Maritime Spatial Planning Challenge Board game



Handbook





Government of the Netherlands

Signature Games



Copyright © 2017 by Lodewijk Abspoel and Igor Mayer

All rights reserved. This document or any portion thereof may not be reproduced or distributed in any manner whatsoever without the permission of the copyright holders except for the purpose of organizing and/or the playing of a licensed version of the MSP Challenge board game.

http://www.handymariner.com/clove-hitch/

ABOUT THE GAME

The Maritime Spatial Planning Challenge board game is a table top strategy game designed for those with an interest in ecosystem-based Marine Spatial Planning (MSP) and sustainable Blue Growth (BG).



The board game is part of the 'Maritime Spatial Planning

Challenge' concept (<u>www.mspchallenge.info</u>) which uses games and playful learning for ocean management. Several MSP Challenge games – digital, role-playing and board games - have been developed at the request of the Ministry of Infrastructure and Water Management of the Kingdom of the Netherlands.

The MSP Challenge games have been developed in light of the implementation of the European Framework Directive¹ (2014/89) on Maritime Spatial Planning (MSP) and the opportunities it gives for Ecosystem Based Maritime Spatial Development (EBMSD).

PURPOSE

The goal of the game is to show some of the dynamic and complex interactions between marine related activities and maritime planning.

The game allows the players to experience and discuss the meaning and implications of different maritime strategic objectives such as Sustainable Blue Growth (SBG), the blue economy, land-sea interactions, short sea shipping, clean & healthy seas and good environmental status of the ocean.

The game should get players 'thinking and talking' about the interrelations among these objectives, for instance how to align and apply them in practice.

DISCLAIMER

The game has not been designed as a near-real planning exercise or decision support tool. It is a metaphor for Marine Spatial Planning with a fictional narrative, stylized maps, colourful tokens and a minimum number of game rules. It should be used to introduce maritime

¹ A directive is a legal act of the European Union, which requires member states to achieve a particular result without dictating the means of achieving that result. Directives are binding only on the member states to whom they are addressed, which can be just one <u>member state</u>, a group of them or all of them.

planning to students, stakeholders or the wider public, and to shape a strategic dialogue among professionals.

This publication does not imply the expression of any opinion whatsoever on the part of the Secretariat of UNESCO/IOC concerning the legal status of any country, territory, city or area or of its authorities, or the delimitation of its frontiers.

The designations employed and the presentation of material do not imply the expression of any opinion whatsoever of UNESCO/IOC on the nature or extent of the jurisdiction of coastal States in general or of any coastal State in particular. Any resemblance to reality is pure coincidence, this is a game board!

QUESTIONS

The discussion in and after the game should be geared towards questions such as:

- Where and how do MSP and Blue Growth reinforce each other?
- Where and how do marine activities get into each other's way?
- To what extend and how can Sustainable Blue Growth be planned (either stimulated or limited)?
- > To what extend and how can the marine environment be protected through MSP?
- To what extend and how do MSP authorities take sectorial interests (shipping, energy etc.) into account?
- To what extend and how are MSP authorities responsive to the needs and requests of stakeholders?
- > To what extend and how can stakeholders influence MSP authorities and their decisions?
- What are criteria to monitor and assess the impacts of maritime activities (e.g., multifunctional or conflicting use of space, cumulative effects, land-sea interactions, ecological status etc.)?
- What are the mechanisms for inter-sectorial or transnational co-ordination among actors and / or countries? What can be done to improve the alignment between MSP, Blue Growth and the ecosystem?

THE CHALLENGE

Players should achieve a productive but also clean, safe and healthy sea in their national and shared marine areas through the spatial allocation of economic and ecological functions and the development of shipping and line infrastructure (energy grid, cables). The tokens and threads in the game symbolize all kinds of human activities, ecological functions, shipping lanes, cables and pipelines.

Players should try to get tokens and threads of different types on the game board, thereby promoting blue development with prospering marine industries, alongside a clean, safe and

healthy Rica Sea. The number of different tokens and threads, and combination in which they are placed on the board, is up to the players.

Players represent different interests and they may gradually find out that they get into each other's way. For example, proposals for new Marine Protected Areas (MPA) or wind farms might require the redirection of existing shipping lanes. Can shippers and planners, or wind farm developers, nature conservationists and planners, coordinate and cooperate with each other to ensure a win-win situation for all their interests?

THE MAP

The game is played in the fictional marine area called the 'Rica Sea'², represented graphically on a large table top game board (1.60 x 2.80 m), with a stylized map of the fictional area.



The map shows a few parameters that should be taken into consideration while planning their socio-economic and ecological functions. Sea depth for instance is represented as light, medium and dark blue on the map. Wind farms can only be placed in light and medium blue areas, not white ones (deeper than 50 meters). Sea depth should also be taken into consideration when planning blue energy (energy from waves, tides and currents).

² **Rica Sea** = Anagram for Rivers, Islands and Coastal Areas. Used with permission of EP Intergroup on IMP SEARICA Seas, Rivers, Islands and Coastal Areas. <u>http://searica.eu/en/</u>

The set-up of the board at the start of the game, also shows a few 'opportunity areas' such as coastal and inland ports, cultural sites, historic wrecks, bird areas, populations of cetaceans, etc. Most of the sea area is underdeveloped but its sheltered location on the globe, proximity to nearby countries and ocean trading routes offers opportunities for maritime trade and marine activities. Distances to shore and ports are important for almost all activities, notably wind energy, shipping and dredging. A few major international shipping lanes have already been established.

Bayland, Peninsuland and Island are three adjacent countries that share the Rica sea basin. The countries have their own maritime heritage and culture, and different ideas for the future development of the resources within the Rica Sea. The countries around the sea have only recently agreed to start planning their uses of the sea, by allocating functions to marine space over time.

PLAYERS

In each country, players assume the roles of maritime planners (1 or 2 per country), nature conservationists or a representative of a marine-related industry: Ports, Shipping, Fisheries, Aquaculture, Tourism & recreation, Renewable energy, Oil & gas, Energy infrastructure, Blue biotech, Deep sea mining, Local business, Maritime industry.

One or two participants can be asked to play a free role as scientists, as representative of an (inter)governmental organization or as court. Others can be asked to observe the process and give feedback during the (intermediate) debriefings.

Industry representatives reside in one of the three countries, but not necessarily represent the national interest of this country. Representatives of maritime industries within the different countries should consider how their interests might be best served.

Shippers and port developers for instance are eager to develop (short sea) shipping, direct connections as well as maritime upstream and downstream activities. This is done by developing shipping lanes between ports (e.g. ferries, or plain cargo), and also between ports and marine activities (e.g. fishing, wind farm construction and maintenance, etc.). They thus become involved in maritime planning decisions.

Fishermen, energy companies, tourist operators and nature conservationists will come up for their interests. Energy transition at sea is a major opportunity for blue development. The development of coastal areas and land-sea interaction should also be taken into consideration.

For ecological or other reasons, such as safety, certain economic activities and shipping may conflict. Hence, shipping (lanes) may not go through Marine Protected Areas (MPA), wind farm, military zones.

Planners should discuss the best positioning of activities in the Rica Sea as well as in their own jurisdictional waters. **Discussions about cross-border and transboundary issues will be key**. Economic functions (such as wind farms) placed on the game board induce shipping (e.g., construction and maintenance). All economic activities in the Rica Sea need to be sustainable and also connected to a port. This is why planners need to coordinate with economic sectors and those with an interest for the state of the marine and coastal ecology.

Decision-making on a come and serve basis may not be very effective. Planners therefore have to develop MSP and make a plan for their country. It is up to the country planners to define and achieve their planning authority and competences. What can planners generally do?

- Monitor and evaluate (review) What is going well and what is not? Observe conflicts among different uses of space.
- Persuade Come up with a vision where the country wants to go. Talk to the industry representatives to get them into a certain direction. Use scientific data.
- Legislate Ban or restrict certain activities in certain areas for instance to protect the marine environment or guarantee safety.
- Stimulate introduce economic incentives (subsidies) or technological innovations, promote multi-functional use of space.
- Mediate Solve conflicts among industry representatives and country interests.
- Coordinate Work together with other countries to introduce new transnational planning institutions (organizations, rules, and harmonization).

HOW TO PLAY?

- The game is designed to take between one to three hours with twelve to thirty players. Seven or eight players per country works best.
- Players are divided over the three countries and assigned one of various roles: maritime spatial planner (at least 2 per country), marine ecology planner (one or two per country), and representatives of the fishing industry, off shore fossil energy industry, wind energy industry, blue energy, aquaculture, tourism and recreation industry, shipping industry, port developer and operator, nature conservationists.
- > Depending on context and objectives, moderators are free to change or add roles.
- Each team has an asset box with the tools to play the game. Coloured tokens with symbols show different marine-related functions.
- Rolls of thread in different colours indicate the different sorts of sailing/shipping activities that take place in the area. The pins go into the holes on the map to connect threads and keep tokens in place.
- Players stand around the table / game board with assigned roles.
- The game board will have been set with a number of existing parameters already in place, e.g. shipping lanes, wildlife habitats, land-based infrastructure, etc.

- Planners and other players develop economic and ecological functions of the Rica Sea by placing the corresponding tiles onto the grid. This accordingly to their role and freedom to develop and/or plan.
- This size of the grid is flexible. Choose the size that you want to use for your session, than take the corresponding token (3nm, 10nm, 12nm or 24nm) and place it in the empty square on the outer edge of the game board.
- Tokens and threads already on the game board give some direction on how to develop the marine area. Certain economic and ecological functions can be combined but other functions will conflict with each other.
- Opportunity Maps in the game hint where the suitable locations (e.g., oil and gas fields) for certain activities (oil platforms) can be found.



RULES OF THE GAME

- 1. Players are encouraged to bring arguments from real life into the discussion to convince others.
- 2. Anything in the game is allowed as long as it has not been forbidden and it is plausible, functional and acceptable within the rules and the spirit of the game.
- 3. A designated member of the facilitator team has the authority to give information, decide on or intervene in all matters that are unclear or not provided for in the game, such playing the role of an intergovernmental organization, other type of institution or authority.

- 4. Some pointers for a successful game:
 - Real life logic is applicable to the Rica Sea. Shipping lanes cannot be planned on land.
 - Players can introduce innovations. Wind turbines for instance cannot be placed in deep water (white zone) at the beginning of the session. However, players can come up with a plausible innovation such as floating turbines.
 - Every economic function should have at least one pin that is connected by at least one thread to at least one port. This helps identify 'land/sea interactions'.
 - Different ecological areas can be planned: special habitat areas, important bird areas and marine protected areas amongst others. The level of protection of important ecological areas and marine sanctuaries can also be set: precautionary use or a no-take zone.
 - Fisheries take place throughout the entire Rica Sea unless it is actively prohibited. At the start of the session only a limited set of tokens will be placed on the board. Those indicate the publicly known important fishing grounds. It is up to the players (fishermen and planners) to further identify where fishing takes place and to map these.
 - Economic activities such as oil and gas extraction, seabed mining and blue biotech should be located in areas where these resources are available, as indicated on the game board or on opportunity maps. It is wise not to hand out these maps at the beginning of the session, in order to avoid players copying them 1 on 1. The maps are merely what scientists say they know (and that maybe not accurate).
 - Aquaculture and wave energy can be combined by promoting the multiuse of the marine space with other functions, such as wind energy, but is dependent on things like technology, will to cooperate and finance. In real life such multifunctional use of space at sea proves pretty difficult to establish.
 - Coastal tourism can take place throughout the entire Rica Sea. Some areas, however, might be considered to be more suitable than others.
 - The Treaty of Cari is *in situ*, obliging protection of underwater cultural heritage. Such cultural heritage sites (wrecks, drown cities et cetera) might be placed on the board at the start of a session, and can either be covered with a Question mark token, or be visible to the players.
 - For safety reasons, only sailing and fishing boats under 24m are allowed within wind farms. Larger vessels must avoid them. Planners can alter this policy.
 - Shipping lanes can be redirected with permission of the International Maritime Organization played by the moderator or a member of the facilitator team.

- Co-use of military areas with functions such as fishing, is possible. However permanent structures such as ports or terminals cannot be combined with military functions for safety reasons.
- A national or regional convention is a gathering of all participants residing in respectively, one or all three countries.

MODERATION

The game starts with a briefing by the moderator, explaining the Rica Sea, the challenge and rules. It is recommended to emphasize to the players that for the duration of the game, the Rica Sea is their world and that they are responsible for what happens. It is important for game play and learning by all that players clearly communicate their moves on the board to other players (be it planers or stakeholders). MSP is a process which needs to be transparent, and less directive planning is needed if stakeholders find solutions for coexistence by themselves.

Depending on the situation, the board game can be played and moderated in a structured or in a very loose and open manner. The game can be played in time-set rounds or steps. Or the moderator can simply let the players go.

After the game, the moderator can explain key concepts and practices, point out inconsistencies or assess player behaviour. Or simply facilitate a professional discussion among the players through open questions, such as 'what happened during the game?' 'why?' and 'how does this resemble real life?'.

When time is limited to an hour or so, it is best to introduce the game world in 5-10 minutes, and then counting - 3-2-1 GO! - Let the players develop the Rica Sea for approximately half an hour. Then pause and reflect for 5-10 minutes. How's it going? What can and should be improved? Resume game-play for another 20 or 30 minutes. Then have a quick round of observations and reflection. Depending on the moderation/facilitation capacity and MSP experience further guidance, help and interaction with the groups and individual players is advised. This can be on a very practical level (how to tie the knots), an informative level (did you see this or that feature on the board? did you consider this or that protection/development?), or on the level of solving more complicated matters in planning (like: does this activity require consent of the planner? Or; how much space does an activity at sea require? What might be the ecological consequence of a certain development?).

Used in this way, the moderator find the game highly effective for engaging and activating participants during a seminar or conference.

The game can also be played with more directive moderation, for instance by letting the participants play in rounds and steps, and or letting them put tiles on the board in a certain sequence. Here is a suggestion how you can moderate the game in a more structured fashion:

Give the participants about 10 minutes to look at their roles, the game material and the objectives for their country. Allow them to talk and get to know each other's interests.

Then, let the industry representatives (esp. the shippers) start developing their part of the world for about 5-10 min. You can also gradually activate more industry representatives, while the planners observe, think etc.

Then when the board is being filled, let the industry players can step back and observe. The planners step in to assess how the Rica Sea is developing.

There is a lot that planners can do to gain control and steer developments. Part of the learning is that they need to discover themselves how MSP can steer marine developments and protect the marine environment. They need to establish their own authority.

Have a look at the website for experiences or contact the MSP challenge team.

DEBRIEFING - THANK YOU FOR PLAYING!

The game always ends with a debriefing. The moderator can start and guide the discussion by asking questions to the group of players:

- 1. How do you feel? What did you experience during the game?
- 2. Are you satisfied with the Rica Sea as it is now?
- 3. Do you feel satisfied with how it came about?
- 4. Did you experience or notice any changes / improvements while the game progressed? For instance more or less chaos / control?
- 5. Was there a vision or strategy? Or, was it first come, first served?
- 6. Which issues were early on the agenda? Which issues were ignored?
- 7. Are there any strange decisions in the Rica Sea? Inconsistent, irrational or unlikely uses of space? Why did this happen?
- 8. Are there any conflicts between different uses of marine space?
- 9. Do you see any multi-functional uses of space?
- 10. How much of the Rica Sea is now marine protected area? Do you think that is enough?
- 11. Who put environmental protection on the agenda? Was that late or early in the game? How easy or difficult was it to get attention for environmental protection?
- 12. Do you feel that some interests are more or better represented in the Rica Sea than others?
- 13. Do you feel there are winners and losers in the Rica Sea?
- 14. Were there any conflicts between stakeholders?
- 15. Did the marine planners have control over the process? What did they do to get it?
- 16. How did it feel to be a marine planner?
- 17. What policy instruments did the planners use? Which instruments did they not use?
- 18. Did the planners or other players introduce new institutions in the game (organizations, rules like directive)? Why (not)?
- 19. How much transnational coordination was there in the game? Where could it have been more or better?
- 20. Did you have fun playing the game?
- 21. What did you learn about MSP from playing the game?

THE RICA SEA – Background context

Rivers, islands and coastal areas characterize this sea basin. The three countries Bayland, Peninsuland and Island have a shared maritime and coastal heritage. One brief look on the map and you can easily understand why past generations of inhabitants and visitors named the sea the Rica Sea. Sea borne trade and raid have had their impact on the societies. The relatively shallow Rica Sea features challenges for seafarers and off shore construction during parts of the year (in wintertime winds pick up from the ocean). On the upside, its proximity to two oceans and a relatively sheltered location on the globe also offer a wide range of natural resources to work with, and tourists might be very much interested to spend their holidays in the Rica Sea.

The state of the marine environment in the Rica Sea is not what it could be. It is under threat of unsustainable fisheries, pollution, invasive species and destruction of coastal and marine habitats. Most government officials and non-government organizations have picked up the concept of the Blue Economy. It is not said that businesses intentionally have unsustainable activities, perhaps it is a matter of perception and lack of a shared vision about how business and planning can be beneficial for the marine environment. The reciprocity of ecosystem goods and services and human activities is debated amongst scientists and users of the sea and coasts. The specifics of the three countries and the potential of their marine and coastal areas translate into different ideas for blue development, which could turn out into conflicts across sea borders. Sea borders that have not entirely been designated, present a further challenge to planning and developing processes.

Scientists, nature conservationists and developers of offshore wind farms have recently promoted such processes, known as marine or maritime spatial planning processes. The governments of Bayland, Peninsuland, have picked up the concept of MSP and Blue Business Development and Island, which is reflected by the fact that all have designated staff assigned with the task to carry out ecosystem based maritime spatial planning processes in the coming period.

REGIONAL COOPERATION

The countries around the Rica Sea are part of the Conventions of the Law of the Seas. Both the sea basin itself and its adjacent marine areas fall under the Global Convention for protection and restoration of marine and coastal biodiversity.

SEARICA is the name of the regional sea convention. Its motto is: 'Management of ecosystem services to provide for prosperity of mankind'.

To tap into the opportunities of future possibilities to maximize on the potential of the sea and coastal areas, the three countries have started various studies, both on economic and ecologic matters. Results should be forthcoming soon.

BAYLAND

For some, the world ends at the coast: for others, that is where it starts.

<u>Key policy priorities:</u> land-sea interactions, multi-modal transport connections to transfer freight from road, road and sea, energy transition (including to more sustainable fuel and short sea shipping) and stakeholder engagement.

<u>Objective</u>: to develop short-sea shipping routes to create multi model transport connections and transfer freight from rail and road to sea. Freight is expected to grow rapidly target is to make that growth happen at sea as much as possible. Liquefied natural gas (LNG) is the preferred fuel for short sea.

Blue Growth opportunities are beach and marine tourism, cruising and wind energy.

PENINSULAND

Humans do not live at sea.

Key policy areas: multiple use of space, shipping & accessibility and invest.

<u>Objective</u>: to shorten transport routes at sea, provide for opportunities combining offshore functions with shipbuilding. Decision might be made to undo the Peninsula canal of its locks.

<u>Blue Growth opportunities</u> are cultivating of fish and seaweed, clean energy and tourism. Cultural heritage on land an in the sea is seen as key to provide growth in this sector. An LNG terminal could be constructed in the main port.

ISLAND

Blue growth happens in a blue environment.

Key policy areas: protect our resources, build with nature and innovate.

<u>Objective</u>: to safeguard accessibility of the Islands (e.g. ferries) and become the world leader in sustainable fishing and in the super yacht industry.

<u>Blue Growth opportunities</u> are blue tourism (like diving and whale watching), blue biotechnology and deep-sea mining. This calls for active and enhanced protection of marine life.

IOC-UNESCO added game features

In addition to the MSP Challenge Blue Development 2017 original version, a set of extra features have been incorporated in this IOC-UNESCO edition 2018. The purpose of these additions is to allow gameplay and learning on ecosystem based marine/maritime spatial development and planning in a context reflecting regional specifics/challenges and in line with the objectives of UN sustainable development goal 14 'Life below water'. Noting in particular also the relation with other SDGs.

Additional symbols/tokens

- Turtles
- Shark
- Marine litter (e.g. plastics)
- Circular economy facility (waste/sewage)
- Desalination facility
- Blank tokens on which players can write to make new elements, or stick on small stickers
- Redesign the distillery for local business (perhaps a shop of some sort, though a distillery for rum would certainly be understood from the Cariben perspective)
- Rename N2000 and Bird/Habitat to international terminology (MPA)