporteur: **Alejandro IGLESIAS CAMPOS**, IOC-UNESCO, Paris, France

Ida REUTERSWÄRD introduced the session by reminding us that we have made great progress on MSP but we need to move ahead. And to do this the connection between MSP and global ocean governance is crucial to address. This is the purpose of this session. How can MSP be used to achieve global ocean governance goals? How can we form new partnerships to make this happen?

Julian BARBIÈRE began by asking how can we highlight the importance of MSP in achieving the Sustainable Development Goal (SDG) 14? More than ever, maintaining the quality of goods and services from marine ecosystem requires a change in the way we are using and governing ocean space. How to bring

different elements of ocean sectors into one integrated global framework with measurable targets? The SDGs are integrated and mutually support one another.

SDG 14 has 10 targets, including target 14.2 focused sustainably managing and protecting marine and coastal ecosystem to avoid significant adverse impacts, this target is measured through an indicator the proportion of EEZ managed using ecosystem-based approaches. MSP has a clear contribution to make in achieving this target. Similarly, the target 14.5 on conserving at least 10 percent of coastal and marine areas, can be supported by MSP by considering the larger marine environment in which marine protected areas (MPAs) exist. MPAs should be

considered in the broader context of MSP. MSP can also be used as a process to achieve fishery management objectives and sustainable blue growth (Targets 14.6 and 14.7). **BARBIÈRE** highlighted the role of marine research, ocean data (including access to data), and marine technology transfer as enabling factors in achieving SDG 14.

Felix LEINEMANN described the joint European Commission / External Action Service initiative on international ocean governance launched in November 2016, stating that ocean governance is a matter of (inter)national security in economic, environmental and societal terms. The challenge is global, but the current international framework is not effective enough. Ocean space is currently under-used. While land makes up 30% of the Earth and supports 95% of its economic activity, the ocean makes up 70% of the Earth, but supports only 5% of economic activity (Europe's collective EEZ is five times larger than the EU land surface area). Humankind has no alternative but to turn to the ocean—in a sustainable way. If we don't act today, we compromise our future. The oceans need better care and better management. We need to keep ocean clean, safe, secure and sustainably managed within the context of a global strategy.

The EU agenda for the future of the ocean is: **(1)** a comprehensive framework of rules and actions at the European level; and **(2)** work regionally and globally with our partners. Three priority areas: **(1)** improving the international ocean governance framework; **(2)** reducing the pressures on the ocean and promoting sustainable “Blue Economy”; **(3)** strengthening ocean research and data. One action that the EU has put forward is to promote MSP at the global level and to maximise the potential of maritime uses and ocean space.

The EU is currently working with its Member States to: put in place maritime plans by 2021; funding MSP cross-border projects; establishing a EU MSP platform to provide technical support; forming a MSP expert group to exchange best practices; and promoting International MSP.

Finally **LEINEMANN** mentioned the EU's hosting of the “Our Ocean” conference in Malta in 5-6 October 2017 to obtain additional commitments to achieve sustainable development of the ocean.

Lisa Emelia SVENSSON began by asserting that MSP was ocean governance at a national level. We need an integrated and holistic approach when we talk about planning. MSP is about collaboration, collaboration, and collaboration! We need to map ocean resources—we need to know what we have. We need to value ocean resources—not only economic, but social and cultural values. We need to make sure it is integrated in policy and decision making level. She emphasized the importance of the “regional” (multi-national) scale in MSP—and the link to the 18 Regional Seas—a patchwork that needs improved collaboration. What is the UN Environment vision for MSP? Area-based management as a common and practical tool for sustainable development. Science, both natural and social, should be better integrated into policy making. Single-sector and multi-sector approaches should be combined. We should advance cross-border uses of MSP, ICZM, and MPAs. We should ensure benefits-sharing among stakeholders. Develop practical trade-

off analysis for planning. And use risk analysis and investment scenarios for private sector engagement. But in the context of harmonization of legal and regulatory approaches across-borders, that one size fits all.

Finally, **SVENSSON** proposed two ideas to realise UN Environment vision: **(1)** a global ocean information facility to support national and regional SDG implementation; and **(2)** formation of global capacity-building partnerships on area-based management (e.g., MSP).



Jihyun LEE began by asserting that MSP is a tool—the most important aspect is how we intend to use the tool. We need to understand the full potential of the tool, e.g., for achieving the Aichi targets and sustainable development targets. She reminded us that the Strategic Plan for Biodiversity 2011-2020 has a very ambitious vision that “by 2050, biodiversity is valued, conserved, restored, and widely used”. So what are we trying to achieve by using this tool—MSP? Since 2010 MSP has been recognised by the CBD as a useful tool to achieve its goals (COP 13 recognised that “MSP is a participatory tool to facilitate the application of the ecosystem approach...and that long-term investment in the development of human and institutional capacity for MSP-related activities is essential for success”. MSP should be linked closely to existing efforts to implement integrated marine and coastal area management, MSP and other effective area-based conservation measures. **LEE** finished by explaining how the identification of EBSAs (Ecologically and Biologically Sensitive Areas) can be used in the context of MSP.

QUESTIONS FROM THE AUDIENCE

🗣️ *How can we make sure that the SDGs are enforceable and legally meaningful at global and national levels?*

LEE mentioned a recent workshop in Costa Rica where Caribbean and South American countries were asked to assess where they stood with respect to the SDG goals and to identify management actions to progress achievement of the targets—what would be the next steps?

SVENSSON emphasized the role of Regional Seas programs in implementing the SDGs.



🗣️ *There are a great number of UN agencies with responsibilities for implementing the SDGs, could streamlining help? What are the next steps for IOC in bringing MSP forward?*

BARBIÈRE agreed that many UN agencies are involved in implementing the SDGs. He mentioned the “UN Oceans” as the main integrative mechanism for bringing UN agencies together. IOC plans to continue with its clearinghouse mechanism through its MSP, its “step-by-step approach” to MSP, and its new partnership with the EC-DG Mare on MSP.

LEINEMANN mentioned about the joint development on transboundary guidance by DG Mare and IOC.

🗣️ *What has been the role of academic and marine scientists in MSP and what is needed from academia and science?*

LEE mentioned the central contributions from academia to the EBSA process.

BARBIÈRE emphasized the importance of MSP capacity building by academia—universities slowly developing curricula focussed on MSP. Universities have the responsibility to advance the concept of MSP.



SESSION 6

Cross-border Cooperation in MSP

This session consisted of panel presentations summarising results from an European Commission-funded study on international cross practice for cross-border cooperation in MSP.

THE PANEL

- 👤 **Steve FLETCHER**, Head of Marine Programme, UN Environment - World Conservation Monitoring Centre, Cambridge, United Kingdom
- 👤 **Hannah THOMAS**, Senior Programme Officer, UN Environment - World Conservation Monitoring Centre, Cambridge, United Kingdom
- 👤 **Dominique BENZAKEN**, Senior Ocean Governance Advisor, Commonwealth Fund for Technical Cooperation, Office of the Vice-President, Government of Seychelles
- 👤 **Stephen OLSEN**, Director Emeritus, URI Coastal Resources Centre, Narragansett, Rhode Island, USA
- 👤 **Jennifer MCCANN**, Director of US Coastal Programs, URI Coastal Resources Centre, Narragansett, Rhode Island, USA
- 👤 **Qinhua FANG**, Professor, Coastal and Ocean Management Institute, Environmental Science Research Centre, Xiamen University, Xiamen, China
- 👤 **Gonçalo CARNEIRO**, Senior Consultant, NIRAS, Stockholm, Sweden
- 👤 **Laura WHITFORD**, Director of Development Policy and Partnerships Asia Pacific, The Nature Conservancy, Melbourne, Australia
- 👤 **Mark BELCHIER**, Chair of Scientific Committee, Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), Hobart, Tasmania, Australia
- 👤 Facilitator: **Damon STANWELL-SMITH**, Head of Marine Environment, NIRAS UK
- 👤 Rapporteur: **Sara MÉNDEZ ROLDÁN**, Environmental Consultant, NIRAS UK

Damon **STANWELL-SMITH** introduced the session noting that different contexts provide different “good practice” lessons that may be relevant to or inspire different MSP planners of the present and future. The intent of the study was to assist EC and European Mem-

ber States in the implementation of the EC MSP directive with a focus on cross-border cooperation. Cross-border cooperation is defined as collaboration across jurisdictions, i.e., between regional, national or sub-national divisions with competency for MSP.

Steve FLETCHER explained that cross-border cooperation in MSP is limited, but very variable, ranging from large well-established formal processes to much more informal linkages and activities. Cooperative mechanisms included legally-binding treaties, political agreements, cooperative organisations and the establishment of 'social infrastructure', which can inspire cooperation with third countries. At the sub-national level, cooperation across borders occurs through tailored social infrastructure (committees, forums, working groups, etc.) that convene in regular meetings. Sub-national MSP processes are frequently undertaken in isolation with little consideration given to potential connectors with other MSP processes. 'Effective' practice in one context may not be comparable to effective practice elsewhere. The use of a structured analytical framework, applicable consistently across multiple MSP processes can help to identify effective practices. The majority of cross-border cooperation occurs at the sub-national level, is variable in format, and supported by social infrastructure. One size does not fit all.



Stephen OLSEN provided background of the study that undertook context-specific analysis of MSP processes in order to identify what, if any, cross-cutting characteristics are shared between MSP processes. The analytical framework of the study is based on the 2003 "Order of Outcomes" framework, that digs through the outcomes of the process at different stages. The framework has been used through the gathering of facts and assessment of different elements using "graduated indicators", e.g., "at the beginning of the MSP process, to what extent was there support for MSP within the relevant government institutions?" or "to what extent have cross-border issues shaped this MSP?". These are important to insert discipline for thinking in a standard manner, but the key is on justifications given.

Dominique BENZAKEN suggested that consideration of climate change in MSP brings the concept of reliance to the table. Contextual governance (legal basis, prior history of decision-making and existing linkages, political culture or geopolitics) has a strong influence on MSP processes, including on the degree to which cross-border collaboration is achieved. MSP can be initiated at different geographical/ decision making scales, but it typically engages several levels of decision making. A history of joint-decision making accelerates MSP development and implementation. MSP provides certainty and encourages investment. Resource mobilisation is a significant challenge and needs innovation.

Jennifer MCCANN reviewed the State of Rhode Island Ocean Special Area Management Plan (SAMP) that was driven by offshore wind development, used as a regulatory tool that helped bring people to the driver's seat, and framed under a set of principles aimed at building trust. The Rhode Island Ocean SAMP responded to the numerous data/assessment requirements of existing regulations. The process engaged regulators to make sure the final product was actually practical and useful for relevant agencies. The Ocean SAMP also facilitated a voice for fishermen to provide input into the planning process (Fisheries Advisory Board), that is still used during the implementation and revision stages. There was early recognition that both regulators and scientists had to engage with people to build trust. The Ocean SAMP also facilitated some collaboration with the adjacent state of Massachusetts to develop offshore wind in a shared area (federal waters), developed through a memorandum of understanding and a designated Area of Mutual Interest.

Gonçalo CARNEIRO then shared some reflections across these first presentations. The process of stakeholder engagement needs to be tailored to the context, expectation and capacity of stakeholders, e.g., governance context can determine capacity for engagement. The extent to which stakeholders engage depends on how they see they may be affected, but also whether they feel they will be able to influence the process. The key purpose of engaging stakeholders should be to build a constituency of individuals ("leaders") committed to taking the MSP process forward.

Hannah THOMAS and **Mark BELCHIER** next reviewed an application of the "ecosystem approach" in the context of the CCAMLR (Commission for the Conservation of Antarctic Marine Living Resources), an area of 32 million km². CCAMLR was negotiated to conserve marine life in the Southern Ocean, but does not exclude harvesting. "Antarctic marine living resources" means all fin fish, molluscs, crustaceans and all other species of living organisms, including birds, but does not include seals or whales. In practice, implementation of the ecosystem approach comprehensively in a rapidly changing and uncertain environment, certainly in any one management process, is difficult. Focus on making ecosystem-based decisions despite the unknowns and strengthening coordination and integration between the multiple management systems interacting with the ecosystem. At CCAMLR while there is an explicit mandate to take the precautionary approach to EBM (ecosystem-based management) while allowing 'rational use' of living resources, the lack of uniform understanding of the EBM concept posed challenges.

CCAMLR is a conservation body that acts as a Regional Fisheries Management Organisation (RFMO). Spatial planning is limited to the establishment of marine protected areas, including the Ross Sea region.

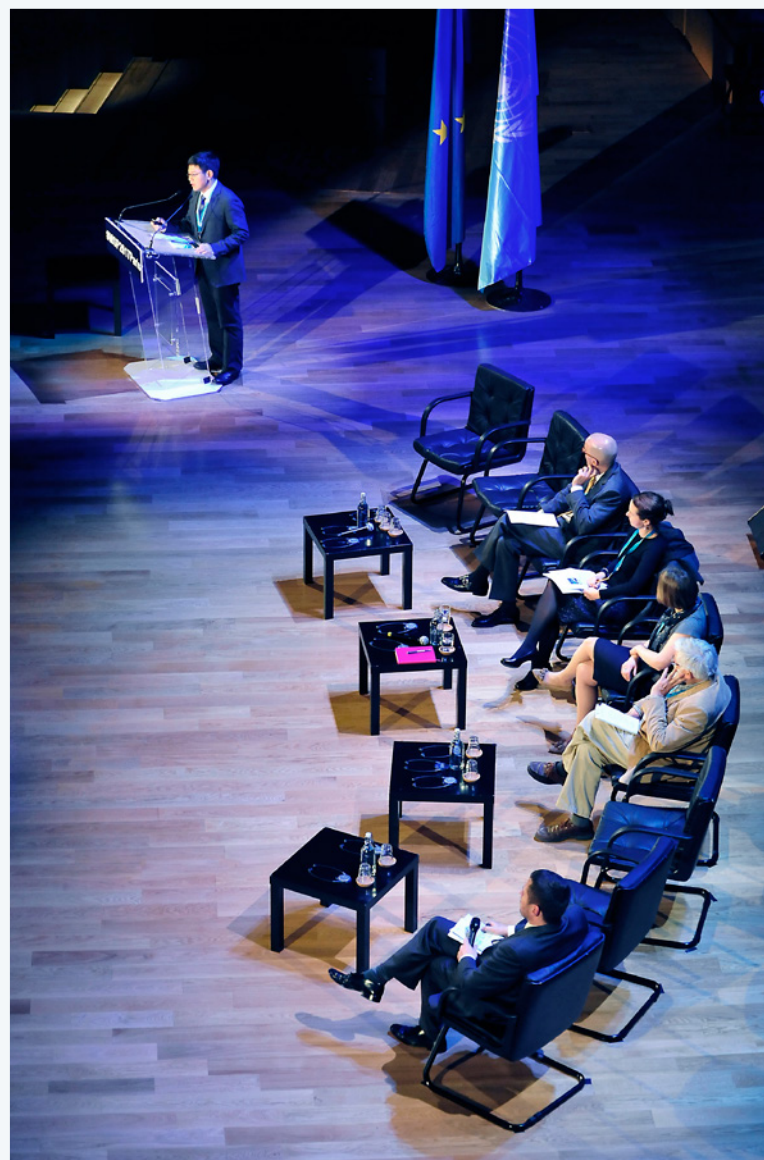
Hannah THOMAS reflected on these presentations. All case studies combine informal and formal platforms for cooperation. Formal platforms at transnational level seem useful to commit organisations, engage sectors and document the process. Informal platforms seem useful to commit individuals and build trust, particularly if there is a lack of formal structures. They are less resourced and tend to be more inclusive. Platforms for “behind-the-scenes” negotiation are important and useful for learning. Enforcement capability is limited by sovereignty rights, and in multi-national cross-border context, volunteering means seem more useful to improve coordination.

Qinhua FANG summarised experience with implementing hierarchical MSP plans and policies focussing on marine functional zoning (MFZ) in Xiamen, China, a harbor city and tourism destination—the sea area of Xiamen is 390 km². MFZ is an enforceable process that allows vertical implementation across different levels (lower level plans are consistent with higher level plans), ensuring consistency between local level plans and national goals, while addressing cross-border issues. Strategic Environmental Assessment has allowed addressing competing demands and assess cumulative impacts. Feasibility is assessed based on multi-dimension decision-making.

Laura WHITFORD explained an approach to making monitoring and evaluation effective illustrated through work in the Coral Triangle Initiative (CTI). The development of a M&E (monitoring and evaluation) framework to measure CTI-CFF goals was used to define roles and accountability, and has been a key process in strengthening cross-border cooperation and build relationships in the CTI. The CTI-CFF also developed the Coral Triangle Atlas, that contributed to a sense of common identity and achievement. A well-designed, relevant, and easy to understand M&E system with simple but robust indicators can build a common identity, assist adaptive management and ensure consistency. Simple objectives will also gain political support more easily. An overly complex system with too many or difficult indicators can help make a program unmeasurable and risks long-term failure.

Hannah THOMAS reflected on thoughts about monitoring and evaluation (M&E) across the four case studies in cross-border MSP. M&E measures collective progress of MSP. It also enables adaptive management, supports ecosystem approaches, ensures consistency across jurisdictions, attracts investment, and fosters cooperative work. Some other lessons learned include: use simple, easily available data; use simple indicators since complex indicators slow progress; make M&E relevant to managers; and remember that M&E can enhance collaboration.

Stephen OLSEN concluded the presentations of this session by identifying good practices in MSP cross-border collaboration. The practice of MSP is as much, often more, of a social and political process with major economic implications—as it is a scientific and technical challenge. The limiting factor is the capacity to practice the ecosystem approach—not gaps in nat-



ural science. Mandates and experience in cross-border collaboration in existing, largely sectoral institutions is uneven, often weak. Central to successful MSP is recognition of strengths and weaknesses within the existing governance system.

OLSEN identified six good practices of MSP:

- Designs that build trust and common purpose have great value, e.g. use of non-politicised coordinating body;
- Invest in understanding the existing governance system, traditions and local knowledge;
- Adopt an issue-driven approach in order to motivate engagement;
- Adopt a long-term perspective;
- Manage expectations for stakeholder involvement;
- Adaptive MSP requires effective long-term monitoring and evaluation.

QUESTIONS FROM THE AUDIENCE

What is the best example of transboundary MSP until now?

OLSEN: There is no “best” example; what can be considered “successful” in one place may be irrelevant in another. There are examples that work (or not) under different circumstances.

What is the biggest challenge in cross-border cooperation?

CARNEIRO/MCCANN: The need for a common purpose that moves forward MSP in the same direction. In Rhode Island, the limited collaboration with Massachusetts during the planning process was mainly caused by competition to become the first state to develop offshore wind and create new jobs.

THOMAS: In a multinational context, the fact that there is no complete control, and that there is a need to cooperate with ongoing / parallel governance structures in place.

BELCHIER: Although a challenge, aligning of thinking is possible, CCAMLR experience shows that consensus-based decision making makes this possible.

Can the approach used at CCAMLR be applied in the Arctic?

BELCHIER: There are parallels between the Arctic and Antarctic and definitely lessons that can be learned from CCAMLR, it would be disappointing that the Arctic management ended up falling under a RFMO regime. There are also big differences, the Arctic has some population in contrast with the relatively deserted Southern Ocean. The Antarctic has also been managed through the Antarctic Treaty System for over 35 years, while this does not exist in the Arctic.

To Jennifer McCann, is it necessary to establish spatial planning regulations for fisheries? Can it be integrated into MSP?

MCCANN/CARNEIRO: In the US, as a traditional activity, regulations and management of fisheries have been in place for a long time. The Ocean SAMP had very clear guidance that could not change the way fisheries were being managed/regulated, but instead made sure that policies were developed to protect existing uses and give them a voice during the planning and implementation process through the establishment of a dedicated Fisheries Advisory Board.

Can “dynamic ocean management” strategies be integrated in MSP?

FLETCHER: If dynamic ocean management is understood as the process of using real-time data updates to keep MSP up to date, yes, it should be part of the process.

BELCHIER: In CCAMLR there is a feedback management system used to ensure the use of data updates in decision-making.

Last question, advice on cross-border cooperation?

FLETCHER: Understand motivations for cooperation through social sciences.

FANG: Learn by doing.

CARNEIRO: MSP as an issue-driven process can assist in bringing people to the table more effectively.

WHITFORD: Political will.

BELCHIER: Remain flexible.

THOMAS: Use existing region-based tools, frameworks, institutions to facilitate cross-border cooperation.

MCCANN: Set realistic expectations from the beginning.

BENZAKEN: One size does not fit all, collaboration is not a done deal, drivers for collaboration need to be there.

OLSEN: Need to identify how to learn together more effectively, stop reinventing the wheel, plea for more effort to collaborative learning.





SESSION 7


Good Practices for Science-based MSP

This session presented some of the latest developments in the natural and social sciences, both to support MSP.

The scientific basis of MSP has been evolving rapidly in recent years hand in hand with the progress in the practice of MSP. Recently progress has occurred also in application of findings from social sciences and economics into the practice of MSP.

The session proved also the importance of strengthening the links between MSP and assessments on impacts of climate change and adaptation to climate change.

THE PANEL

-  **Paul GILLILAND**, Head of Marine Planning, Marine Management Organisation (MMO), Newcastle upon Tyne, United Kingdom
-  **Jan SCHMIDTBAUER CRONA**, Senior Analyst, Marine Spatial Planning and Maritime Affairs, Swedish Agency for Marine and Water Management, Göteborg, Sweden
-  **Adrian JUDD**, Centre for Environment Fisheries and Aquaculture Science (CEFAS), Lowestoft, United Kingdom
-  **Paul MARSHALL**, Adjunct Associate Professor, University of Queensland, and Director, Reef Ecologic, Brisbane, Australia
-  **Steven VANDENBORRE**, Legal and Policy Advisor at Belgian Marine Spatial Planning Unit, Marine Environment, Brussels, Belgium
-  Facilitator: **Ingela ISAKSSON**, Swedish Agency for Marine and Water Management
-  Rapporteur: **Riku VARJOPURO**, Finnish Environmental Agency

The presentations fell into four themes:

- Socio-economic information and stakeholders;
- Cumulative assessments and ecosystem approach;
- Climate change;
- Flexible and learning approaches in knowledge production.



SOCIO-ECONOMIC INFORMATION, STAKEHOLDERS, AND MSP

Paul GILLILAND and **Steven VANDENBORRE** both spoke about socio-economic information and stakeholders. **GILLILAND** emphasized that as late as 2010 very little socio-economic research related to MSP existed in the published literature, but it has steadily increased, including work done by the MMO in the preparation of its regional plans. In the end, socio-economics is about people. Partnerships with people and institutions that have data are essential, as is working across disciplines. Ecologists/biologists have to work with social scientists—and collaborate. Multidisciplinary projects are what you are in for when undertaking MSP.

VANDENBORRE discussed the process for developing the Belgian plan for the North Sea (2014-2020)—the planning cycle is six years. Belgium has now produced three successive plans. The Belgian plan relies heavily on spatial analysis, a long-term (20-30 years) vision of spatial use, clear economic, social and ecological objectives, including indicators, and an identification of management actions to implement the plan. He emphasized that stakeholder engagement is continuous throughout the

MSP process (planning to implementation) through informal questionnaires and informal contacts, and through formal consultations. Stakeholders in Belgium have already evaluated the process and content of the latest plan. He emphasized building trust and noted that “trust arrives on foot and leaves on horseback!” Stakeholders are also important on upgrading the data base for planning by cross-checking. Seduce stakeholders to share. Don't cross the threshold of “no return” if data are not mature. However, a sub-optimal MSP is better than one that arrives too late. Work toward co-ownership of the plan.

Presentations and questions from the audience addressed the roles of stakeholders in MSP and the related topic of the utilisation of socio-economic evidence in MSP. It is noteworthy that actually all of the scientific methods and tools that were presented emphasized the importance of socio-economic evidence and stakeholder engagement.

Socio-economic matters are important, so think about them throughout the MSP process. Collection of this kind of evidence requires new types of partnerships as the sources of information are different from the collection of environmental evidence. Starting with “quick wins” – evidence that is readily available – is a good strategy to show value of socio-economic evidence to all parties that are involved in the process.

Stakeholders have important roles as knowledge providers for MSP. They can bring into the processes not only the essential socio-economic evidence as their inputs can also improve the contents of the plans and knowledge base of MSP. Even commercially-sensitive data can be obtained, if the planners can show that there is a value for the data holders to provide it.

Participatory evaluation of both the process of planning and the content of the plan is useful for the success of the process and for the quality of the plan. Getting stakeholders on board in all stages of planning creates trust and co-ownership that are keys to legitimacy and, ultimately, to success of MSP. Collaboration takes time, but it's worth it!

Politicians and policy makers are important actors as their support to the MSP process is a critical success factor. These actors need to be engaged in the processes frequently to gain their trust and to ensure that they are informed about the process and its objectives. It is also important to allow them to give their own comments and input to the processes.

CUMULATIVE ASSESSMENTS AND THE ECOSYSTEM APPROACH IN MSP

Adrian JUDD summarised the importance of the assessment of cumulative effects in the MSP process—and the importance of MSP as a vehicle to manage cumulative effects. When we start talking about cumulative effects, it's important to be clear about what we are actually trying to do. What's the purpose of the plan? What are the objectives of the plan? What is the information available? Cumulative impacts assessment is not always about producing maps.

The importance of applying an ecosystem approach in MSP was raised several times during the conference. Practical tools

to apply the ecosystem approach have been developed. The scientific basis of the ecosystem approach requires assessment methods that can address impacts of human activities on several components of the ecosystems – as well as on ecological processes. Cumulative impact assessments are developed for that purpose.

- The ecosystem approach is a change in the way how we understand ecosystems and impacts of human activities. It changes focus from parts of the ecosystems to relationships between the parts and to processes. Furthermore, the ecosystem approach understands humans as components of the ecosystems. It is important that tools to implement ecosystem approach foster this change of thinking.
- Cumulative impact assessment can address several possible combinations of effects of human pressures on several ecosystem components. This can, however, lead to very complex approaches, the results of which are difficult to communicate. Therefore, there is a need to apply filters to ensure that the assessment targets the relevant questions.
- Cumulative assessment can significantly support maritime planning and implementation of the ecosystem approach, but it must be understood only as a means to an end. The ultimate goal of applying cumulative assessments is to help MSP to manage cumulative impacts on the ecosystems.
- Ecosystem approach and cumulative assessments are essentially multidisciplinary efforts. They should be based on an understanding of the social, economic and environmental drivers and consequences of the policies described in a Marine Spatial Plan. For this purpose they need to bring together the political, engineering, economic, social and environmental sciences – and should utilise stakeholder engagement to ensure quality of the assessments and “buy in” of the results.

CLIMATE CHANGE AND MSP

Paul MARSHALL described the potential impact of climate change on MSP. MSP is about the future. It's about thinking about the future. Climate change is a major driver of existing and future conditions and trends for marine systems—a game changer—and must be a central consideration for marine spatial planning efforts. An analytical framework for strengthening the linkage was presented. MSP is future-oriented and it should take into account different drivers and changes of conditions, but climate change is often neglected as a factor. Climate change brings very specific aspects to thinking in future-oriented ways as due to the climate change conditions for spatial planning change as well. But there are things we can do—including actions through MSP, such as building resilience.

- As the climate change is proceeding the vulnerabilities of the environment and human communities are increasing. A research approach based on a vulnerability framework brings social and ecological linkages to the fore in a study of impacts of the climate change.

- Mapping of social and ecological vulnerabilities produces applicable results for MSP. This analysis should also present differences – including spatial differences – in vulnerabilities as the effects of climate change do not affect evenly all locations and all groups of people.
- Adaptiveness and responsiveness are important aspects in vulnerability analysis. Analysis should identify what communities can do to adapt to the climate change and how to increase resilience against manifestation of the climate change.
- People can easily become disempowered when the anticipated consequences of the climate change are explained. Vulnerability analysis and mapping that help to reduce local pressures help also show that there are means available to improve adaptive capacity.

In summary, climate change is here to stay. Unprecedented changes in the time period that MSP has been evolving. The systems we are dealing with are not just lines on maps, they are the foundations of human well-being. As planners we have a responsibility to get MSP right. Vulnerability and resilience provide concepts and frameworks to do that. If we don't get this right, then the relevance of MSP might be in question.

FLEXIBLE AND LEARNING APPROACHES IN MSP

Jan SCHMIDTBAUER CRONA emphasized the importance of fostering adaptive and flexible approaches in MSP – as well as in production and use of scientific evidence in MSP and illustrated these approaches through the work of HELCOM and VASAB. Spatial planning must be started even if all of the expected evidence is not available or scientifically validated. MSP processes have to be smart and adaptive: Better a MSP in a suboptimal state, than one that arrives too late.

- Complete, sound and robust evidence is not usually available, nor is it even always necessary. New data can be received when it becomes available to inform and improve implementation or review of the plans. In many cases the legal provisions or policies of MSP do not even require that all evidence need to be scientifically validated.
- A key to adaptive and successful MSP is to accept early on that some things may go wrong as long as the planning system can correct them. Aiming for the perfect can be the enemy of good maritime spatial planning, if the planning process is choked by attempts to collect perfect evidence before the process can be started.
- Necessity of taking adaptive and flexible approaches was highlighted also in the sense that different contexts require different approaches to MSP. The conditions for planning and the issues relevant in planning are different. Furthermore, countries have very different possibilities of conducting MSP and presently MSP is mainly happening in highly developed countries. Alternative approaches are needed for MSP to fit into different contexts.

QUESTIONS FROM THE AUDIENCE

One question asked by the audience divided the panelists in their responses. This was a question that asked about the differences between the “ecosystem approach” to MSP and an approach that is based on the concept of a “social-ecological system”.

GILLILAND warned against too easy adoption of new academic concepts, which would risk confusing more than improving the practices of MSP. The ecosystem approach that was made widely known in the CBD process is presently endorsed in many important high-level processes and policies.

MARSHALL reminded the social-ecological system approach can be useful in some contexts especially if the research aims to understand dynamics of the contexts in which marine and maritime activities take place. It's important to look at the outcomes of these approaches. In that consideration the differences between the ecosystem approach and the social-ecological systems thinking may prove to be merely semantic.

Another important question asked was whether one should start MSP processes from the Regional Seas level or from the national level.

Here the responses of the panelists emphasized the importance of understanding the contexts and scales in more qualified ways. EEZs of countries around the world are of very different sizes, making some sub-national sea areas as big as some Regional Seas. Here again the flexible approach was suggested. It was also reminded that it is important to be aware of the specified mandates of planning authorities in context of Regional Seas MSP collaboration. Those can be limiting factors in a Regional Seas approach.





Communication Workshop

The workshop showcased good practices on how to communicate MSP.

THE PANEL

-  **Jochen LAMP**, Head of Baltic Sea Office, WWF-Germany, Hamburg, Germany
-  **Marian STUIVER**, Senior Researcher, Wageningen University & Research, Wageningen, The Netherlands
-  **Lodewijk ABSPOEL**, Advisor, Integrated Maritime Policy, Ministry of Infrastructure and the Environment, The Hague, The Netherlands
-  **Thierry OHAYON**, Contract Manager, Service of Sanitation Marseille Métropole, Marseille, France
-  Facilitator: **Christopher MALAPITAN**, Visuality, Belgium





SESSION 8

MSP Toward Sustainable Blue Growth

This session discussed the untapped potential of sustainable “Blue Growth” for creating jobs, growth, and investments.

Speakers discussed how in practice MSP processes could lead to certainty and sustainability of our ocean economies.

THE PANEL

-  **Xin TENG**, Associate Professor, Sea Area and Islands Office, National Ocean Technology Center, State Oceanic Administration (SOA) and National Marine Functional Zoning Expert Committee Office, Tianjin, China
-  **Marian STUIVER**, Senior Researcher, Wageningen University & Research, Wageningen, The Netherlands
-  **Jessica HJERPE OLAUSSON**, Maritime Expert, Region Västra Götaland, Kungälv, Sweden
-  Facilitator: **Bernhard FRIESS**, DG Mare, Brussels, Belgium
-  **Marc-Philip BUCKHOUT**, Vice-Chair, Aquaculture Advisory Council, Seas at Risk, Brussels, Belgium
-  Rapporteur: **Marie COLOMBIER**, DG Mare, Brussels, Belgium

Bernhard FRIESS introduced the panel by emphasizing the importance of sustainable Blue Growth and the “Blue Economy (five million jobs in the European Blue Economy). It’s a concept that has a lot of potential for innovation. But Blue Growth should be discussed in a very specific way—our problems cannot be solved simply by economic development—we have to be smarter than that. When we only focus on growth, we can do a lot of damage to the marine environment. Whenever we develop economic activities in the sea, we need to know about environmental impacts—and to minimise those impacts. If we extract resources from the sea, we should do it in a way that is renewable. MSP is very impor-

tant in that context by avoiding conflicts, including conflicts with nature.

Xin TENG began the panel by citing four major points: **(1)** What is the Blue Economy in China? **(2)** What is the current situation of the Blue Economy in China? In March 2012 the State Council of China approved the National Marine Functional Zoning program (2011-2020) and approved all 11 provincial MFZ plans. The Blue Economy is about 10% of China’s GDP. Coastal tourism is growing at an annual rate of 12%. **(3)** How does MFZ promote the Blue Economy? Six MFZ objectives promote the Blue Economy, including aquaculture and marine protected

areas (11% of territorial waters by 2020). Provincial waters have been divided into over 1900 functional zones that supply the space for development of the Blue Economy, and (4) How will the Blue Economy develop over the next five years? The plan is to increase the Blue Economy in a stable manner, including the tourism sector. To develop cross-border MSP capacity, in 2016 China established a Working Group on Cambodia-China Marine Spatial Planning with the Ministry of Environment of Cambodia and the Royal University of Phnom Penh to apply China's MFZ approach to the development of Cambodia's marine spatial plan.

Jessica Hjerpe OLAUSSON discussed the combination of MSP and regional development in the Västra Götaland region (southwest coast of Sweden). The region has 49 municipalities (municipalities are responsible for coastal lands and out to 12 nautical miles at sea. Blue growth is included in the VGR region. What is done on land affects the sea. Cooperation among users of the sea and coast is critical. A "Maritime Cluster" has been created with working groups on maritime operations, marine biotechnology, seafood, tourism, ocean management, and marine energy. The groups create awareness and discuss solutions to problems at the municipal level. In response to a question from the audience about the involvement of municipalities in MSP, Olausson explained that the issue was often better communications with local authorities about the potential of the sea, not only the problems related to development and how some of these problems can be resolved at the municipal level. Local authorities have to deal with hundreds of issues and traditionally have not focused on development of ocean areas.

Marc-Philip BUCKHOUT talked about how MSP can support sustainable aquaculture. The Aquaculture Advisory Council (AAC) includes MSP in its work programme. It provides advice on aquaculture and related matters to European institutions. MSP provides the tool to reach "good environmental status" of the Marine Strategy Framework Directive. MSP can identify where aquaculture can take place with minimum environmental impacts. Environmental carrying capacity should be defined prior to development, including aquaculture development. Aquaculture should take place in existing marine protected areas only

if can be shown to have minimal or no environmental effects. Important steps have been taken by the industry to make it more sustainable. In response to a question from the audience, **FRIESS** explained that the EU is encouraging its Member States to develop national plans for aquaculture so that requirements for ocean space and environmental impacts can be better evaluated and dealt with in marine spatial plans.

Marian STUIVER talked about multi-use platforms at sea and Blue Growth. Project MERMAID (2012-2016) explored the possibilities of co-locating multi-uses on one platform, e.g., mussels, seaweed, and wind energy generation in the North Sea, fish farms and wind in the Baltic Sea, and wave and wind energy in the Atlantic. Assessment was from a technical and environmental point of view with a focus on knowledge and participatory aspects. Almost no existing business cases of multi-use platforms. She next discussed Project MARIBE (Marine Investments for the Blue Economy)—a 2015-2016 project to help partners develop the best business structure for the Blue Economy. MSP is hardly mentioned; when business focuses on the economy, the planning and the ecosystem are forgotten. In conclusion, **STUIVER** described the SOMOS project (Safe Production of Marine Plants and Use of Ocean Space).



QUESTIONS FROM THE AUDIENCE

STUIVER responded to a question about who bears the risks and costs of multi-use marine investments—especially to society. Who should pay for the costs of safety—to both society and the environment.

A question also was raised about very real proposal for a multi-use platform in the Dogger Bank (North Sea) particularly the implications on other uses such as NATURA 2000 sites and fishing.

How should we manage the Blue Economy?

Panelists generally agreed that MSP is a very good tool to manage the Blue Economy and to balance trade-offs among the various uses and the environment.

FRIESS summarised the discussion emphasized that the coastal economy and sea-based economy should be separated—coastal economies are much larger than sea-based economy (the Blue Economy). How do we manage the Blue Economy? We should be humble about economic growth in the ocean—if you grow economic activities in the oceans you can't measure progress through growth in GDP (economic growth is a dogma that is coming to its limits). It's not just the economic activities that have value; it's the ocean itself that has value. We need to do only things that keep the whole marine system afloat.



SESSION 9

Institutional Capacity Development for MSP

This session discussed the institutional capacity needs at the regional and national level, including financial aspects, to promote adaptive management within MSP.

THE PANEL

-  **Joseph ONWONA ANSONG**, Research Assistant, Centre for Marine and Renewable Energy Ireland, University College Cork, Ireland
-  **NGUYEN Chu Hoi**, Professor, Department of Environmental Management, University of Sciences, Vietnam National University (VNU), Hanoi, Vietnam
-  **Norma Patricia MUÑOZ-SEVILLA**, Professor, National Polytechnic Institute, Centre for Interdisciplinary Studies on Environment and Development (CIEMAD), Mexico City, Mexico
-  Facilitator: **Angela SCHULTZ-ZEHDEN**, S.Pro, Germany
-  **Badal REZAH**, Director General, Continental Shelf, Maritime Zone Administration and Exploration, Port Louis, Mauritius
-  Rapporteur: **Claudia DELGADO**, IOC-UNESCO/IODE, Ostend, Belgium

Angela SCHULTZ-ZEHDEN introduced the purpose of the panel—to come up with recommendations that can guide policy makers in how to promote capacity building for MSP over the next decade. Her experience with MSP began in 2001 with the development of a Länder-level plan approved in 2005 for Mecklenburg-Vorpommern covering coast and territorial sea. The Baltic Sea, a place where capacity was developed through various projects funded by the EC since 2001, e.g., BaltCoast, PlanCoast, PlanBothnia, PartiSEApate, and BaltSpace. European countries that are now

implementing MSP through the EC Directive on MSP have taken on board the capacities developed through these projects. A European MSP Platform (www.msp-platform.eu) has been developed over the past several years to provide information on European experiences to countries beginning MSP processes.

Joseph ONWONA ANSONG, a former student of the Erasmus Mundus masters course on MSP, kicked off his presentation by emphasising the importance the EU Directive on MSP in creating competent authorities and the transposition of the Di-

rective into national legislation and guidelines. The Directive has stimulated many MSP educational activities, and created knowledge, research, networks, and partnerships throughout Europe. The EU MSP Platform is a good example. There are over 37 MSP-related courses evenly distributed across Europe—most at the Masters level. He described his very positive MSP education through the Erasmus Mundus course, a two-year advanced professional masters program, in three European universities: Università luav di Venezia, [the University of Seville](#), and [the University of Azores](#). 61% of its graduates are in MSP-related jobs. He concluded with four ideas about MSP capacity building: **(1)** training diversification, e.g., short courses, webinars, workshops that would be more flexible and adaptable to different demands of professionals; **(2)** development of training and educational modules that reflect the trans-disciplinary nature of MSP; **(3)** cross-border capacity building for MSP should go beyond actors and authorities to involve administrative sectors and departments, both national and transnational; and **(4)** the statutory and governance elements of MSP should be a core module of MSP courses.

Norma Patricia MUÑOZ-SEVILLA shared experiences with capacity development for MSP in Mexico. She began by characterising the marine and coastal areas of Mexico—one of the most biologically diverse in the world. It has a very diverse set of stakeholders as well—including indigenous people. The Gulf of Mexico is dominated by oil and gas production and fisheries; the Gulf of California by tourism and fisheries. Like many countries, Mexico has many institutions involved with managing coastal and marine areas. Any project in the coastal zone or marine areas has to deal with a minimum of two federal, state, and municipal agencies, or even more. At least 38 national laws apply to marine areas. MSP in Mexico grew from the bottom up. A national policy for seas and coasts was completed in 2010, including principles for an integrated vision, coordination, adaptive, transparency and participation, best scientific information, ecosystem approach, and the precautionary principle. 80% of the country now has MSP plans. The university system works well with government on coastal and marine issues in Mexico, but we need more people working in the marine sciences. Renewable marine energy is a particular challenge for capacity development in Mexico.

Badal REZAH summarised MSP activities in Mauritius. The ratio of land to water is 1:1,000. Since 2000 the ocean economy has been identified as an area for growth. Mauritius is using the IOC ten-step approach to MSP with outputs including a comprehensive marine spatial management plan, a vision for the future, and a zoning map and a permit system. In 2013 Mauritius embarked on the development of an ocean economy roadmap. He used two case studies of port development and aquaculture zones as examples of MSP activity. In December 2016 a Cabinet Decision was taken to develop a Marine Spatial Plan for the EEZ of Mauritius. Its purpose will be to identify the use of marine space for different uses consistent with national policies and legislation while preserving, protecting, and restoring the marine environment, including resilience to climate change impacts—all in line with the implementation of the UN SDGs of Agenda 2030. He closed with a brief overview of a new data management project—a centralised information system for marine spatial planning—to support MSP in Mauritius. The ocean

economy is clearly on the government agenda and MSP is important to grow the ocean economy.

NGUYEN Chu Hoi shared some lessons learned from MSM in Vietnam and recommendations for capacity development. Vietnam is a maritime country. Its coastal and marine economy contributes about 22-30 of national GDP. It has marine activities, e.g., marine transport, oil and gas, mineral extraction, tourism, fishing, aquaculture and renewable energy—and all of these uses need space, resulting in increased use conflicts in the context of multi-use of the sea. Capacity building for MSP has been taking place since about 2009 when the IOC-UNESCO initiative on MSP conducted a pilot study in Halong Bay to test its draft guidelines. The IOC-UNESCO guidelines on MSP have been translated into Vietnamese. COBSEA/UNEP-Sida carried out a capacity building project to apply MSP in the East Asian Seas; and NOAA, the World Bank, and Sida have supported MSP in Vietnam from 2015-2017. Vietnam has passed national legislation for sea use planning (2012), for marine environmental resources (2015), and drafted a national law for MSP, hopefully passed by National Assembly in 2017. Ten pilot MSP project supported by the World Bank are currently working on a national MSP plan focussed on the territorial sea. Some of the lessons learned include: **(1)** human resource development through short training courses and in universities have been effective; **(2)** MSP planners should be skilled in the MSP process; **(3)** capacity building in mapping, zoning, and the development of MSP plans is necessary; **(4)** and strengthened institutional capacity to develop legal authority for MSP is needed. Vietnam supports the EC-DG Mare/IOC-UNESCO initiative to develop international guidelines for MSP.



QUESTIONS FROM THE AUDIENCE

What is a “Marine Spatial Planner” and what are his or her three major competences?

ANSONG: Interesting question. A MSP planner should know all aspects of the job from an ecological, economic, and social perspective. A MSP planner should be a facilitator and a visionary.

REZAH: A “MSP planner” is not a single person, but needs to be collegial—a team.

MUÑOZ-SEVILLA: The planner should have vision, should know the area, the marine science, and the legal framework.

NGUYEN: Focused on long-term, space conflicts, integration.

Is emphasis too much on natural sciences?

ANSONG: It's important to have the social sciences built into capacity development. It is in the Erasmus Mundus MSP training.

MUÑOZ-SEVILLA: Humans are part of the problem and the solutions.

What should MSP institutions look like?

MUÑOZ-SEVILLA: Interdisciplinary.

REZAH: Access to information and data sharing.

In Vietnam, what capacity do you need to put together a national plan?

NGUYEN: In Vietnam we are working in 10 coastal provinces. We have a MSP team that presents courses to provincial planners from three provinces at a time.

What is the role of experts in MSP?

REZAH: In Mauritius and the Seychelles we have used experts extensively, even diplomats for help with a legal and financial framework.

How is training funded? In Europe, for example, we have an effective MSP training program, Erasmus Mundus, but we don't train European students, only international students. We will wind up in the future with trained planners in other countries, but none in Europe? What is experience with funding for education and training in other countries?

MUÑOZ-SEVILLA: In Mexico we have the National Council for Science and Technology that provides grants for students in Masters or PhD programmes, including for study abroad. Normally the private sector does not give educational grants.

A final round of the speakers:

What kind of advice would you give to IOC-UNESCO or the EC-DG Mare in terms of next steps for MSP capacity development?

ANSONG: More training events, summer schools, workshops, seminars for professional around the world to kick-start MSP.

REZAH: The only constant in a dynamic ocean is change. MSP is an adaptive process that can deal with change. We have to keep that in mind.

NGUYEN: MSP is a public responsibility, not a private one.










SESSION 10

Ocean Planning in Areas Beyond National Jurisdiction

The session discussed the potential use of MSP to manage the 60% of the surface area of the world ocean that is beyond national jurisdiction—and about which significantly less is known compared to national waters.

THE PANEL

-  **Kristina Maria GJERDE**, Senior High Seas Advisor, IUCN Global Marine and Polar Programme, Cambridge, Massachusetts, USA
-  **Dixon WARUINGE**, Head of Nairobi Convention Secretariat, UN Environment, Nairobi, Kenya
-  **Darius CAMPBELL**, Executive Secretary, OSPAR Commission, London, United Kingdom
-  **Julian REYNA-MORENO**, Secretary General of the Permanent Commission of the Southeast Pacific (CPPS), Guayaquil, Ecuador
-  Facilitator: **David JOHNSON**, Seascope Consultants, Romsey, UK
-  Rapporteur: **Alessandra LAMOTTE**, DG Mare, Brussels, Belgium

David JOHNSON introduced the panel by reviewing some issues to be discussed including the different boundaries between the “High Seas” (the water column) and the “Area” (the seafloor). The High Seas extend over the extended continental shelves of some countries and could present an interesting challenge to MSP in those places. Significantly less is known about ABNJ in terms of both science and the human activities taking place there. He mentioned restoration of deep sea environments as a concept that we need to be thinking about in terms of MSP. Is MSP relevant at all to ABNJ either now or in the future? What are the main stressors and who are the stakeholders—different from MSP in national waters. How to fund MSP in ABNJ?

Kristina GJERDE reminded the conference that the drafters of the Law of the Sea Convention looked at the ocean area beyond national jurisdiction as a calm, lifeless, flat, empty horizon with no life in it. The challenge is that we lack a legally-binding framework, a lack of clear mandates and shared principles, and an absence of common goals, objectives, criteria, guidelines for ecosystem-based management, for the management of marine biodiversity—let alone for MSP.

How can we come together to better plan our ocean and—at the same time—plan for marine conservation? We do have a set of area-based management tools that have been applied to ABNJ: vulnerable marine ecosystems and fishery closures by

Regional Fishery Management Organisations (RFMOs); Particularly Sensitive Sea Areas and Special Areas of the International Maritime Organisation; and Areas of Particular Environmental Interest and Preservation Reference Zones of the International Seabed Authority. They are often applied too little and too late. We hardly have tools to establish marine protected areas, let alone MSP.

So how do we scale up to MSP? We have a process, a UN ad-hoc open-ended information working group to study issues related to the conservation and sustainable use of marine biological diversity in ABNJ, including area-based management tools, MPAs, strategic environmental assessments—what would they look like at a global level? A role for a new UN implementing Agreement should have a common purpose, common operating principles, conservation tools, compliance requirements, and building a scientific bases for action as an obligation for MSP across borders.



Dixon WARUINGE described the boundary of the Nairobi Convention, a legal framework and platform for regional cooperation that covers the Western Indian Ocean (WIO)—an important marine region for its human and ecological characteristics. But change is coming, the most important is oil and gas—a disruptive economic activity—one that will be disruptive to the region. Most of the governance arrangements we have discussed, ICZM, MPAs, the ecosystem approach, are limited to the first 12-nautical miles—the territorial sea. Very few countries within the Nairobi Convention have MPAs, for example, beyond their territorial seas, so we need to do more thinking about the continuum between the territorial seas and the high seas. Since our countries contain five of the poorest in the world, the Blue Economy is attractive as a way to address the SDG goals related to health, education and poverty. The problem is governance. What is the “ecosystem approach”? The existing regional governance structures do not talk to each other. What framework

do we have to manage the activities that may be coming—deep seabed mining, luxury tourism, oil and gas? All of this is a reason to discuss MSP. But only the Seychelles and South Africa have initiatives to implement MSP. So we need to implement MSP through existing regional projects: Northern Mozambique Channel (Comoros, Madagascar, France, Tanzania, and Mozambique); Western Indian Ocean Strategic Action Programme (9 WIO countries); and a focus on ocean governance in ABNJ (FAO, UNEP, and Nairobi Convention). The Nairobi Convention plans to enhance the capacity of WIO governments through the development and implementation of MSP (five countries with MSP plans within five years), support the development of ocean policies to better explain EBM, ICZM, and MSP. Other actions focus on share resources in transboundary areas and the connectivity among EBSAs for sustainable blue growth.

Darius CAMPBELL spoke about OSPAR's (Convention for the Protection of the Marine Environment of the North-east Atlantic) cooperation with other institutions within the area of ABNJ. OSPAR has EEZs and ABNJ within its boundaries. One of its basic principles is the “ecosystem approach” (EA). To implement the EA we need a multi-sectoral approach—and cooperation and collaboration among those sectors. Many species and habitats to protect—and OSPAR does this by establishing a network of MPAs including in ABNJ. Areas in ABNJ are simpler than areas within the EEZ or coastal zone of countries—but no single authority is responsible for managing economic activities similar to what you might have in EEZ or coastal areas. It's a different situation. OSPAR has established MPAs within ABNJ in close cooperation with the North-east Atlantic Fisheries Commission and its designation of “vulnerable marine ecosystems”, and that cooperation is critical in achieving OSPAR's objectives. One mechanism for cooperation is the “collective arrangement”, a non-legally binding text among international organisations to cooperate and coordinate specific management actions in areas in ABNJ. It's important not to undermine each other's work. Another challenge is for regional organisations such as OSPAR to gain the cooperation of global organisations such as the ISA or IMO. Finally, Campbell discussed the “ladder of coordination” including (1) information and knowledge sharing; (2) common discussions and deliberations, coordinating world views; (3) adjustment of behaviour within own sector; and (4) joint measures (management actions) across sectors and levels of government.

Julian REYNA-MORENO provided his thoughts on MSP in ABNJ from the perspective of the Permanent Commission of the Southeast Pacific (the CPPS region) comprised of Colombia, Ecuador, Peru, Chile, and Panama founded by the Declaration of Maritime Zone (the Santiago Declaration, 1952) to defend the rights of coastal states over the adjacent sea and its resources in an extension of 200 nautical miles. The CPPS operates under the principle of the “ecosystem approach. The CPPS is an inter-governmental organisation, a regional maritime system, and a political and operative alliance to consolidate the presence of the countries of the region of the Eastern Pacific and the effective and coordinated projection to the adjoining zones and to link the region to the Pacific Basin. CPPS has identified Vulnerable Marine Ecosystems and Ecologically and Biologically Significant Marine Areas in the CPPS region. The SPINCAM project is an important conservation project on governance and ecosystem-based management of the coastal zone.

QUESTIONS FROM THE AUDIENCE

How to persuade countries to finance?

CAMPBELL: MSP is happening now, existing organisations are doing a lot of work in this sense and new organisations might be needed at regional scale, in the context of the Regional Seas, in order to support MSP and other area-based processes.

Is immigration an issue for ABNJ and MSP?

WARUINGE responded that this is a difficult question since we're supposed to be talking about ABNJ, not terrestrial space issues. The answer is "yes" and "no".

How to engage more people in the Common Heritage?

GJERDE emphasized that a MSP process seems appropriate to engage a full range of stakeholders and the public through global and regional organisations. She emphasized the importance of engaging the public throughout the process—too often, e.g., the ISA or IMO, it's only those with economic interests that have access to the process. A lot of people are left out of the arena.

More emphasis on MSP in the PrepCom?

GJERDE replied "yes" this is a good idea. A lot of questioning about the strategic role of strategic environmental assessments, environmental impact assessments, and then developing an environment management plan as a logical consequence. Lots of confusion on strategic environmental assessments.

How to get ocean users to comply?

REYNA-MORENO: often not all stakeholders are not around the table. When all stakeholders, e.g., NGOs, are at the table compliance is more likely.

Who should lead the charge?

CAMPBELL: It's happening already. It's about trade-offs. I don't see a leader; we'll have to negotiate it.

WARUINGE: Countries should lead the charge and be aware of dealing with it.

GJERDE: It should be a mix of global and regional involvement. ABNJs are an area of common concern. You need global principles, policies, concern to apply at the regional level and a mechanism to ensure participation by the global public. There is a great discrepancy in the development of regional institutions; they need to be strengthened to take over MSP and to address new scientific findings about the ocean.

REYNA-MORENO agreed with **CAMPBELL** that MSP is happening now. The leader in ABNJ should be guided by regional organisations.





SESSION 11

Priorities for the Next Decade and Concluding Remarks

This final session summarised the previous panel sessions of the conference and reviewed what should be the priorities for MSP.

CONFERENCE RAPPORTEURS

-  **Anja KREINER**, Senior Fisheries Biologist, Ministry of Fisheries and Marine Resources, Swakopmund, Namibia
-  **Ingela ISAKSSON**, Swedish Agency for Marine and Water Management, Göteborg, Sweden
-  **Jacek ZAUCHA**, Professor of Economics, University of Gdansk, Poland
-  **Marie COLOMBIER**, Policy Officer, Directorate General for Maritime Affairs and Fisheries, European Commission, Brussels, Belgium
-  **Alejandro IGLESIAS CAMPOS**, Programme Specialist, Marine Policy and Regional Coordination Section, Intergovernmental Oceanographic Commission of UNESCO, Paris, France
-  **Angela SCHULTZ-ZEHDEN**, Managing Director, S-Pro, Berlin, Germany
-  **Damon STANWELL-SMITH**, Head of Marine Environment, NIRAS, Cambridge, UK
-  **David JOHNSON**, Director, Seascope Consultants, Romsey, United Kingdom

THE PANEL

-  **Vincent BOUVIER**, Secretary General for the Sea (SGMer), Paris, France
-  **Hashali HAMUKUAYA**, Executive Secretary of the Benguela Current Convention (South Africa, Namibia, and Angola), Swakopmund, Namibia
-  **Lisa Emelia SVENSSON**, Director for Ocean and Marine Programmes, UN Environment (DROP PROGRAMME), Nairobi, Kenya
-  **Ida REUTERSWÄRD**, Policy Officer, Ministry of the Environment and Energy, Stockholm, Sweden
-  **Bernhard FRIESS**, Director, Directorate General for Maritime Affairs and Fisheries, European Commission, Brussels, Belgium
-  Facilitator: **Julian BARBIÈRE**, IOC-UNESCO, Paris, France
-  Rapporteur: **Marie COLOMBIER**, DG Mare, Brussels, Belgium

Julian BARBIÈRE opened this final session by stating that we would review the main messages of the conference underlining the key challenges for planner and identifying key challenges for MSP. We are no longer just talking to marine planners, but to many experts from different disciplines such as marine scientists, politicians, biologists, etc. We had over 400 participants in this conference with an important variety of backgrounds. Where do we want to be in 2030? What was the experience of the conference with the “MSP Challenge” game? About 60 people from 26 countries participated in the game. Collectively they had more than 300 years of experience with MSP. But one conclusion of the game that is very relevant to this conference was that there was limited transnational cooperation established during the game. He then introduced the rapporteurs of each session for two-minute summaries of their sessions.

FEEDBACK FROM THE SESSIONS

Anja KREINER reported that it's important to develop a vision for any plan, keep the plan simple, and learn by doing, involve stakeholders, gather political support, and find an institutional home for MSP.

Jacek ZAUCHA thought that it was a great conference; engage stakeholders from beginning, ultimate goal is stakeholder ownership of the plan; must find a balance between complete engagement of stakeholders and no engagement.

Alejandro IGLESIAS CAMPOS reported that MSP will definitely play a major role in the implementation of Agenda 2030; MSP is important in advancing ocean governance, including areas beyond national jurisdiction; and a final point on the importance of collaboration, collaboration, and collaboration; ecosystem approach is very difficult to implement in practice.

Damon STANWELL-SMITH reported on cross-border MSP: good practice not best practice; cross-borders was defined as cross-jurisdictions; the key is to build a constituency to progress MSP; a simple monitoring and evaluation system with simple indicators is preferred since a complicated system risks failure and MSP is a social-political process rather than a scientific-technical one; to engender trust leads to successful cross-border MSP.

Ingela ISAKSSON summarised important messages: better a sub-optimal plan than one that comes too late; socio-economic issues matter; cumulative effects assessments should have a clearly defined purpose; climate change is a major driver and must be a central consideration of marine spatial plans; collaboration makes a difference.

Marie COLOMBIER identified three messages: the maritime economy offers a great opportunity, but emphasising Blue Growth is like playing Monopoly for the seas—and stakeholders are important in preventing this; all maritime sectors are subject to a multiplicity of rules and regulations and MSP is a process that offers a way to organise and rationalise this complexity and while multiple use of ocean space is an attractive idea more needs to be done to make it commercially viable; and the environment is not just another sector, it is the basis for sustainable development.



Angela SCHULTZ-ZEHDEN echoed some of the points made by other rapporteurs: no lack of institutions, in fact there is a plethora of institutions, strong need for a strong coordinating body that takes on MSP; key competencies for MSP include strong facilitation skills, strong coordination; social skills development should be taken on board; a planner or planning team should be visionary; MSP is a long-term process that needs long-term financing.

David JOHNSON emphasized the need for strategic, long-term MSP in areas beyond national jurisdiction, rather than a retrofit; high-lighted the important UN negotiations toward a legal implementing agreement for biodiversity in ABNJ and regional interests that can move this toward implementation; while this is a long-term prospect there is a need for urgency to start to think about this, imperative for cost accounting; MSP in ABNJ should be about benefit sharing.

PRIORITIES FOR MSP

Vincent BOUVIER pointed out that there are more and more uses of the sea that are often causing conflicts. MSP can be used to avoid or solve these conflicts. MSP must be established on the basis of consensus. In France there are the “Conseils Maritimes de Façade” in the context of national strategy and the EU initiatives related to MSP. MSP should be carried out at the appropriate economic scale—MSP will not be the same in planning an area close to a port as planning an area in the high seas. Finally, planning across borders is critical.

Lisa SVENSSON emphasized that MSP needs to be a practical tool to achieve a purpose. MSP is not a goal in itself. We have to take into account the human dimension (scientific, social). She emphasized the inter-connection between land and sea, and the inter-connection within and among regions. We must link MSP with other SDGs—oceans are a critical link to reach other goals. Ocean governance is MSP in a regional context. Finally, one size does not fit all.



Bernhard FRIESS stressed the importance of maintaining momentum. Rich ideas and accomplishments presented at the conference. We should try to implement MSP initiatives in most, if not all, the sea regions of the world. It's the big opportunity; it's a big responsibility.

Hashali HAMUKUAYA pointed out that regional conventions on Large Marine Ecosystems (LMEs), such as the Benguela Current Commission, can be useful platforms or building blocks to achieve MSP in a transboundary context. He emphasized the importance of regional cooperation and stakeholder engagement early in the process.

Ida REUTERSWÄRD emphasized that this conference was a team-building event. We are on a journey—getting together as a group. We have made a lot of progress and we have now a lot of information and new tools. We should also visualise this progress of the “policy journey”. Agenda 2030 is the politically agreed global vision of the future. For MSP this is crucial—what we see on the horizon—MSP is a means to move toward the agenda. What is unique about us as humans is our ability to make plans—where will we be in the next 10 years—our “visual journey”.

QUESTIONS FROM THE AUDIENCE

What about defence policy?

BOUVIER responded that there is a need for defence policy because sovereign states legitimately defend their interests in the territorial sea, the EEZ and the high seas with the presence of their navies. The threats are numerous.

What about fisheries and MSP?

FRIESS responded that the key challenge in the European context is to maintain fish stocks at a sustainable level. All

the economic data show that as we move toward sustainability, the economy improves.

HAMUKUAYA responded that this is an issue in the context of the Benguela Current Convention—in theory the BCC practices ecosystem-based management including fishing—with difficulty, but we are improving.

A statement from the floor stimulated a discussion on **when we should meet next**. The consensus of the conference was **every two years**.

LAST WORDS

Bernhard FRIESS offered concluding remarks emphasising:

- Creating a positive atmosphere and spirit during and following up on the conference;
- Continuing the momentum, tremendous progress over past 10 years;
- Finding political commitment, need to provide political impulse to move forward.

FRIESS announced development of a joint IOC-UNESCO/EC-DG-Mare “road map” around five priority areas:

- Encouraging Transboundary MSP;
- Promoting the Blue Economy in cooperation with Agenda 2030;
- Stimulating Ecosystem-based MSP;
- Capacity building in all dimensions;
- Mutual understanding and communication about the importance of what we are doing.

Julian BARBIÈRE provided last words on the conference and future plans. IOC will commit to continuing its work on MSP by providing a hub for international work through its website (msp.ioc-unesco.org), by trying to build empirical evidence of the environmental, economic, and social benefits of MSP, continue to focus our work on SDGs in its formal role responsible for ocean science, technology, and capacity development, on communications for decision makers to support MSP implementation, and through the IOC-UNESCO/EC DGMare Roadmap on Transboundary MSP, especially international guidelines.

Thank you all and good-bye!





APPENDIX 1

Joint IOC EC Roadmap for MSP

The conference concluded with the adoption of a Joint Roadmap to accelerate Maritime/Marine Spatial Planning processes worldwide.

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 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 Mem-

ber 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: TRAINING 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 plat-

form'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

List of participants

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