The Potential for Marine Spatial Planning and Blue Economy Initiatives to Improve the Management of Exclusive Economic Zones

Online workshop, 13 October 2021, 09.00-12.00 (UK) / 10.00 - 13.00 (CET) / 17.00 - 20.00 (Japan).

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Introduction

The aim of this workshop was to share and exchange knowledge and experiences on how MSP and blue economy initiatives can achieve better management of exclusive economic zones, with a focus on Europe and Japan. The event was organised by the University of Liverpool, with support from the Government on Japan.

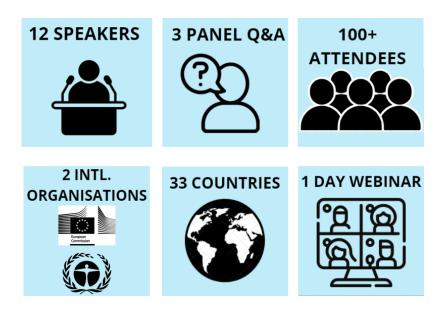
The workshop began with a Governmental welcome from Mr IMADA Katsuhiko, followed by session one, which focused on introducing MSP in East Asia and Japan, and what progress has been made. The second session had speakers addressing international and European MSP and blue economy initiatives. The last main session covered blue economy opportunities in Japan. All of the main sessions had the opportunity for Q&A, which sparked interesting discussions. The closing session summarised the day's events and the knowledge exchanged between Japan and Europe.

The workshop was chaired by Professor Karyn MORRISEY, from the Department of Technology, Management and Economics, at the Technical University of Denmark.

Event Statistics

- 106 attendees
- 12 speakers and panellists

• 33 countries and 2 international organisations represented: Australia, Bangladesh, Belgium, Brazil, Canada, China, Croatia, Denmark, Egypt, Finland, France, Georgia, Germany, Ghana, Guyana, Hong Kong, Indonesia, Ireland, Japan, South Korea, Netherlands, Nigeria, Portugal, Romania, Russia, Serbia, South Africa, Spain, Sweden, Switzerland, Tanzania, United Kingdom, United States, the European Commission, and the United Nations Environment Program (UNEP).



A full recording of the workshop is available here:

https://www.youtube.com/playlist?list=PLRy_MKILPTgGr_qk7-8R4vfuSGsn9_E1h

Session One: Introduction and MSP Progress in East Asia

Welcome & Introduction to the Workshop, Dr Stephen JAY, University of Liverpool.

Governmental welcome, Mr. IMADA Katsuhiko, Director, Law of the Sea Division, International Legal Affairs Bureau, Ministry of Foreign Affairs of Japan.

"The discussions on MSP and blue economy initiatives are most related to the Exclusive Economic Zone (EEZ). EEZ is a relatively new scheme stipulated under the United Nations Convention on the Law of the Sea (UNCLOS), often referred to as a constitution of the oceans. Due to the delicate balance of rights and obligations between coastal states and other states, we have faced sensitive issues related to EEZ as practitioners of the convention. Today, coastal states with sovereign rights and jurisdiction gain benefits through such activities as fisheries and natural resources development from their EEZ. To maximise the benefit gained in accordance with international law, I believe coastal states are required to effectively manage their EEZ. When it comes to the effective management of the EEZ, one of the essential key words may be sustainability. As we are all aware of the sustainable development goals (SDGs), which are a universal call to action by all countries, contain elements related to this. SDG14 is about conservation and sustainable use of the oceans, seas, and marine

resources. Careful management of essential resources, including those in EEZ is necessary in order to realise a sustainable future. We understand that the very concept of this workshop, MSP and the blue economy, will contribute to the achievement of SDGs, especially SDG14. Blue economy is all about a range of economic sectors and related policies, that aim for the sustainable use of ocean resources. For Japan MSP is a relatively new concept, and we are very keen to learn a lot about this concept, with a great potential to improve the sustainable management of our EEZ. We anticipate that through the exchange of valuable information and views on blue economy and MSP in this workshop, will lead to effective management of EEZ. In closing I would like to extend my sincere appreciation to the University of Liverpool, especially to Dr Stephen Jay and Dr Karyn Morrissey, for organising this workshop, even in this difficult time. It is also my pleasure that Japanese speakers, who are working on the frontline for the ocean, will make precious inputs to this session today, together with noted speakers from European countries. I hope this workshop will be beneficial for all the speakers and participants from around the world."

Marine and Coastal Spatial Planning Legal and Policy Frameworks in the East Asian Seas: Assessment, Lessons Learned and Recommendations towards ecosystem-based management and sustainable blue economy, Prof. Larry HILDEBRAND, World Maritime University, Sweden/Canada.

A recent review of legal and policy frameworks relevant to marine and coastal spatial planning (MCSP) and sustainable blue economy (SBE) development in the nine countries revealed both strengths and weaknesses COBSEA and made recommendations for further advancing these important processes. The review identified a strong foundation of relevant legal and policy instruments, the broad adoption of ecosystem-based approaches, and that most steps in MCSP developments in the EAS region have now been completed. Further work is, however, required in further developing sustainable, resilient and inclusive blue economies, strengthening vertical and horizontal integration, incorporating climate change mitigation, adaptation and resiliency strategies, and enhancing the capacity of those involved with the further development of these processes. The recently released IOC-UNESCO/EC MSPGlobal International Guide on Marine/Maritime Spatial Planning provides important guidance.

The progress in integrated ocean management and outlook for MSP in Japan, Mr. TSUNODA Tomohiko, senior research fellow, Ocean Policy Research Institute of the Sasakawa Peace Foundation, Japan.

The presentation introduced the history of MSP debate in Japan, along with the developments in Japan's comprehensive ocean policy, including the enactment of the Basic Act on Ocean Policy (2007). Ten years ago, there were not enough needs for new ocean use for the introduction of MSP. However, with the recent expansion of offshore wind firm projects, MSP has substantially started in Japan. In addition, as marine protected areas are expected to expand in the future, the perspective of a comprehensive ocean policy that strikes a balance between the use and conservation of ocean areas is becoming more important.

MSP in Japan: From coast to offshore, Prof. WAKITA Kazumi, School of Marine Science and Technology, Tokai University, Japan.

There has been a trend towards expansion of targeted sea areas in Japan from coast to offshore, for both conservation of the marine environment and use of sea space, especially for offshore wind power. In light of this, Marine Spatial Planning (MSP) needs to be promoted. In order to encourage local governments to develop MSP, limitations pointed out by Wakita, and Yagi (2013) should be addressed, such as by structuring hierarchical integration through issuing permits with few clearance points and providing financial resources to local governments implementing MSP. Holistic MSP is indispensable to achieve both marine biodiversity conservation and sustainable use of marine resources.

Session One Q&A

- 1. Would it be better for East Asian nations to begin with MSP for their inshore water (territorial waters) first, before extending to EEZs?
- **Mr. TSUNODA Tomohiko**: Where to start the MSP process depends on which waters have the needs. In the case of offshore wind in Japan, the introduction is from the inshore area, therefore we may start MSP within the inshore areas, where it is needed most.
- **Prof. Larry HILDEBRAND**: UNEP describes MSP as Marine and Coastal Spatial Planning (MCSP), so we must make sure we link land-based activities with the marine component, because all these activities and ecosystems interact. We need a geographically expansive approach to MCSP.
- 2. Do you think we will see MSP implementation in the next 5-10 years in Japan, and more widely throughout East Asia?
- **Mr. TSUNODA Tomohiko:** With the new law on the use of the sea area for renewable energy purposes, it is likely substantial MSP processes will be advanced in Japan in the next 5 years.
- **Prof. Larry HILDEBRAND:** Absolutely, our research showed countries in the region are well on their way, there are of course challenges to be faced, so they need to sustain effort towards implementation. Overall, it could well take less than 5 years in many countries.
- 3. In some countries, MSP has been pursued to help particular sectors, such as wind energy or conservation. Are there sectors that would particularly benefit in Japan?
- **Prof. WAKITA Kazumi**: One of the largest marine sectors in Japan is fisheries. There is an example of fisheries being supportive of the early offshore wind farms in Japan. My personal view is that it is dependent on the people who are in the centre of the local area. If the "key" person is reliable within their local area, they can have great influence on those around them. This shows the importance of Stakeholder engagement from the first planning phase.
- 4. What is the state and status of the availability of trans-boundary geospatial data for effective planning in E Asia?

- **Prof. WAKITA Kazumi**: Relevant international organisations, such as UNEP and Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), provide common data. There is also a lot of monitoring and worldwide data which can be applied to MSP in Japan.
- **Mr. TSUNODA Tomohiko**: We still need more monitoring. Coastal system GIS has been developed in Japan, and Google is creating a sophisticated Global Fishing Watch system. These are private sector systems which have great potential to be utilised within MSP.

Session Two: MSP and Blue Economy Initiatives in Europe

Background to MSP and blue economies in Europe, Mr. Juan RONCO, European Commission, Belgium.

The presentation provided a general overview of the recent initiatives launched by European Union to promote a sustainable use of resources in the marine environment. On 17 May, the European Commission adopted the Communication on a new approach for a sustainable blue economy in the EU "A Green Recovery for the Blue Economy – Transforming the EU's Blue Economy for a Sustainable Future". This strategy sets out a detailed agenda for the sector to transition from "Blue Growth" to a sustainable blue economy, which drives the green transition, replacing unchecked expansion with clean, climate-proof and sustainable activities. In the presentation the European Union's framework law (Directive) on Maritime Spatial Planning was discussed, with a focus on national implementations exemplifying the resolution of use conflicts in the marine space.

Sustainable blue economies, Mr. Riku VARJOPURO, SYKE/Plan4Blue, Finland.

Plan4Blue supports growth of the marine and maritime sectors in a way that emphasizes the need to find a balance between economic, social, and environmental goals. The project activities focus on the Gulf of Finland and Archipelago Sea areas covering the sea areas of Estonia and Finland. Planning and management of these sea areas requires cross-border collaboration between stakeholders and authorities, as many of the economic activities in the area and also their impacts cross borders. For this purpose, the project develops cross-border capacity in maritime spatial planning. The research conditions for a sustainable blue economy are made up of economic analysis, future scenarios, vulnerable sea areas, and cross-border cases.

https://www.syke.fi/projects/plan4blue

MSP for blue growth, EU, Ms. Ivana LUKIC, s.Pro Sustainable Projects/SUBMARINER Network for Blue Growth EEIG.

The presentation has given a brief overview of the topic MSP and Blue Growth including the insights from the study under the same name conducted in 2018. It emphasized the need for forward-looking and adaptive planning, that integrates multiple policy objectives in a holistic manner. The concept of ocean multi-use has

been highlighted as a tool for the more efficient and integrated use of ocean resources. Innovative multi-use allowing for a more 'systems approach' in planning will have a key role in reconciling different priorities (decarbonization – food security – nature protection). Moreover, nature-based-inclusive multi-use is already becoming a norm in several countries e.g., nature inclusive offshore wind development in the Netherlands, ocean multi-use demonstrator sites in Portugal, oyster restoration and farming in offshore wind farms in Belgium. Nevertheless, governments have the key role to drive these pragmatic solutions - questions of fishing quota, insurance, safety zones, go beyond MSP and cannot be solved by industry actors alone.

Session Two Q&A

- 1. Balancing the interests of the different stakeholders or users of the marine space (either economic or non-economic activities) has proven to be a difficult process, even under the MSP umbrella. How can the trade-offs between the economic (shipping, large fleet fisheries) and non-economic activities (marine ecosystem, impacts on coastal communities) be accounted for in the strategies and policies for the offshore management of space? How are the risks and losses from alternative plans being accounted for?
- Mr. Juan RONCO: The trade-offs you mention are best addressed during the preparation and the establishment of the plan, so that potential conflicts can be solved in advance. On accounting for these trade-offs, monitoring of the implementation of the plans is key. This monitoring is important to assess the risks and benefits (e.g., biodiversity in offshore wind parks). Adaptation of plans is also a way to address these trade-offs and minimise adverse effects.
- Ms. Ivana LUKIC: The Multi-Frame project looked at sustainability of ocean multi-use and how it has been taken up in MSP around the world. This includes case studies in e.g., Brazil, USA, Mozambique. The project shows how MSP, and the concept of multi-use, mean different things in different countries and are understood differently. When it comes to trade-offs, this project is trying to produce an assessment framework on how to assess the sustainability of multi-use. This involves considering in combination effects, so what effect one use has on another, and then in combination what effects this can have on the environment, the local communities, the economy etc. There is a huge disparity on how this is dealt with between countries.
- Mr. Riku VARJOPURO: Dealing with trade-offs comes with dialogue, and good assessment in the pre-planning phase. With assessment of the current situation and future trends, you know who the actors are, and what the sectors are. The key is dialogue between sectors in the pre-planning phase, supported by good stakeholder analysis and engagement.
- 2. How is the European Commission supporting the statutory requirement for the implementation of an ecosystem-based approach? I know there are a couple guidance documents which have been commissioned. But are there any practical applications being supported or case studies being developed?
- **Mr. Juan RONCO**: The European Commission is working on a study titled "Guidelines for implementing an Ecosystem-based Approach in Maritime Spatial Planning". This study will be published. It was presented at a webinar jointly organised

with **IOC-UNESCO** in the context of the MSPGlobal initiative: https://www.mspglobal2030.org/events/online-seminar-on-applying-eba-in-msp-en. The European MSP Platform (an EU Commission sponsored initiative) has also published material on applying Ecosystems Based Approach https://www.msp-platform.eu/faq/ecosystem-based-approach. We are also funding cross border cooperation projects (inside and outside the EU) where countries cooperate to apply the Ecosystems Based Approach.

- 3. Do you think the Plan4Blue project could be used as an example for others in terms of trans-boundary working within MSP?
- Mr. Riku VARJOPURO: Plan4Blue can give some ideas on cross-border collaboration. The EU has also funded several other cross-border MSP such as Baltic SCOPE and Pan Baltic Scope in the Baltic Sea region. Many projects also in other sea areas. Here are Plan4Blue findings on cross-border collaboration: https://www.syke.fi/download/noname/%7B4A8EBFA4-DF70-4339-BBEA-36525749C13F%7D/151007
- 4. I understand the EU is on the way to transform from the MSP Directive towards law, are there difficulties arising from this?
- **Mr. Juan RONCO**: The EU Directive sets a framework within which individual EU countries establish their plans. Among the most common challenges that EU countries face we find: 1) coordinating local and national planning as in some countries municipalities and/or regions have planning powers 2) resolving conflicts among or between some sectors (e.g. offshore wind versus fisheries) 3) gathering enough data to assess the state of the marine environment 4) consulting relevant stakeholders and obtaining political endorsement for the design and implementation of the plans.
- 5. Riku, could you please give more details on scenario analysis? What are the criteria to set these four scenarios?
- **Mr. Riku VARJOPURO**: The Plan4Blue ran a three-year, participatory scenario process that utilised multiple methods from economic analysis of trends to collection of expert views in Delphi surveys and collaborative workshops for assessing possible future developments and formulation of future storylines. The video that was shown as part of the presentation presented the alternative future storylines that were based on the results of working with experts. The work was further focussed on key maritime sectors to study how the sectors could develop under the alternative storylines. More information on the Plan4Blue scenario process and results can be found on the website: https://www.syke.fi/en
 - <u>US/Research Development/Research and development projects/Projects/Maritime</u>
 <u>Spatial Planning for Sustainable Blue Economies PLAN4BLUE/Scenarios</u>
- 6. What is the role of trade-off analysis in considering multiple use of marine spaces?
- **Mr. Juan RONCO**: There is some literature on this issue of "trade-off analysis". The European Commission asked the European MSP Platform (funded by the EU) to look at coexistence among different sectors. Information on this Study is available here https://www.msp-platform.eu/events/msp-blue-growth-study-published. This Study also show that in addition of trade-offs there are also synergies in multiple use of the marine space.

- 7. The use of specifically designed offshore wind farm structures, such as Eco Scour and artificial reef blocks is very interesting. Do you think we may see this (or other multiuse examples) incorporated throughout a full offshore wind farm?
- **Ms. Ivana LUKIC**: Definitely, but what technology and size may be used very much depends on the local conditions and cost-benefit assessment on the project level.
- 8. Small-scale fisheries are often said to be marginalized in the process of MSP and Blue Economy initiatives. What is the situation in Europe and how're such issues being discussed?
- **Mr. Juan RONCO**: In the European Union each of the Member countries has public participation by informing all interested parties and by consulting the relevant stakeholders and authorities, and the public concerned, at an early stage in the development of maritime spatial plans.
- 9. Talking from a global perspective and because the sea knows no boundaries. What is the international collaborative effort to initiate and or develop MSP in other continents and countries, especially in Africa, where there is a need to address sea pollution (including oil spill) and overfishing to sustain a global ecosystem and the blue economic gains?
- **Mr. Juan RONCO**: The EU Commission is working with IOC-UNESCO to develop a roadmap for the international implementation of MSP. We are providing funds to promote MSP internationally. Examples include a set of guidelines for cross-border cooperation, as well as two projects supporting cross-border collaboration in the Mediterranean and the Eastern Pacific. In terms of Africa, this has been done in the context of the MSP Global initiative. I recognise we have to do more in terms of MSP in Africa, outside of the Mediterranean.
- **Mr. Riku VARJOPURO**: Some of the UN regional seas conventions have been active in promoting cross-border MSP collaboration in East and West Africa. This is an area where there will hopefully be more work going into the future.

Session Three: Blue Economy Opportunities in East Asia

MSP through fishers' local traditional knowledge: The case of Lobster Fisheries in Wagu, Japan, Hiroe Ishihara, Graduate School of Frontier Science, University of Tokyo, Japan

More than 30% of protected areas in Japan are managed by the fishermen themselves. As in most of the cases, in Wagu district, the fishermen's association designs the management rules which can be termed as 'group operation' and 'individual operation' using different fishing grounds for each season. The presentation revealed that during the group operation, in which fishermen coordinate to suppress competition, they utilise rather productive fishing ground, whereas: during the individual operation, in which they are free to compete, they use less productive fishing grounds. By utilising the fishermen's traditional ecological knowledge in designing the management rules, this fishery aims to avoid overfishing.

The first step of Japan? Japanese offshore wind energy law and policies, Dr. HIGUCHI Eka, Koeki University, Japan

This presentation shows that the Japanese offshore wind power energy law and policy should be based on marine spatial planning from the perspectives of the UNESCO-IOC's guideline (2009) and academic criteria on Collie et al. (2013). According to the evaluation, Japan's new act for the utilization of offshore wind, consisted of five kinds of document, based around the ten steps of UNESCO-IOC's guideline and four requirements of Collie et al.'s criterion. This presentation also pointed out some challenges such as insufficiency in stakeholder participation etc.

MSP approaches underpinned by the ecosystem approach and sustainable blue economy, Mr. NAKAMURA Takehiro, Coordinator, Marine and Coastal Ecosystems Unit, UNEP, Kenya.

The presentation presented the conceptual guidelines to apply the Integrated Coastal Zone Management and Marine Spatial Planning to achieve the Sustainable Development Goal targets 14.1 and 14.2

(https://wedocs.unep.org/handle/20.500.11822/26440). To achieve the target 14.2, incorporation of the ecosystem approach in marine spatial planning is important including assessment and valuation of ecosystem services and deployment of appropriate area-based conservation measures such as marine protected areas and the other effective area-based conservation measures. The conceptual guidelines are supported by two case studies from the Baltic Sea and The Philippines.

Session Three Q&A

- 1. Given the example of lobster fisheries in Wagu, and perhaps the nature of fisheries in Japan, do you think Japan represents a particularly important example of why local traditional knowledge should be included within any MSP process?
- Dr. ISHIHARA Hiroe: I think in a way yes. But at the same time, traditional ecological knowledge exists everywhere, but is not fully recognized in ecosystem evaluation. I am hoping that the new framework of Nature contribution to people that is supposed to replace ecosystem service will be able to visualize the significance of TEK around the world.
- 2. Could the good experience of cooperative fishing (in A) be used as evidence to develop fishing policy / rules that could be implemented more widely in Japan?
- **Dr. ISHIHARA Hiroe**: There is also a negative side to group operation/coordinated fisheries. In the district there are only 26 fishermen, and there is dissatisfaction within the younger generation, who want to earn more money. The younger generation feel the older can be a burden, especially as the older generation cannot work at the same productivity levels. In order for this co-op mode to function, you need a small number of fishermen, a homogenous population, and interests in terms of income level and social conditions. I don't think it is applicable to all around the world, but if there is a condition where you have a small number of fishermen and homogenous interests, then this might be applicable. There are a few cases in Japan where they do both co-op modes and individual competition.

- 3. How much progress is the offshore wind energy industry making in Japan, despite the institutional difficulties?
- **Dr. HIGUCHI Eka**: For now, industries are really active in engaging offshore wind power in Japan. For example, around 30 industries are interested in developing the YUZA offshore area (Yamagata Pref), although the area has not yet been designated as a promoting sea by the government at this time (2021 Oct). Also, several new offshore wind construction vessels are planned to be built nationwide. In my presentation, I show that the Japanese legal system has challenges in various stakeholder participation, but it may be easier for businesses.
- 4. Are there particular ecosystem services that might be important for Japan to consider in MSP initiatives?
- **Mr. NAKAMURA Takehiro**: The previous speakers' presentations highlighted well the ecosystem services important for Japan to consider in the MSP initiatives. We have had fisheries related ecosystem service where ecosystems function as a fish habitat. There is an ecosystem service related to marine renewable energy. It is however advisable that other ecosystem services are taken into consideration in the Japanese MSP processes as there is trade-off with other ecosystem services.
- 5. Will MSP be a policy tool to achieve the goal of "protecting 30% of the seas areas before 2030" in Japan and other East Asia Countries? How to make a balance between the blue economy and this goal?
- Mr. NAKAMURA Takehiro: The Aichi biodiversity target 11 (10% by 2020) includes not only MPA but also other effective area-based conservation measures (OECMs). The same is under discussion for 30x30 proposal for inclusion in the post 2020 Global Biodiversity Framework. In the international community, there has been discussion on the use of fisheries closures or Vulnerable Marine Ecosystems where seasonal closure and fishing gear selection is required as one of the OECMs when they can serve to achieve the conservation objectives.

Concluding Remarks

The chair, Karyn MORRISSEY, thanked all the presenters for their informative presentations, and for engaging so well with the discussions. It was also noted how great it was to see MSP being framed as an opportunity for Japan to move towards sustainable use and development of their marine resource in the near future. We should also not forget about evidence-based policy, and all Japanese speakers were urged to continue the work they were doing in collecting baseline data and considering the socio-cultural dynamics in MSP.

Stephen JAY ended the workshop by saying how interesting it was to see how MSP is evolving, particularly looking at the European context and how MSP can support the shift to a sustainable blue economy. This represents a much more integrative approach. Rather than thinking in terms of simplistic zoning, we are thinking about how different uses can work together, and at the same time bringing in social and economic considerations. Another message we might want to send out from a European context to our colleagues in Japan, and more widely in East and

Southeast Asia, is to build upon the capital that is already there, for example the very interesting social perspective that Hiroe presented to us on a fishing point of view.

What remains is to thank everybody, especially the panellists for contributing so fully, and the Government of Japan, in particular the Embassy of Japan in the UK, for supporting the organisation of this event.

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