

Maritime Spatial Planning Challenge

Short Sea Shipping Edition

EU



Government of the Netherlands

2016

Signature Games



ABOUT THE GAME

The 'Maritime Spatial Planning Challenge - Short Sea Shipping Edition' is a playful learning experience – a 'table top strategy game' – designed for policy-makers and strategists working in the area of ecosystem based Maritime Spatial Planning (MSP), the development of sustainable Blue Growth and Short Sea Shipping.

The game is loosely based upon the 'Maritime Spatial Planning Challenge' (www.mspchallenge.info). It has been developed by the same team, at the request of the Netherlands' ministry of Infrastructure and Environment (I&M) for the occasion of the high level group meeting on Short Sea Shipping under the Netherlands EU Presidency 2016 (Amsterdam, the Netherlands, February 15, 2016).

GOAL

The goal of the game is to show some of the dynamic and complex interactions between Short Sea Shipping and Maritime Spatial Planning (MSP), with strategic objectives Blue Growth and Good Environmental Status. The game has been developed in light of the EU directive (2014/89) on MSP and the opportunities its' implementation gives for short sea shipping.

The game should get players 'thinking and talking' about the interrelations between MSP, Blue Growth and (short sea) shipping.

LIMITATIONS

The game has not been designed as a near-real planning exercise or decision support tool. Although it is a metaphor for Maritime Spatial Planning with a fictional narrative, stylized maps, playful tokens and a minimum number of game rules, it should be used to shape a strategic dialogue among professionals in the field.

QUESTIONS

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

- Where and how do MSP and short sea shipping reinforce each other?
- Where and how do they get into each other's way?
- Is short sea shipping sufficiently taken into account in MSP processes and responsible authorities?
- What can be done to improve the alignment between MSP and short sea shipping?

THE CHALLENGE

The main challenge for the players is to achieve Blue Growth (BG) and Good Environmental Status in their national and shared marine areas through the spatial allocation of economic and ecological functions and the development of short sea shipping. This is done by placing tokens on the game board. The tokens symbolize all kinds of human activities, ecological functions and shipping.

Planners and shippers may gradually find out that they get into each other's way, more often than not. Existing shipping lanes block the planning of new MSP areas. The planning of MSP areas necessitates a redirection of shipping lanes. And so on. Hence, shippers and planners in and between the countries need to coordinate and co-operate.

THE MAP

The game is played in the fictional marine area called the 'Rica Sea',¹ 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 planners should take into consideration while planning their economic and ecological functions, such as sea depth (light, medium and dark blue). Wind farms for instance can only be placed in light and medium blue areas, not white areas (deeper than 50 meters).

Furthermore, the already map shows a few 'hot spots' to be developed during the game, such as sea and inland ports, cultural sites, wrecks, birds, whales etc. Distances to shore and ports are important for wind farming and dredging. Sea depth is important for wind farming. There already are a few major international shipping lanes...but most of the sea area is remarkably underdeveloped.

Three countries – Island, Bayland and Peninsuland– shore the Rica Sea. The countries around the sea have only recently agreed to start planning their shared uses of the sea, by allocating functions to marine space over time.

¹ Rica Sea = Anagram for Rivers and Coastal Areas. Used with permission of EP Intergroup on IMP SEARICA Seas, Rivers, Islands and Coastal Areas.

PLAYERS

Players are assigned the role of planner or shipper in each of the three countries.

Planners should try to get as many tokens and of different types on the game board, thereby promoting Blue Growth and/or Good Environmental Status.

Shippers reside in one of the countries, but not necessarily represent the national interest of this country. Shippers are eager to develop short sea shipping and related upstream/ downstream activities. In the game, this is done by developing shipping lanes between ports (e.g., ferries, goods) and between ports and marine activities (e., fishing, wind farm construction and maintenance, etc.).

Shippers should try to get as many threat-pin connections and / of different types onto the game board. Straight lines have more value, since each angle in a line reduces the value (efficiency) of the shipping lane.

Economic functions (such as wind farms) placed on the game board induce short sea shipping (e.g., construction and maintenance). All economic activities in the Rica-sea need to be connected to a port. This is why planners need to coordinate with shippers.

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, wind farm, military zones...

Existing or potential conflicts need to be resolved in a discussion among planners and shippers.

HOW TO PLAY?

- The game is designed to take between 1-3 hours with 12-24 players.
- Players are divided over the countries and assigned one of two roles, planner or shipper.
- All players have an asset box with different paraphernalia.
- Planners have a quantity of cares (acrylate squares 4.5 x 4.5 cm) with symbols of their function in different colors, and a large quantity of pins.
- Shippers have roles of threat in different colors, with a large quantity of pins and a few scissors.
- All players stand around the game board (1.6 x 2.8 m) with a grid and scale. There is a legend of symbols at left and right sides of the game board.
- Planners develop economic and ecological functions of the Rica Sea by placing the corresponding tokens onto the grid. Hot spot tokens already on the game board and opportunity maps, give some direction on how to develop the marine area. Certain economic and ecological functions can be combined, whereas other functions conflict with each other.
- Planners place one or more of their tokens onto the pins. These pins go into the little holes drilled into the game board.
- Shippers develop short sea shipping by connecting ports with ports, and ports with economic functions. Shipping lanes are developed by connecting two or more pins on the board using threat of a corresponding color. Shippers can ask planners to also develop (air)ports, transport nodes etc. on land.

PERFORMANCE

The performance of the MSP planners is calculated by the amount of squares that they place on the map, by the end of the game, as well as the variety of squares that they use.

For each country, the game masters know the number of tokens at the start of the game. To get an indication of performance, the players can be asked to count the number of tokens (all, for each color) at the end of the game.

The performance of the shippers is measured by the length of the threat – or the number of pinholes - they use to make shipping lanes. However, each angle in a shipping lane reduces its value because a straight line is more efficient.

In a short game session, there will probably not be enough time to calculate the performance of planners and shippers, but one can get a rough indication, sufficient to start up debriefing and discussion.

Ecology points - Number of pin holes covered by ecological functions, MPA, wind farms, blue energy and recreation.

Economy points – Number of pin holes covered by economic functions: oil & gas, dredging, fishing...

Shipping points – Number of pin holes used for shipping lanes from port to port or from port to MSP function vice versa, minus the number of connection points that constitute an angle on that shipping route. In other words, straight shipping lines award more points than diversions.

RULES OF THE GAME

1. Players divide roles. Each country has 2 - 4 planners and 2 - 4 shippers.
2. Planners design a Maritime Spatial Plan (MSP) by putting economic and ecological functions on the game board.
3. Shippers are responsible for developing different types of (short sea) shipping lanes by connecting pins.
4. Players have several boxes with paraphernalia: colorful plastic tokens, colorful threats, and pins that should be placed on the map to designate economic and ecological functions, and shipping lanes.
5. Pins go into the holes on the map to connect the threats and keep the tokens in place.
6. Shippers have pins that can be placed in the holes in the game board, and then be connected by colourful threats to designate short sea shipping lanes. Colours of the threats indicate type of shipping.
7. Every economic function should have at least one pin that is connected by at least one threat to at least one port. Otherwise it is still undeveloped.
8. A few placement rules:
 - Real life logic is applicable to the Rica Sea. For instance, wind farms cannot be placed in deep water (white zone). Players are encouraged to bring such arguments from real life into the discussion to convince others.
 - Different ecological areas can be planned: habitat areas, bird areas, habitat and bird areas, and marine protected areas.
 - Fisheries take place at the entire Rica Sea except where it is prohibited.
 - Economic activities such as oil and gas extraction, seabed mining, should be planned in areas where these resources are available as indicated on the game board or opportunity maps.
 - Aquaculture and wave energy can be combined with other functions, such as with wind energy.
 - Coastal tourism can take place at the entire Rica Sea. Some areas are however more suitable than others.
 - For safety reasons only sailing and fishing boats no longer than 24 meter are allowed within wind farms. Planners can decide to change this policy.

- Shipping lanes can be redirected with permission of the International Maritime Organization, played by G.O.D.
 - Co-use of military areas is possible, but permanent structures cannot be combined for safety reasons.
 - The treaty of Rica is forcing countries to protect the underwater cultural heritage in situ.
9. A national or regional convention is a gathering of all participants residing in respectively, one or all three countries.
 10. Anything in the game is allowed as long as it has not been forbidden by the game facilitators and it is plausible, functional and acceptable within the rules and the spirit of the game.
 11. The Game Overall Director (G.O.D.) in consultation with the game facilitator, has the authority to give information, decide or intervene in all matters that are unclear or not provided for in the game, such playing the role of EU, IMO or any other institution or authority.

STEPS OF PLAY

1. Players stand around the table / game board with assigned roles.
2. Moderator gives 5-7 minute play instructions.
3. Timer is set on 5 minutes.
4. Shippers are asked to start developing shipping lanes.
5. Planners are asked to step back a little and take 5 minutes to decide which economic and ecological functions they want to place on the map.
6. After 5 minutes has passed, planners step forward to the game board and place their tokens, talking out loud to explain what is placed and why. Shippers give way, but may continue developing their lanes when they do not hinder the planners.
7. After 5 minutes, all players - shippers and planners - step back from the map, and observe the result. Potential conflicts are discussed and if necessary they are resolved.
8. The game cycle starts again from 3.
9. Play three or four rounds, until players are done, or it's time to stop.
10. Take 5-10 minutes for debriefing; focus on result and process.
11. End with key message: You are no longer alone at sea! If you are a shipper – what do you know about MSP? If you are a planner: how do you take short sea shipping into your plans?

THE RICA SEA

Rivers, islands and coastal areas characterize this sea basin. The three countries Bayland, Peninsuland and Island have a shared maritime and coastal heritage. It shows. 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 feature challenges for sea farers and off shore construction during parts of the year. Its proximity to two oceans and a relatively sheltered location on the globe also offer a wide range of natural resources to work with.

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. It's 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 it's the beginning of the world.

Key policy areas: land-sea interactions, energy transition and reach out.

Objective in short sea shipping is 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. LNG is the preferred fuel for short sea.

Objective in Blue Growth focuses on beach and nautical tourism, cruising and on wind energy.

PENINSULAND

Humans do not live at sea.

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

Short Sea objective is 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.

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

ISLAND

Blue growth happens in a blue environment.

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

Short Sea shipping objective is to safeguard accessibility of the Islands (o.a. ferries) and become the world leader in sustainable fishing and in the super yacht industry.

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

MESSAGE OF THE GAME (DEBRIEFING)

BLUE GROWTH

It is vital to communicate to the world of short sea shipping that Blue Growth is not only and simply about five new concepts for use of the sea, such as ocean energy, aquaculture and nautical tourism. Blue Growth is the umbrella of sustainable development of all maritime activities, including shipping, offshore, near shore and on-shore activities. Blue Growth and the opportunities it offers to the short sea community should be better communicated. This is a task for both the short sea shipping community and the planning community.

MARITIME SPATIAL PLANNING

Maritime Spatial Planning is a process which is not only about maritime space or mapping the ecological vulnerable areas at sea. It is a puzzle for all types of activities in preferably a coordinated way. It is important that short sea shippers become part in the Maritime Spatial Planning efforts the Member States will embark on.

SHORT SEA SHIPPING

Of particular interest to the short sea world are land-sea interactions, fixing the non IMO regulated ship movements on the spatial maps, and to be involved in the opportunities and threats that medium and large offshore developments offer.

MARITIME SPATIAL PLANNING EU DIRECTIVE 2014/89/EU

'Maritime spatial planning will contribute to the effective management of marine activities and the sustainable use of marine and coastal resources, by creating a framework for consistent, transparent, sustainable and evidence-based decision-making. In order to achieve its objectives, this Directive should lay down obligations to establish a maritime planning process, resulting in a maritime spatial plan or plans; such a planning process should take into account land-sea interactions and promote cooperation among Member States.[...] In order to promote the sustainable growth of maritime economies, the sustainable development of marine areas and the sustainable use of marine resources, maritime spatial planning should apply an ecosystem-based approach as referred to in Article 1(3) of Directive 2008/56/EC with the aim of ensuring that the collective pressure of all activities is kept within levels compatible with the achievement of good environmental status and that the capacity of marine ecosystems to respond to human-induced changes is not compromised, while contributing to the sustainable use of marine goods and services by present and future generations.'

SHORT SEA SHIPPING

'Short sea shipping refers to coastal trade, coastal shipping, coasting trade and coastwise trade, which encompass the movement of cargo and passengers mainly by sea along a coast, without crossing an ocean (which is called deep-sea shipping', 'intercontinental shipping' or 'ocean shipping'). Short Sea Shipping can be feeders, fishing, offshore construction, nautical tourism, ferries, cruise vessels, roll on roll off et cetera. Shipbuilding and maintenance, logistic (hinterland) connections and other services are part of the upstream and downstream short sea shipping economy.'

BLUE GROWTH COM(2014) 254/2

'Blue Growth is the long term strategy to support sustainable growth in the marine and maritime sectors as a whole. Seas and oceans are drivers for the European economy and have great potential for innovation and growth. It is the maritime contribution to achieving the goals of the Europe 2020 strategy for smart, sustainable and inclusive growth. The 'blue' economy represents roughly 5.4 million jobs and generates a gross added value of almost €500 billion a year. However, further growth is possible in a number of areas which are highlighted within the strategy. The strategy consists of three components: 1. Develop sectors that have a high potential for sustainable jobs and growth, such as: a. aquaculture; b. coastal tourism; c. marine biotechnology; d. ocean energy; e. seabed mining. 2. Essential components to provide knowledge, legal certainty and security in the blue economy. a. marine knowledge to improve access to information about the sea; b. maritime spatial planning to ensure an efficient and sustainable management of activities at sea; c. integrated maritime surveillance to give authorities a better picture of what is happening at sea. 3. Sea basin strategies to ensure tailor-made measures and to foster cooperation between countries.'