



# Workshop

## Sustainable Blue Economy

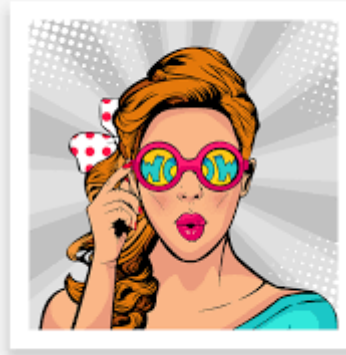
### DATA



# WELCOME

Gdansk, 31 January 2024

Blue Cluster (Belgium) & Netherlands Enterprise Agency & Ministry of Agriculture, Nature and Food Quality (the Netherlands), SHOM (France)



Some **questions** will appear via SLIDO - Please don't use to comment ..

Photo/filming objections?



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**#3949 208**



## WELCOME

- |       |   |                           |
|-------|---|---------------------------|
| 13:00 | SBE, policy recommendations, Maripark storyline                             | (Marijn Rabaut, BC)       |
|       | Data, policy recommendations, data storyline                                | (Bérénice Lequesne, SHOM) |
| 13:15 | Maripark in Finland   | (Laura Pietilä, RCSI)     |
| 13:25 | Compendium Greater North Sea - Sharing knowledge for transboundary dialogue | (Willem Stolte, Deltares) |
| 13:30 | Spatial Decision Support Tools  | (Yannick Leroy, SHOM)     |

## ROLE PLAY

- |       |                         |                            |
|-------|-------------------------|----------------------------|
| 13:35 | Introduction and set-up | (Nathalie Scheidegger LNV) |
| 13:40 | Role play               |                            |

## DISCUSSION

- |       |  |                     |
|-------|--|---------------------|
| 13:55 | Outcomes of the workshop, plenary discussion |                     |
| 14:20 | Wrap-up                                      | (Marijn Rabaut, BC) |

slido



**Which stakeholder group do you belong to?**

① Start presenting to display the poll results on this slide.

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**What is your experience in one word (eg. MSP, EBA, data, multi-use ...) ?**

① Start presenting to display the poll results on this slide.



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Emerging Ecosystem-based  
Maritime Spatial Planning  
Topics in the North and Baltic  
Sea Regions

**Policy advise: SBE, MU, Maripark**

**Marijn Rabaut (BC)**



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# Core group SBE



## Take home message

The success of a sustainable blue economy asks for an overall vision on the future of our oceans and seas in marine spatial planning



Location: Brussels

Location: Finland

Location: the Netherlands

Location: Sweden

# Sustainable Blue Economy

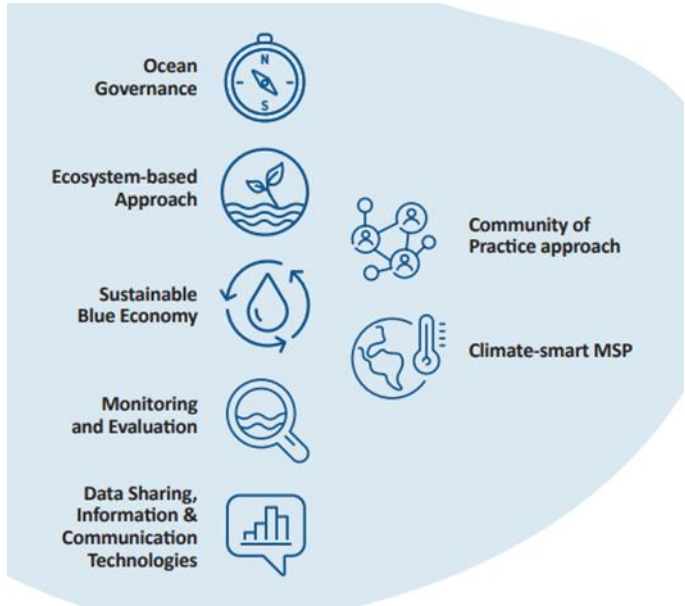
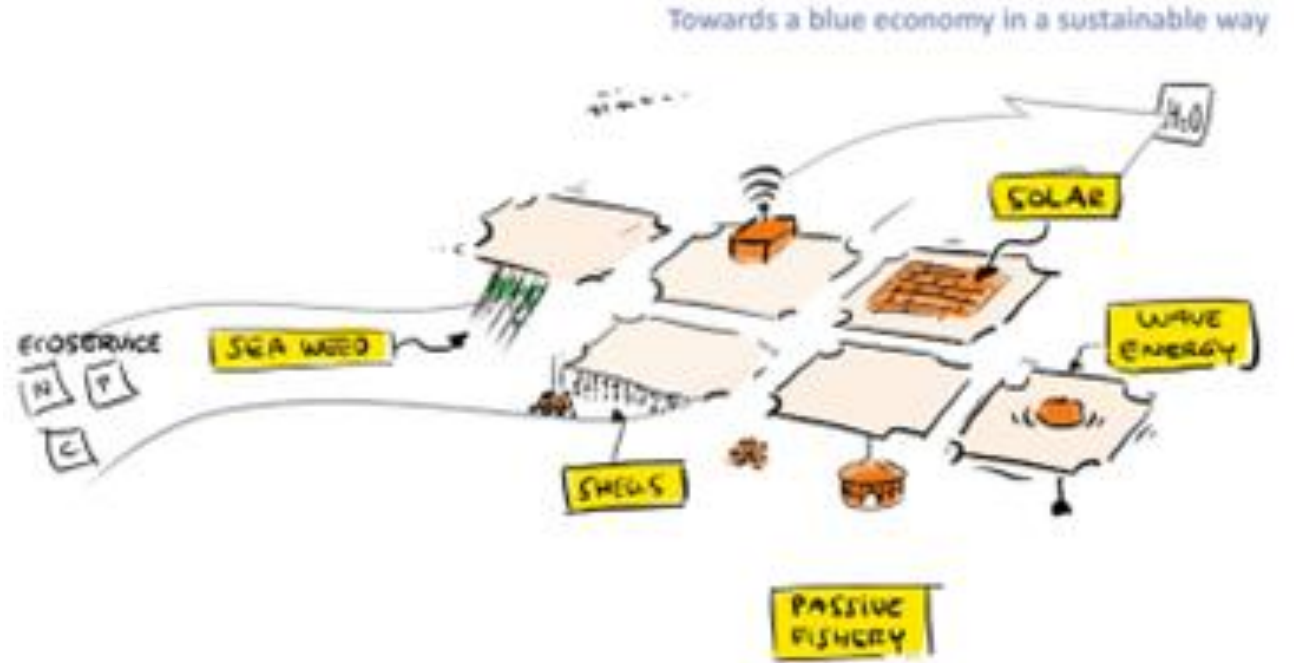


For SBE the aim is clear: tackle the intertwined crises of climate change and biodiversity loss by nurturing the well-being of our seas and harnessing their resources in a responsible way.

- May 17, 2021 EC - visionary proposal SBE encompassing the diverse industries and sectors - oceans, seas and coastal regions.
- European Green deal, Climate law, Renewable energy directive, Energy efficiency directive, Re-power EU, Carbon border adjustment mechanism, transition fund, Biodiversity strategy, Farm to Fork, Nature restoration Law, Sustainable aquaculture, Horizon Mission Oceans, Seas and Water (...).
- Aquaculture, energy, fishery, maritime connections, blue tourism, nature inclusive design, ecosystem-based approach, data-efficiency, smart systems, coastal defense, mineral resources, marine biotechnology, freshwater production (...).
- Precautionary principle



- Growing human activities at sea – growing importance MSP
- Pressure, scarcity of space, conflicts and competition, overfishing, pollution, habitat degradation
- **Synergies, circular economy, holistic use**, ecosystem-based approach, compromises in uses, innovation and smart systems, data management
- MSP for sustainability, efficiency and resilience SBE
- Balance economic growth and marine ecosystem conservation benefits society, economy, environment



# Multi-use, the next step

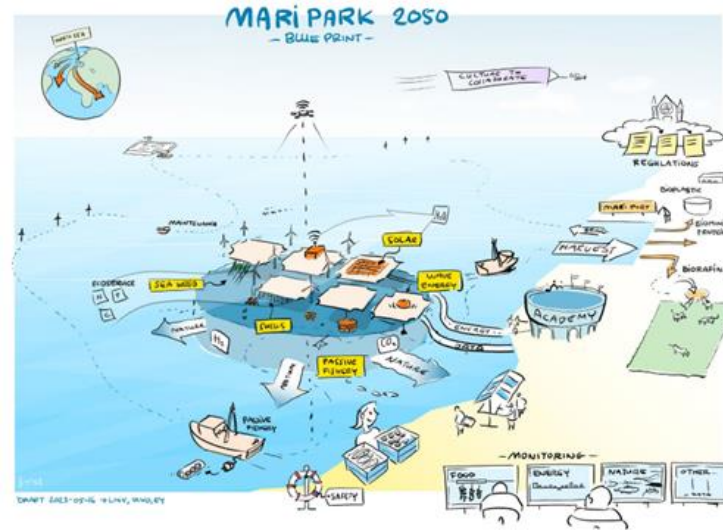


While possible synergies between different uses promise a great future, there are a few technological, economic, ecological and regulatory challenges that need to be overcome before a seamless symbiosis is achieved.

- Collaborative Governance: close cooperation and coordination with relevant stakeholders to align policies with the needs private parties;
- Regulatory Support: clear adaptive regulatory frameworks on liability, permitting and environmental impact assessments;
- Technology development: developing robust, efficient and safe technologies;
- Innovative business models: designing commercially viable business models;
- Financing and investment: setting up financial incentive instruments, especially for the start-up phase towards scale-up.

Fields are interdependent, MU sector requires totally new approach. SBE governmental structure.

Government stimulates, research supports policy and innovation, companies provide commercially viable business models.



- Facilitate, accelerate transition from sector-specific, single-use activities to sector-unspecific, multi-use business
- Basic physical infrastructure -> development MU
- Shared physical infrastructure (anchors, docking, sensors, smart systems monitoring and evaluation, data, ...)
- Shared sea transport
- Cost-effective and sustainable
- Optimised security
- Overarching organisational body dedicated to facilitating and optimizing multi-use initiatives
- Central authority for the efficient management and maintenance of these initiatives

## Recommendations

**1** We recommend focusing on broad integrated research on all quantified impacts of climate change on the Blue Economy as a whole. This includes existing blue economies, such as tourism, shipping and fisheries, and emerging economies such as offshore seaweed and shellfish farming and offshore renewable energy. Quantification of these impacts can help including mitigating measures targeting these impacts in the EU member state's maritime spatial plans.

**2** We recommend identifying (cumulative) human pressure factors, like for example mentioned in the key messages from the 'QSR2023' and the 'State of the Baltic Sea 2023' report, and making spatial and policy choices based on these factors that will trigger a movement to achieve a sustainable blue economy.

**3** Achieving a sustainable blue economy requires a delicate balance between all the different interests and needs of the various users of the sea. At the same time, the precautionary principle must be applied, to ensure the activities do not negatively impact each other and/

or the environment. We recommended, identifying mitigating measures, for the benefit of nature or people, in advance. When setting up a mitigating package of measures, it is advisable to investigate synergies and economies of scale that may arise precisely as a result of increased activities at sea.

**4** We recommend including and integrating multiple use in the design of new wind farms. The preconditions needed to make multi-use successful can then also be included in the programme of requirements of new wind farms. For existing wind farms, we recommend that policy, laws and regulations provide clarity on multi-use of space and, here too, the preconditions to make multi-use possible.

**5** It is clear that for multi-use to grow into a mature sector, it needs an overarching approach in which all stakeholders work intensively together from their own roles and responsibilities. We recommend. Setting up a public-private partnership to help to reduce risks to an acceptable (entrepreneurial) level in a coherent and pragmatic way ensuring the realisation of societal values.



Integrated  
research

Cumulative  
impacts

Mitigation of  
measures/  
Economies of  
scale

MU as standard

Partnerships



## Entity

We recommend the creation of an entity co-responsible for use of space at sea, the organisation and streamlining of such use, and responsible for the realisation and maintenance of basic infrastructure for multi-use at sea.

## Specific maripark requirements

It is paramount to develop a list of requirements for each individual Maripark. Since each Maripark will provide services to different possible forms of usage. Food production requires a different infrastructure than for example renewable energy or maybe even nature development.

## Regulatory framework

Provide a regulatory framework to make the realization of Mariparks possible. Ensure that a solid balance is established between the responsibilities of the government and the private sector, also through property or usage rights, to ensure the viability of Mariparks.

## sharing

Ensure cooperation and collaboration on an equal level between all relevant organizations and individuals to ensure can further enhance knowledge sharing, learning, networking, collaboration, and innovation within their communities, thus fostering a more robust multi-use environment. A Community of Practice way of working proved to be a very relevant and vibrant method to do so.

## Infrastructure synergies

The increasing use of the sea also requires effective coordination at the operational level among various forms of usage. Sharing basic infrastructure in this context can lead to cost reduction for all parties involved. Therefore, we recommend that the scope of Maripark not only provides services for emerging multi-use initiatives but also for the existing blue economy.

### Authors:

Kinnie De Beule, Marijn Rabaut (Blue Cluster, Belgium), Nathalie Scheidegger (Min.LNV, the Netherlands) and Margjele Karper, Nico Buytendijk (RVO, The Netherlands)

Citation: De Beule, K., Rabaut, M., Scheidegger, N., Karper, M., Buytendijk, N. (2023). Policy Brief Towards a sustainable blue economy. Policy brief of the eMSP R&I Sustainable Blue Economy Learning Strand, download from <https://www.emsproject.eu/results/>

### Disclaimer:

This policy brief has been developed within in the eMSP NBSR project. It is based on insights of the persons participating in the project and does not necessarily exactly mirror the views of their organisations and nations.



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**LS Data, policy recommendations**

**Bérénice Lequesne (SHOM)**



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## FINAL CONFERENCE

Gdansk, Poland | 31 January – 1 February 2024

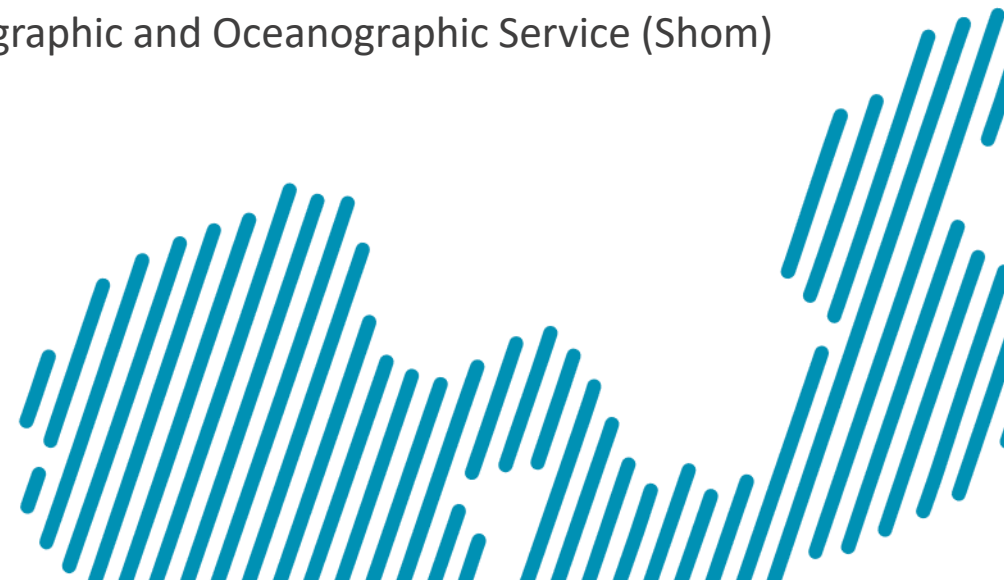


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# Data Sharing, information and communication technology serving MSP

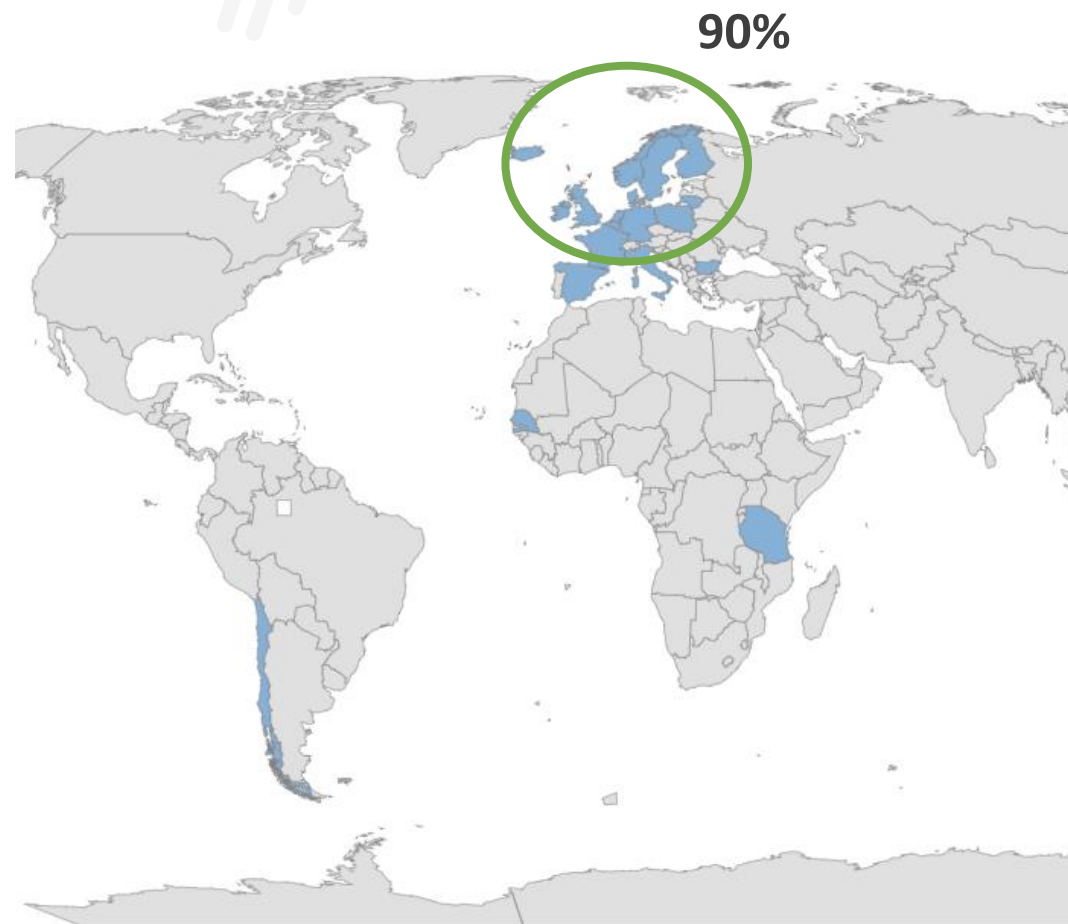
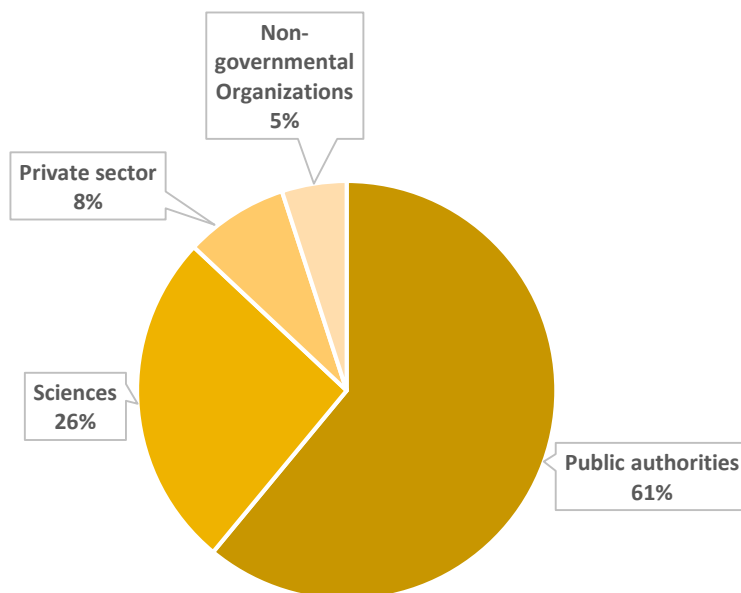
French National Hydrographic and Oceanographic Service (Shom)



# The Data Community of Practice



80 participants



## Aims:

Provide recommendations  
for better harmonization  
and standardization of MSP  
data

Identify practical suggestions for:

- Improving ongoing MSP processes at the Member States level and between sea regions.
- Supporting future EU initiatives to aid Member States in implementing MSP.

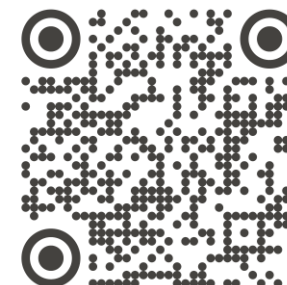
### Policy Brief

## Strengthening Data sharing for informed decision-making in Maritime Spatial Planning



Published in January 2024

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copy!**



# 1

**Adopt international data standards such as ISO, INSPIRE, directives, International Hydrographic Organization's Standards (S-57) and TEG recommendations**

# 2

**Make MSP output data compliant with FAIR  
(Findable, Accessible, Interoperable, and  
Reusable) principles**

# 3

**Enrich the available data sharing platforms  
to improve the comprehensiveness of  
available data**

# 4

**Actively employ the recommended  
Reference Lists to increase data coherence  
and harmonization approach, data  
classification and categorization into  
relevant and consistent categories and  
subcategories**

# 5

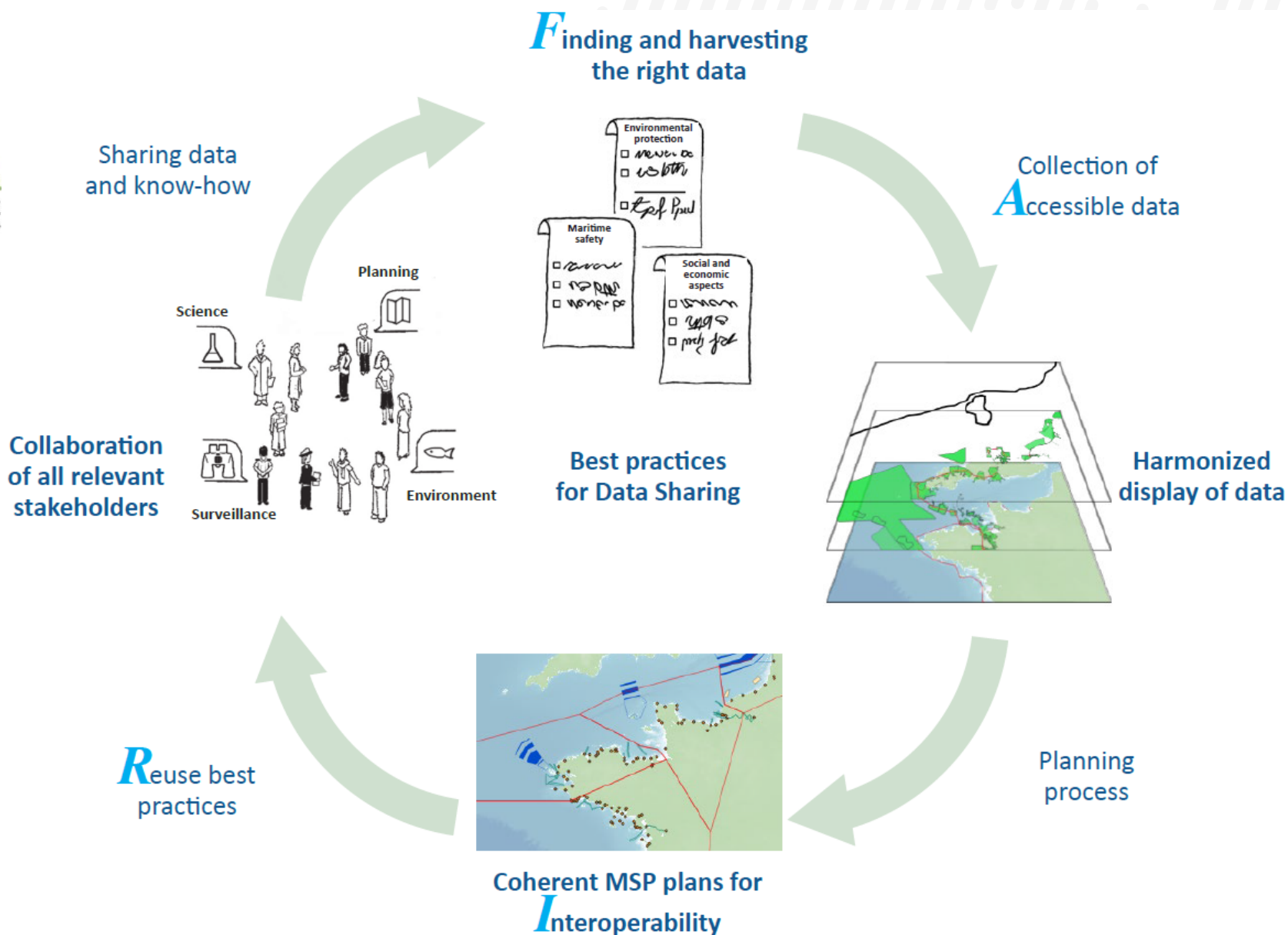
**Follow the framework protocol for Blue  
Corridors implementation to increase  
connectivity between MPAs and species'  
functional habitats in the planning process**

# 6

**Visualize the “invisible”: invest in geospatial  
visualization technologies and resources**

# 7

**Continue supporting transboundary MSP projects and initiatives which are led by and involve MSP authorities**





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# Thank you!

**Bérénice Lequesne – [berenice.lequesne@shom.fr](mailto:berenice.lequesne@shom.fr)**



Netherlands Enterprise Agency



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and Water Management



Ministry of Agriculture, Nature and  
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**Finnish Maripark**

**Laura Pietilä (RCSI)**



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# Sustainable Blue Economy and building a national-level Community of Practice

The Finnish MSP COP for SBE

Laura Pietilä

Project Planner, Regional Council of Southwest Finland

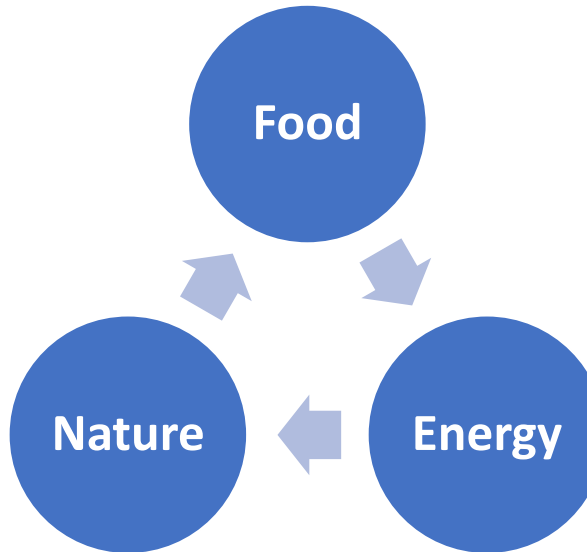
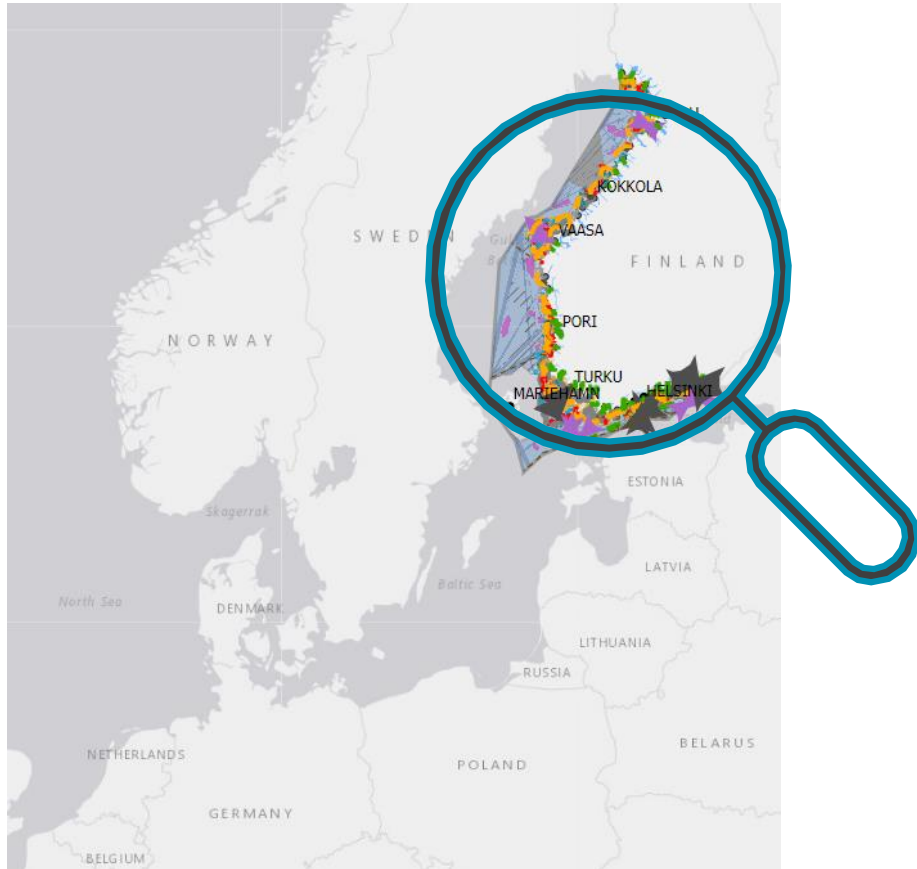
Coordination of Finnish MSP Cooperation

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# Sustainable Blue Economy in Finland

## AIM OF THE NATIONAL COMMUNITY OF PRACTICE



- Reflect on the cross-cutting topic of **marine multi-use** through three EGD themes (food, energy, nature)
- Bring lessons from international collaboration into the national process
- Support sustainable blue economy and create an updated look into the sectors for the second round of maritime spatial planning in Finland

## How did we work?

- 4 themes, 4 workshops

### Steps:

- 1) Attend the SBE COP meeting
  - 2) Organise a follow-up national sub-COP meeting
  - 3) Repeat
- Further exploration of multi-use through 3 expert meetings and a local-level MariPark case study.
  - Reflection on how the multi-use concept feeds into the Finnish MSP process. Engaging MSP planners.



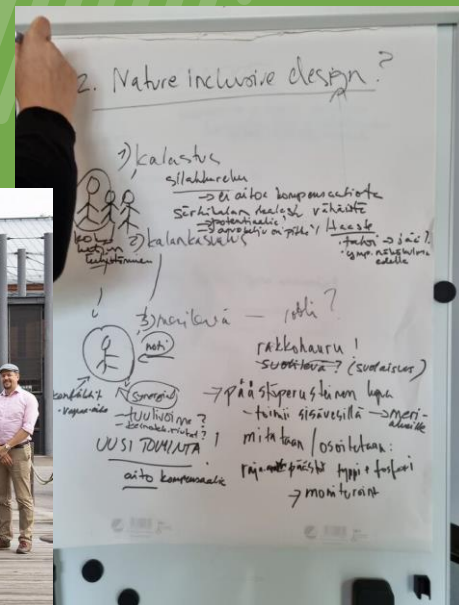


# Sustainable Marine Food Production

1<sup>st</sup> meeting in August 2022, Turku

## THEMES

- Finnish Aquaculture Strategy 2030
  - National targets for marine food production
  - Security of supply
- Future of fishing - climate change and new industries are transforming the operating environment
  - Need for adaptive planning
- Potential for seaweed farming in Baltic Sea conditions
  - Synergies with other actors (energy, fisheries)
  - Employment, innovation, removing nutrients from the sea
- Nature-inclusive design
  - MariParks?



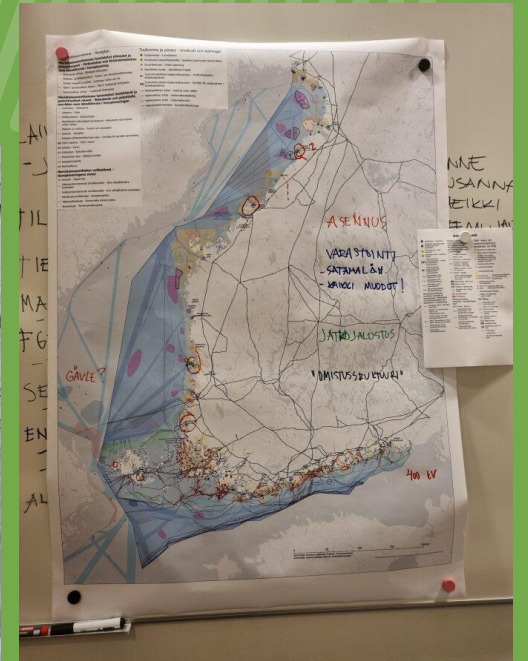
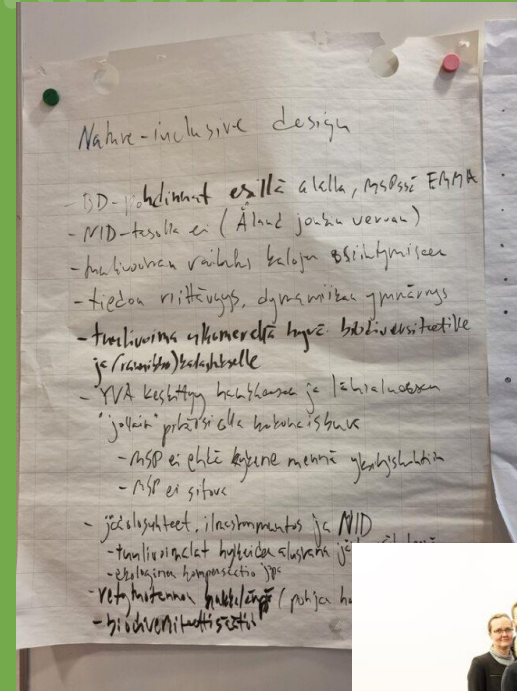


# Sustainable Marine Energy Production

2<sup>nd</sup> meeting in December 2022, in Vaasa

## THEMES

- Meeting energy production targets
  - Technological development
  - Impact of winter conditions
  - Cables and transferring options
- Green hydrogen
- Coordinating other marine activities
- Nature-inclusive design
  - What could a MariPark with energy focus look like in Finland?
  - Increasing biodiversity through new habitats, directing oxygen from green hydrogen production to the seabed, sharing space with functions that reduce nutrients from the sea...



FOOD

ENERGY

NATURE

MULTI-  
USE

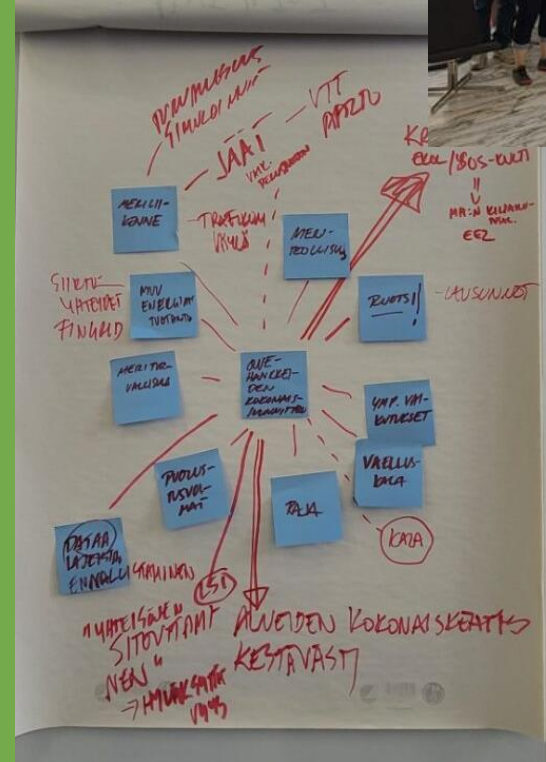


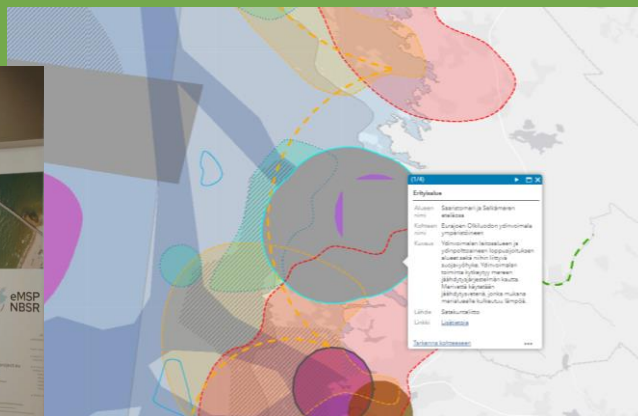
# Nature-inclusive design and Finnish MSP

## 3<sup>rd</sup> meeting in June 2023, Helsinki

## THEMES

- Marine protected areas and blue-green infrastructure
- Biodiversity Strategy 2030
  - How to achieve the targets? Protecting state-owned and private waters, wide stakeholder engagement, cross-border collaboration, changes in legislation to support protection
- Climate change modellings
  - Where will the highest nature values be in 2100? Changes in salinity, temperature, oxygen concentration → changes in species
  - Biggest changes in the northernmost and coastal areas
- Cross-sector collaboration
- Nature-Inclusive Design
  - MariPark planning principle





## THEMES

- Can MariParks be a way forward in attaining European Green Deal objectives?
  - Just and fair transition, sustainable marine food production, climate change mitigation, protection and restoration of marine nature, blue circular economy, zero pollution
- Changing environment
  - Increasing human pressures, especially offshore wind energy and hydrogen
  - Climate change
  - Need for controlled development
- Synergies between marine sectors
  - What is needed for successful co-operation?

FOOD

ENERGY

NATURE

MULTI-  
USE

# MariPark – some insights from the Finnish expert group

## 1. Interviews with local companies & results (collaboration with CleanBlueDigi project, University of Turku)

- Need for a deeper understanding of **requirements for the operating environment**
- A **clear administrative framework**
- The company takes responsibility over the running of a MariPark and simultaneously **bears its risks**. For this reason **the operating environment must be stable both administratively and socially** (social acceptance)
- The coordinating party should be a private entity (a start-up?) to ensure **dexterity**

## 2. Exploring NID compensation models and permitting

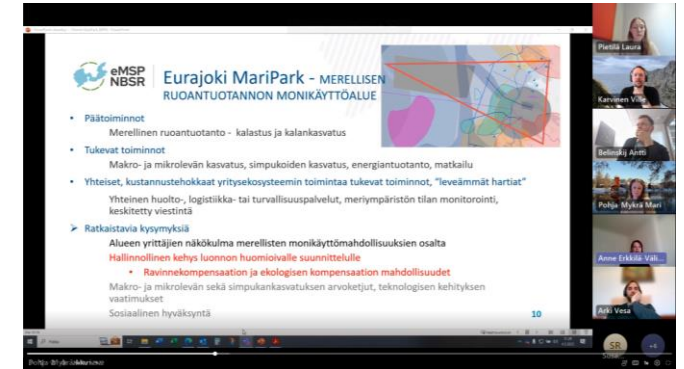
- Nutrient compensation is not currently recognised by jurisdiction
- However, **co-permitting in the same coastal water body (WFD) may be possible** with NID principles as reasoning in the future → Nutrient removal could be equated to purification methods

## 3. Harnessing GES indicators for MSP and MariParks

- **Linking indicators with human pressures** and developing CIA for a MariPark according to specific functions
  - 1) Indicators must reflect effects that can be directly linked to human activities
  - 2) Any changes caused by a MariPark must be detectable through the indicator (doesn't get lost in the "noise")
  - 3) The indicators should also be able to reflect a positive change

## What was done:

- 4 workshops with varying sectoral focus on multi-use
- Building a case study – Eurajoki MariPark
  - 3 expert meetings online
    1. Interviews with local companies & results (collaboration with CleanBlueDigi project, University of Turku)
    2. Exploring NID compensation models and permitting
    3. Harnessing GES indicators for MSP and MariParks



Way forward → bringing the concept to planning process in 2024 through work in MSP-GREEN project and valuable MSP practices



- More information on the Finnish MSP and Community of Practice:
  - [Merialuesuunnittelu.fi](https://merialuesuunnittelu.fi)



[MSP & Marine Food workshop](#)



[MSP & Marine Energy workshop](#)



[MSP & Marine Nature workshop](#)



[MSP & Marine multi-use workshop](#)

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## MARITIME SPATIAL PLANNING

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## **Compendium of the greater North Sea**

**(Deltares)**



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Ministry of Infrastructure  
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**Deltares**

# Compendium of the Greater North Sea

**Sharing knowledge for  
transboundary dialogue**

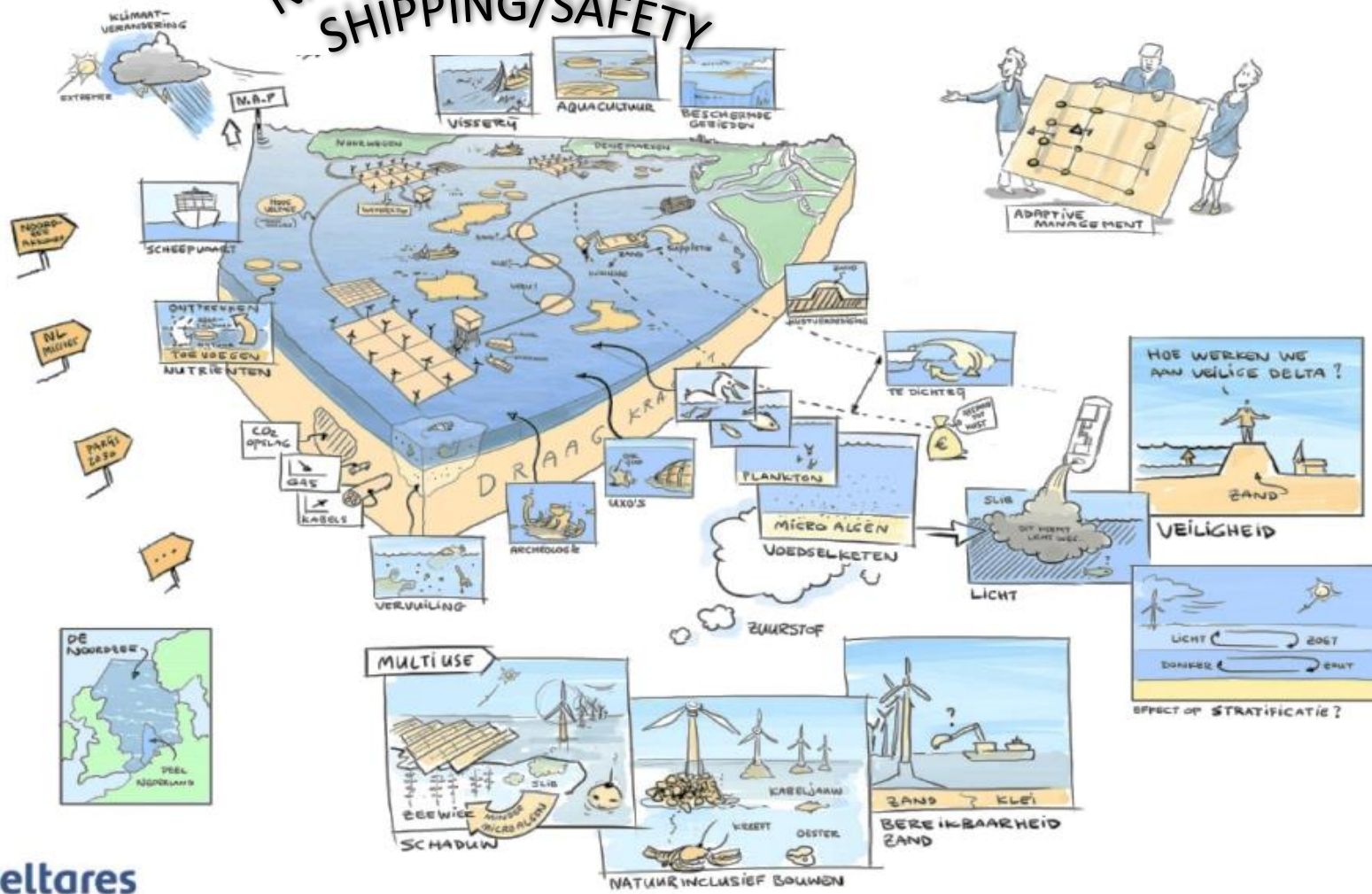
Willem Stolte, Nathalie Dees, Sharon Tatman (Deltares)

Lodewijk Abspoel, Odilia Schölvink (Ministry I & W)

Jan 2023

# Transitions in the Greater North Sea

ENERGY  
FOOD  
NATURE  
SHIPPING/SAFETY



Pressures on planning

Cumulative effects

Transboundary processes

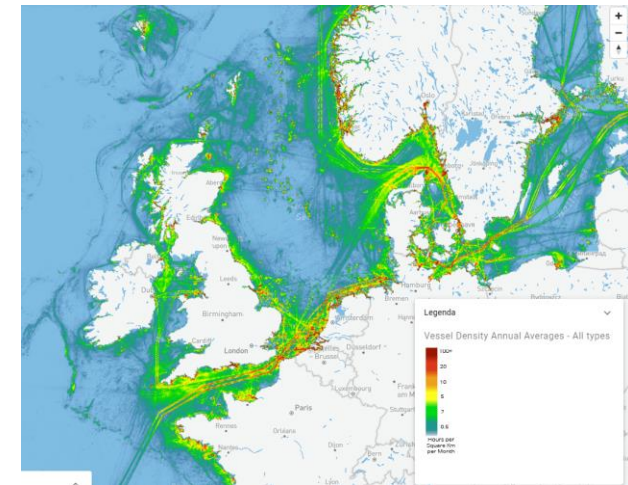
Sharing of **knowledge** among countries is crucial

# GNSBI knowledge sharing



**Greater  
North Sea  
Basin Initiative**

- Nov 2023 ministerial conference on GNSBI
- 2024: start of 6 working tracks
  - Deltares and Dutch Ministry I&W lead **WT Knowledge sharing**
- Knowledge sharing platform
  - current situation
  - future developments and plans
  - Issues/conflicts



Presentation on GNSBI by  
Odilia Schölvínck

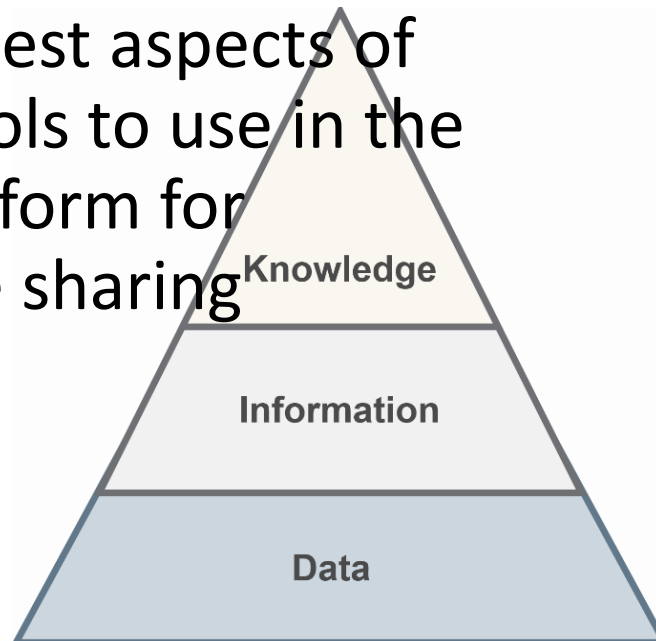


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# Gap analysis for knowledge sharing platform

- work in progress -

- Categorize and rank current knowledge sharing tools
  - Global, European, Regional & National level
- Combine best aspects of existing tools to use in the GNSBI platform for knowledge sharing



Types of knowledge sharing tools



**Data Catalogue**



**Data Portal**



**Map Viewer**



**Information Service**



**Assessment Tool**

Ranking categories

a) Research Area (does it consider the North Sea?)

b) Does the tool comply with open data standards?

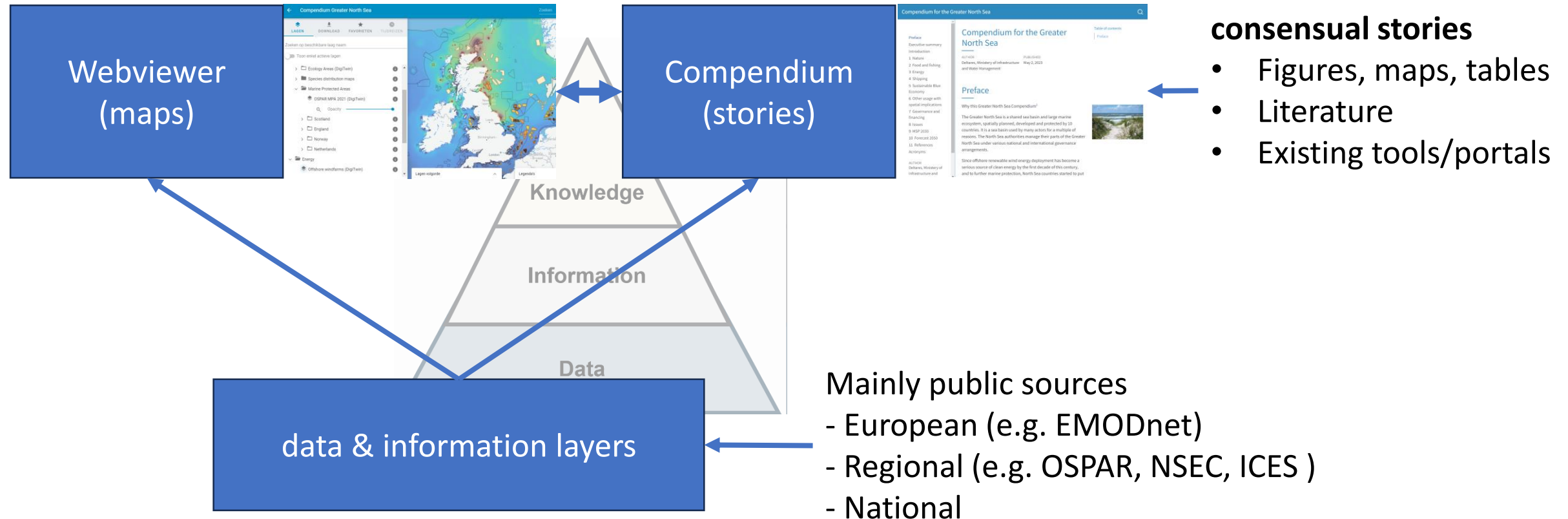
c) Is the type of data and information relevant to MSP?

d) Does the tool integrate data & information into knowledge?

# Compendium Greater North Sea proof-of-concept

spatial & temporal  
**data & information**

**knowledge interpretation**  
Transboundary dialogue



More information and demo  
at exhibition stand

# Contact



[www.deltares.nl](http://www.deltares.nl)



[@deltares](https://twitter.com/deltares)



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## **Spatial Decision Support Tools**

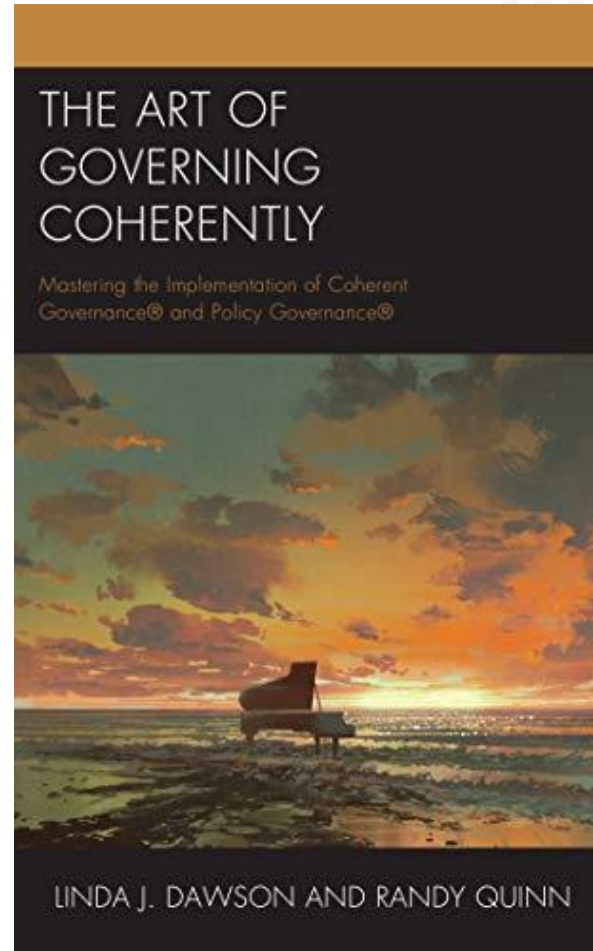
**Yannick Leroy (SHOM)**



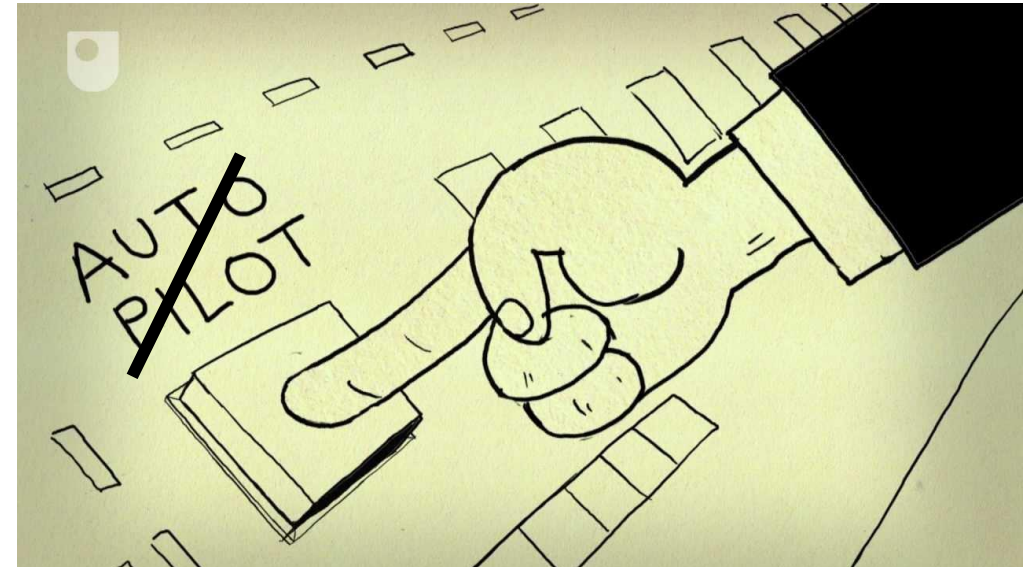
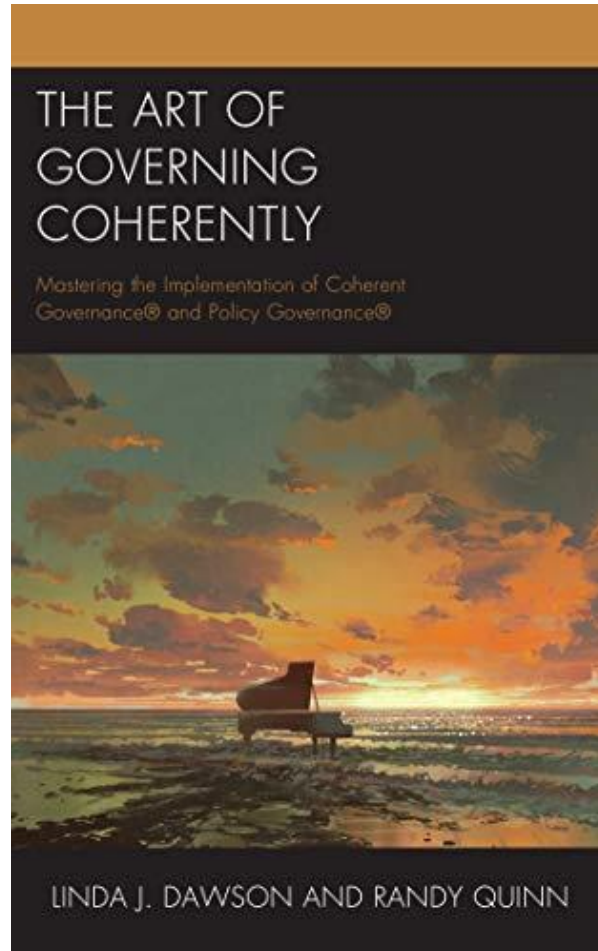
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# Spatial Decision-Support Tools (SDSTs): useful devices for MSP practitioners?



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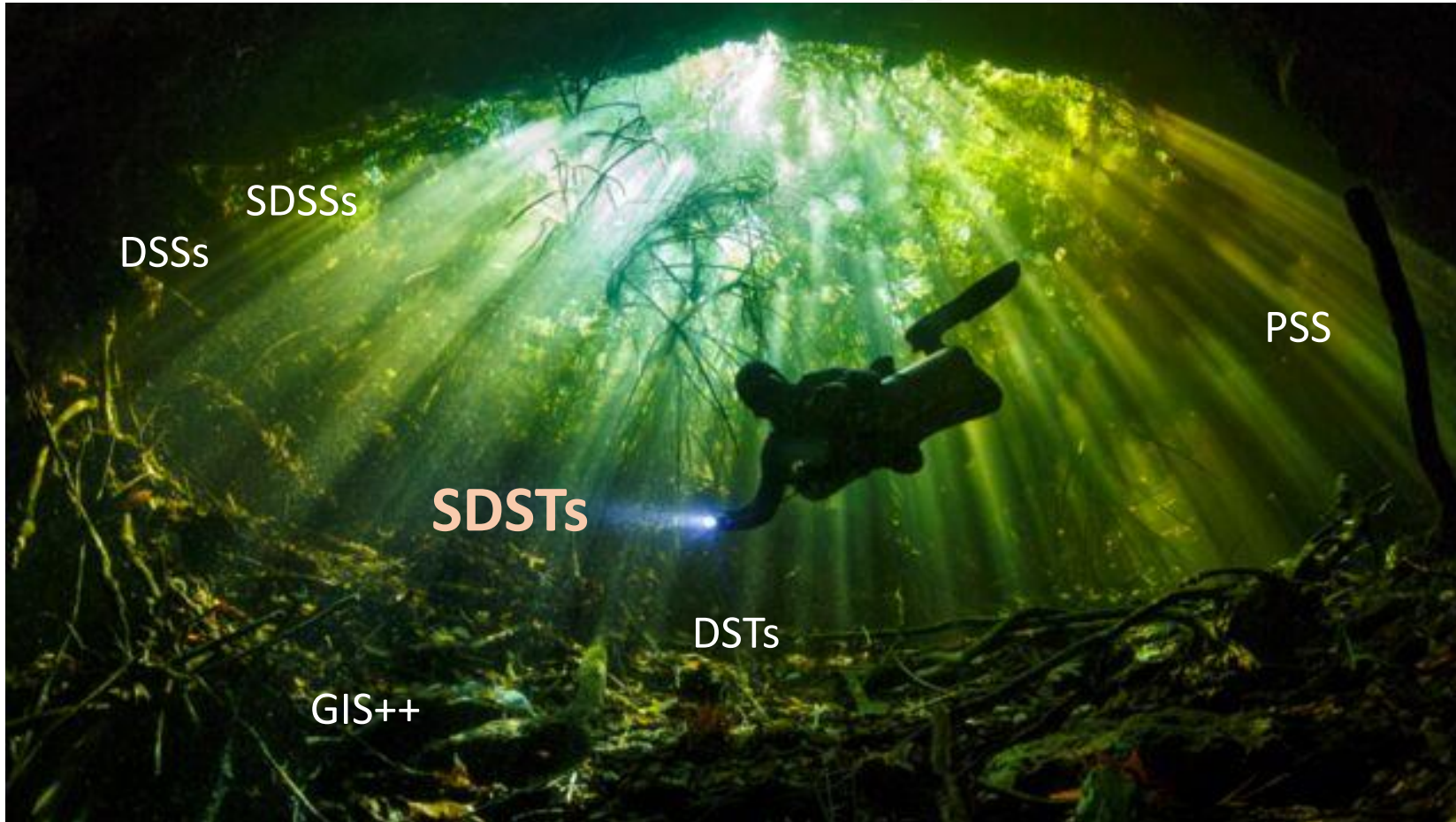


<https://waterpartnership.org.au/what-is-a-decision-support-system-dss/>

# Spatial Decision-Support Tools (SDSTs): useful devices for MSP practitioners?

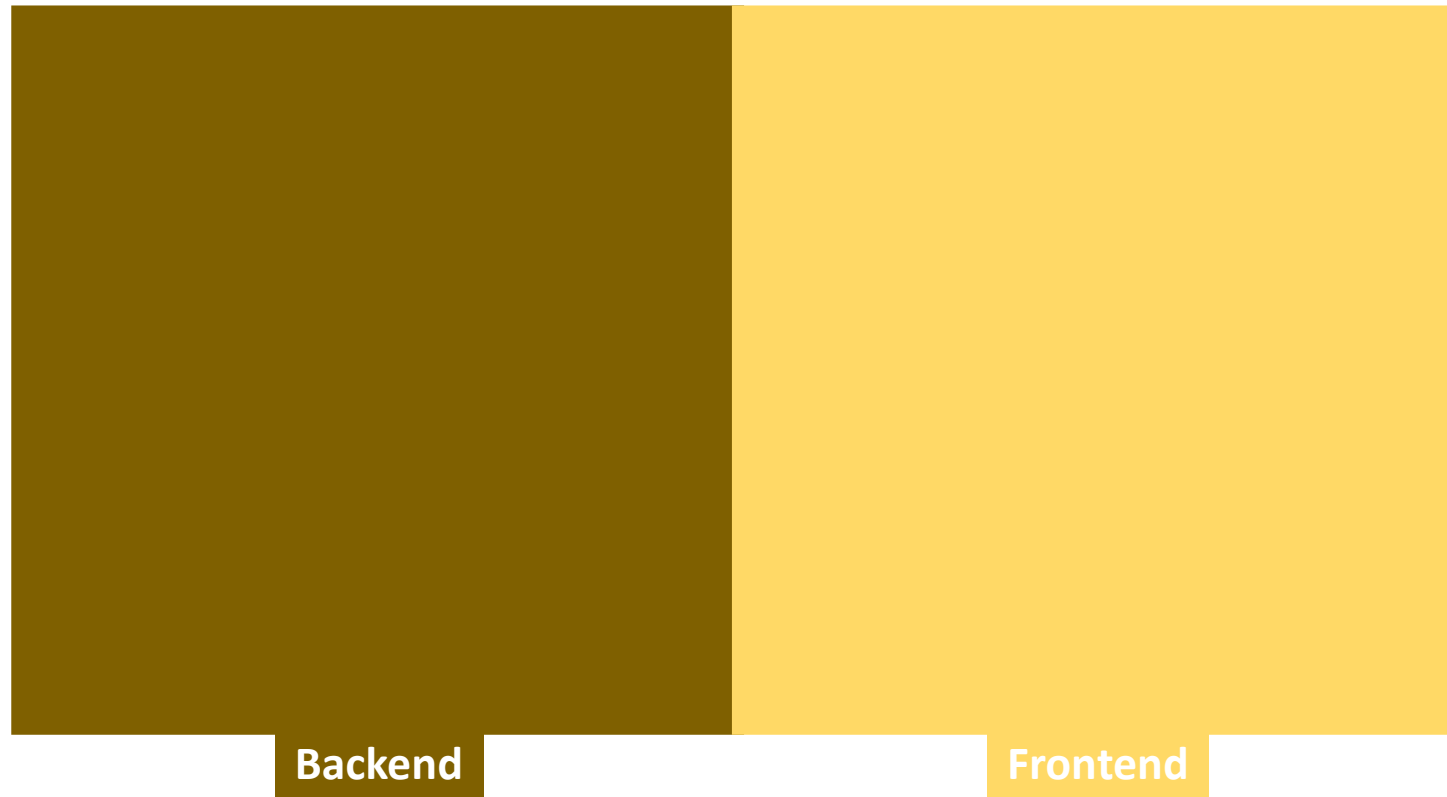


# Spatial Decision-Support Tools (SDSTs): useful devices for MSP practitioners?



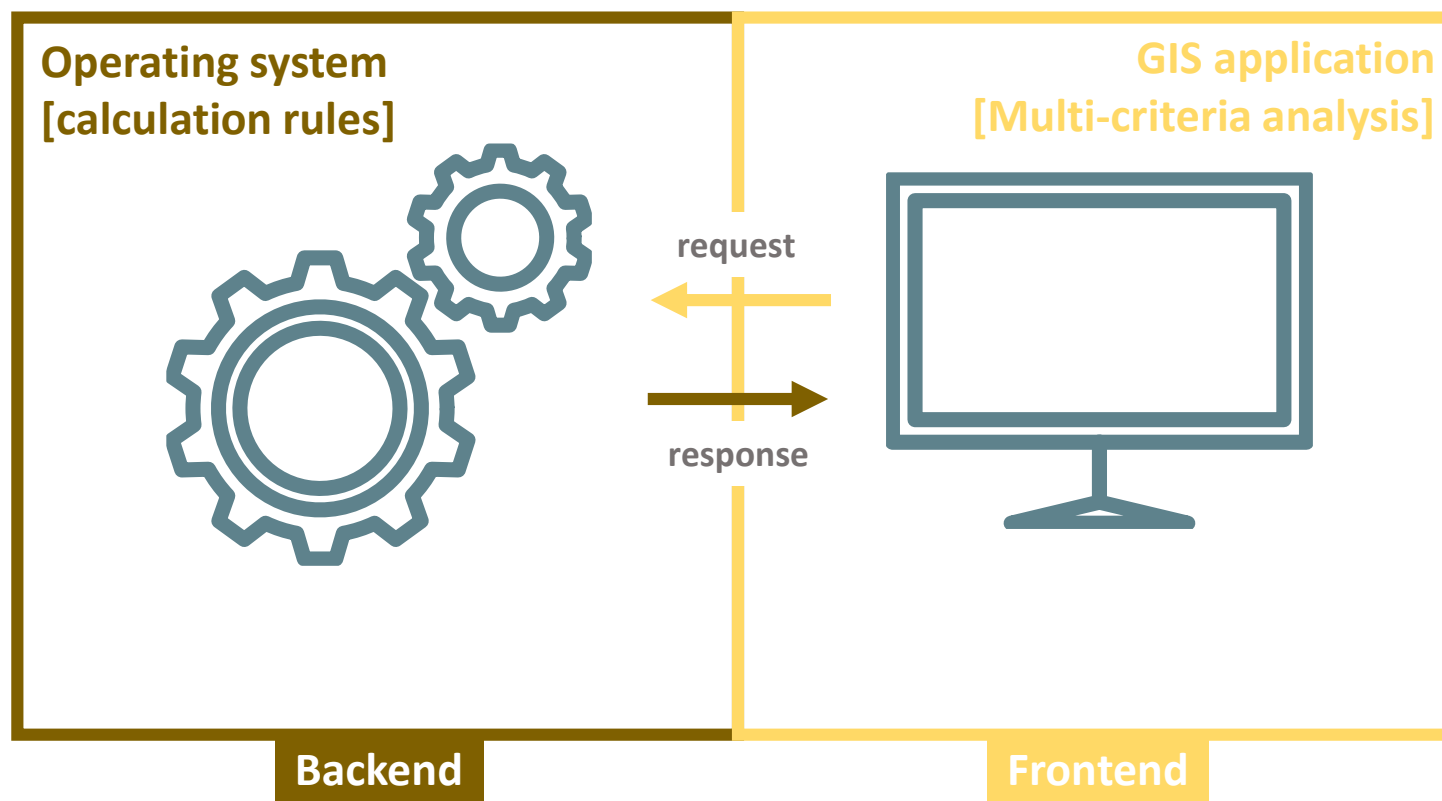
# Spatial Decision-Support Tools (SDSTs): useful devices for MSP practitioners?

- Assembly pieces of SDSTs' puzzle



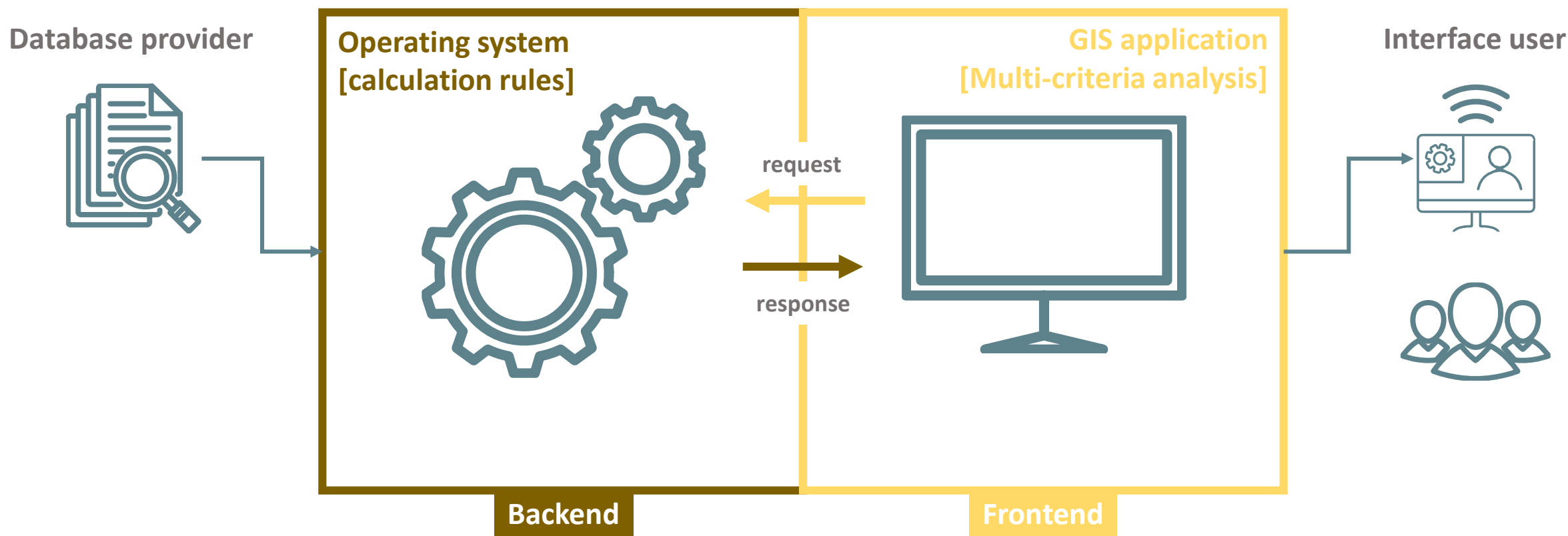
# Spatial Decision-Support Tools (SDSTs): useful devices for MSP practitioners?

- Assembly pieces of SDSTs' puzzle



# Spatial Decision-Support Tools (SDSTs): useful devices for MSP practitioners?

- Assembly pieces of SDSTs' puzzle

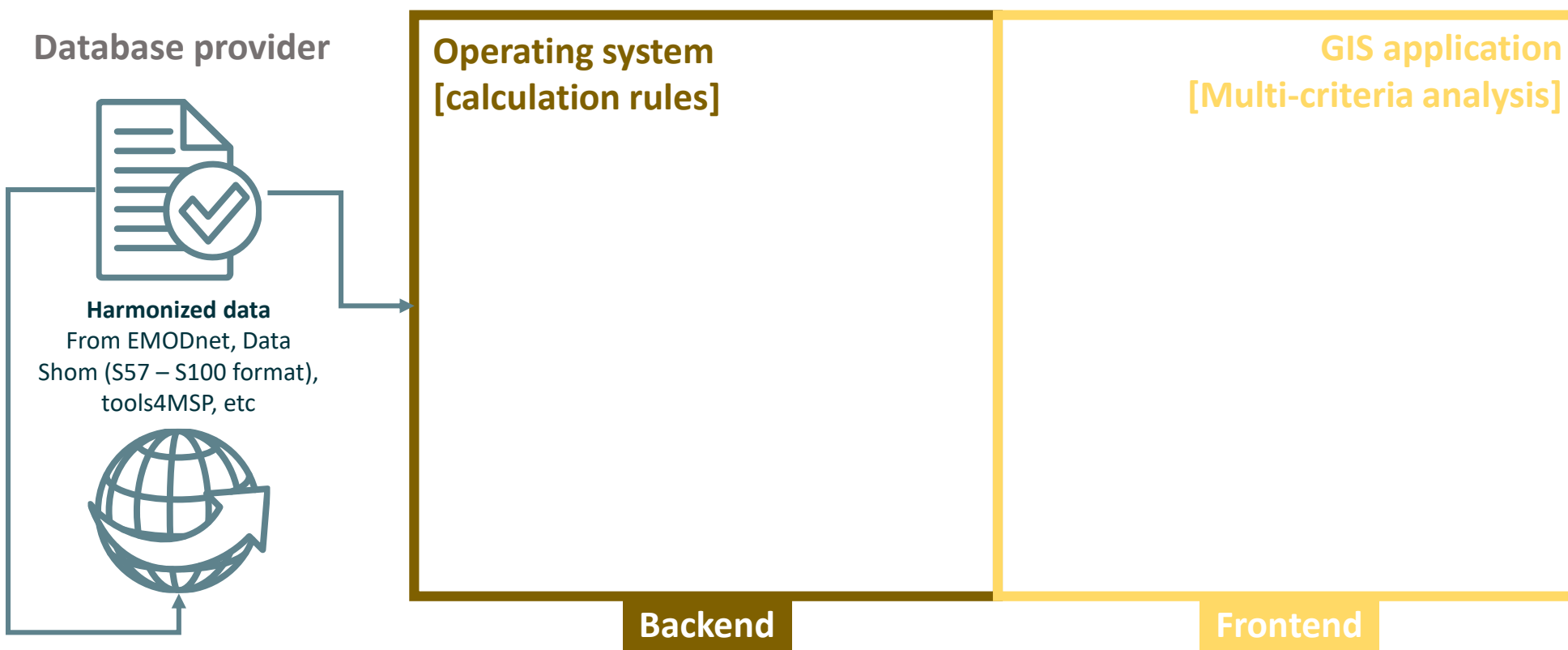


# Spatial Decision-Support Tools (SDSTs): useful devices for MSP practitioners?

- “NaviSafe”: SDSTs for safety navigation



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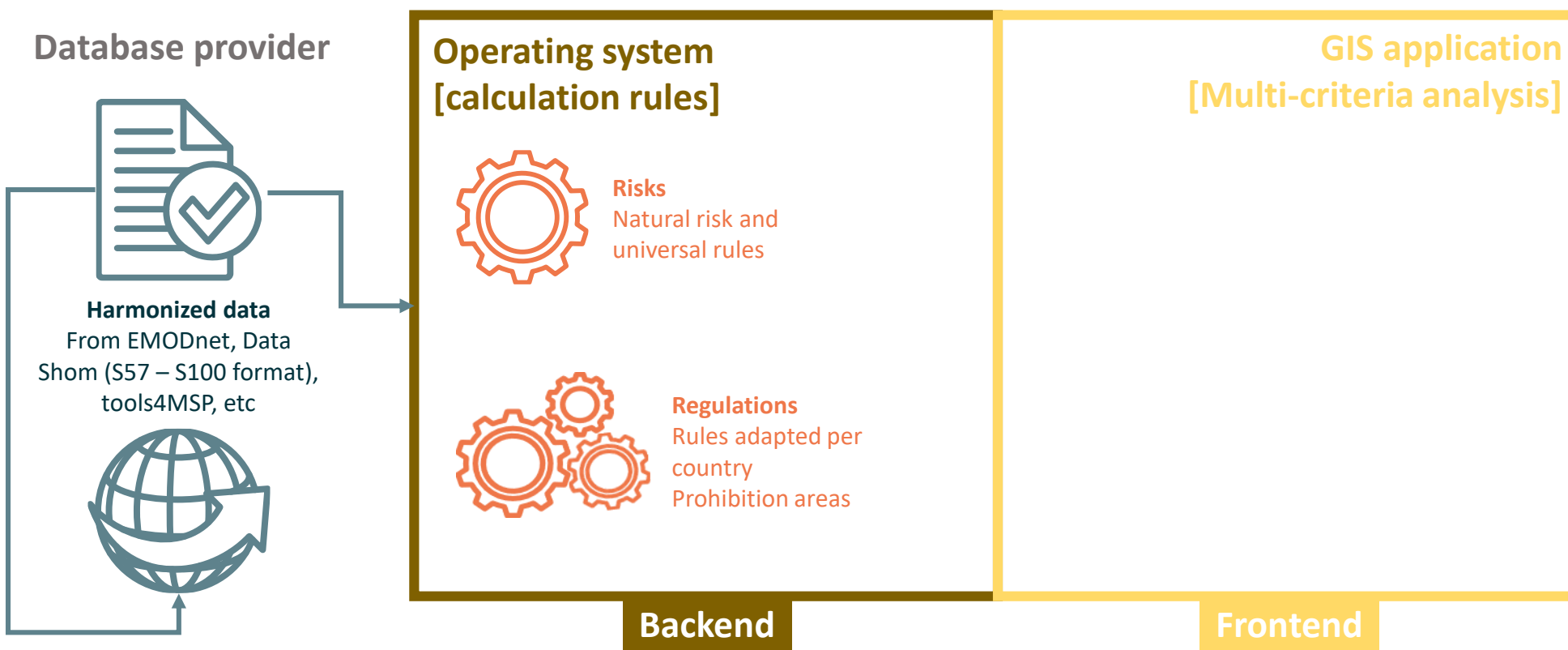


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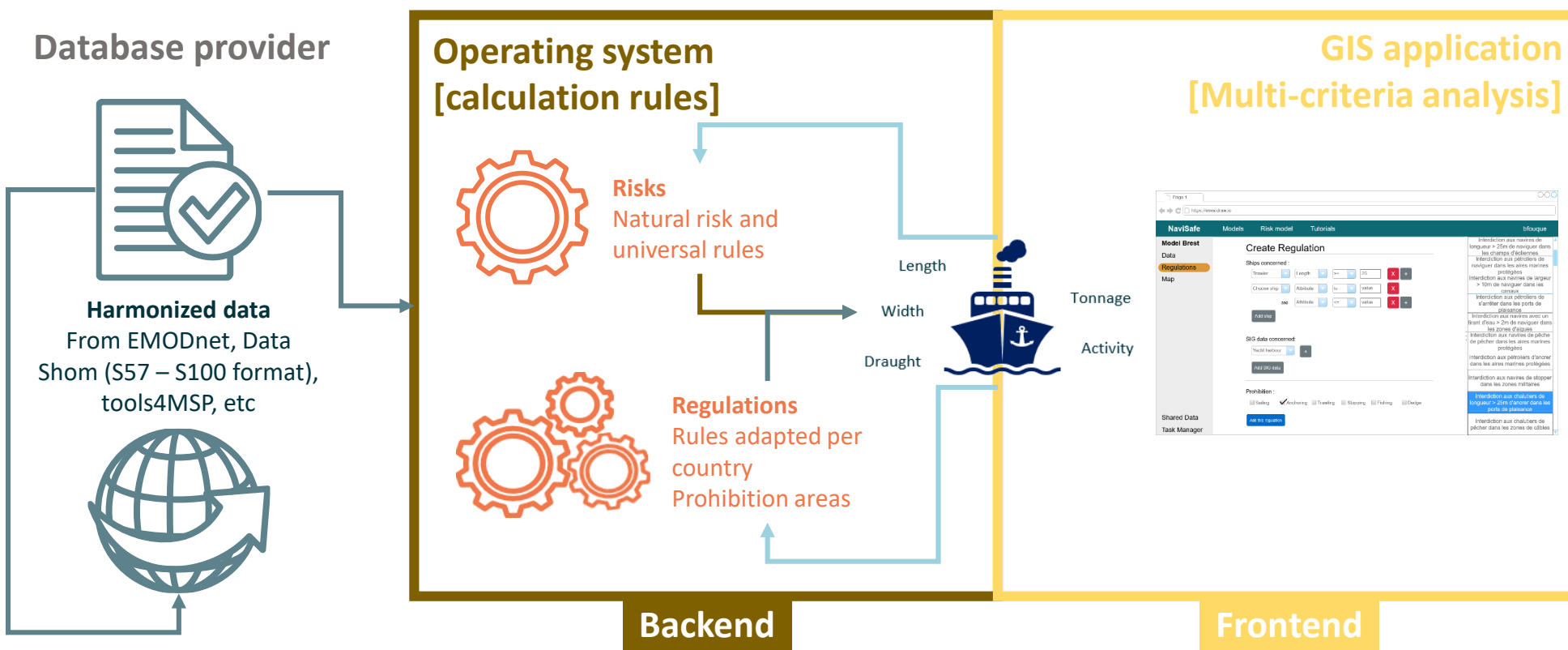


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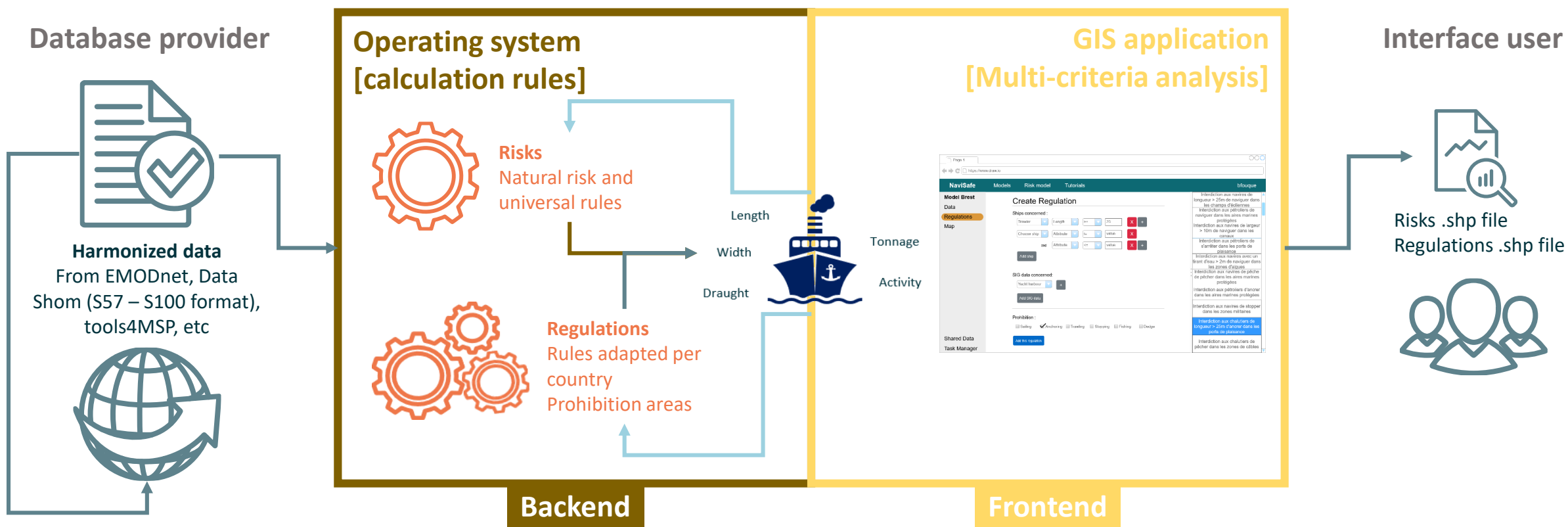


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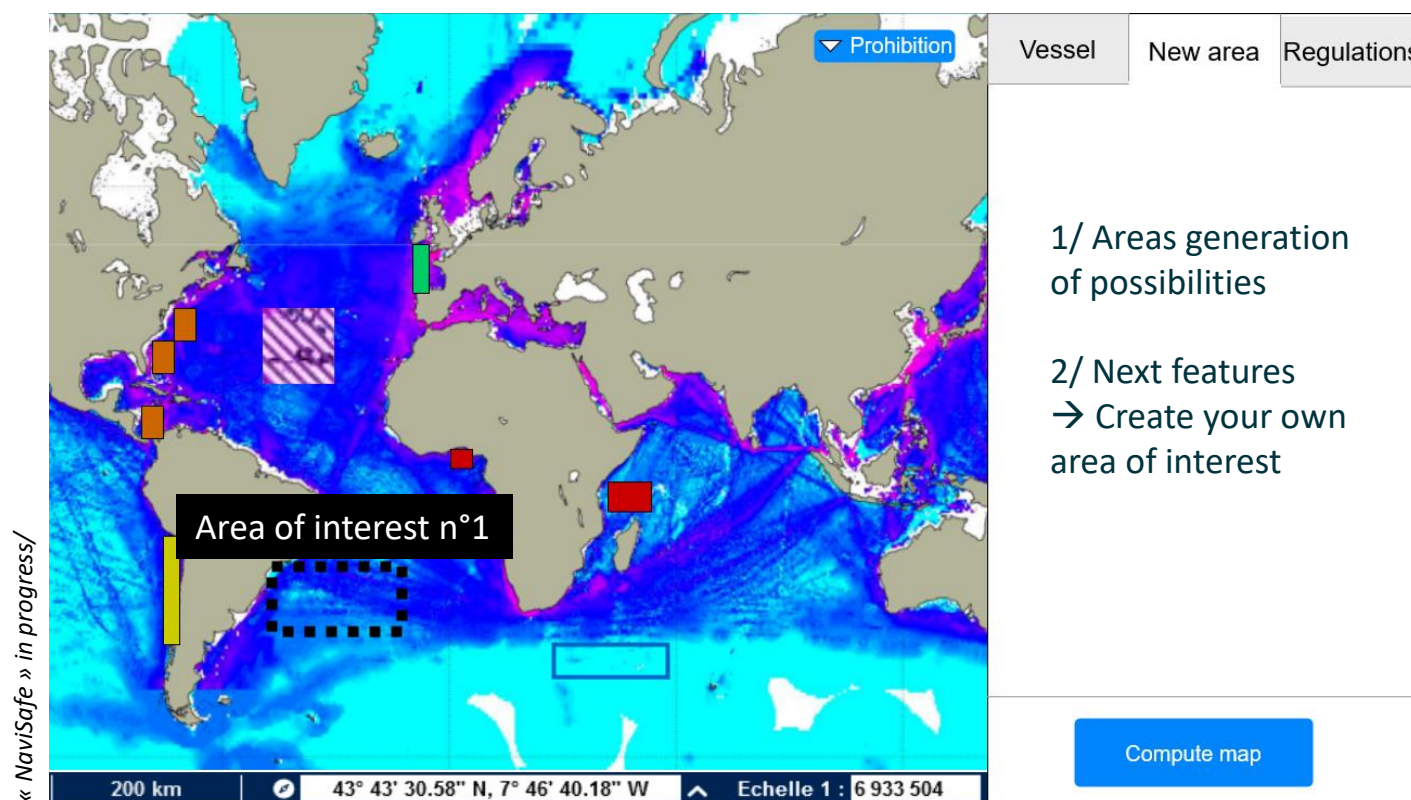


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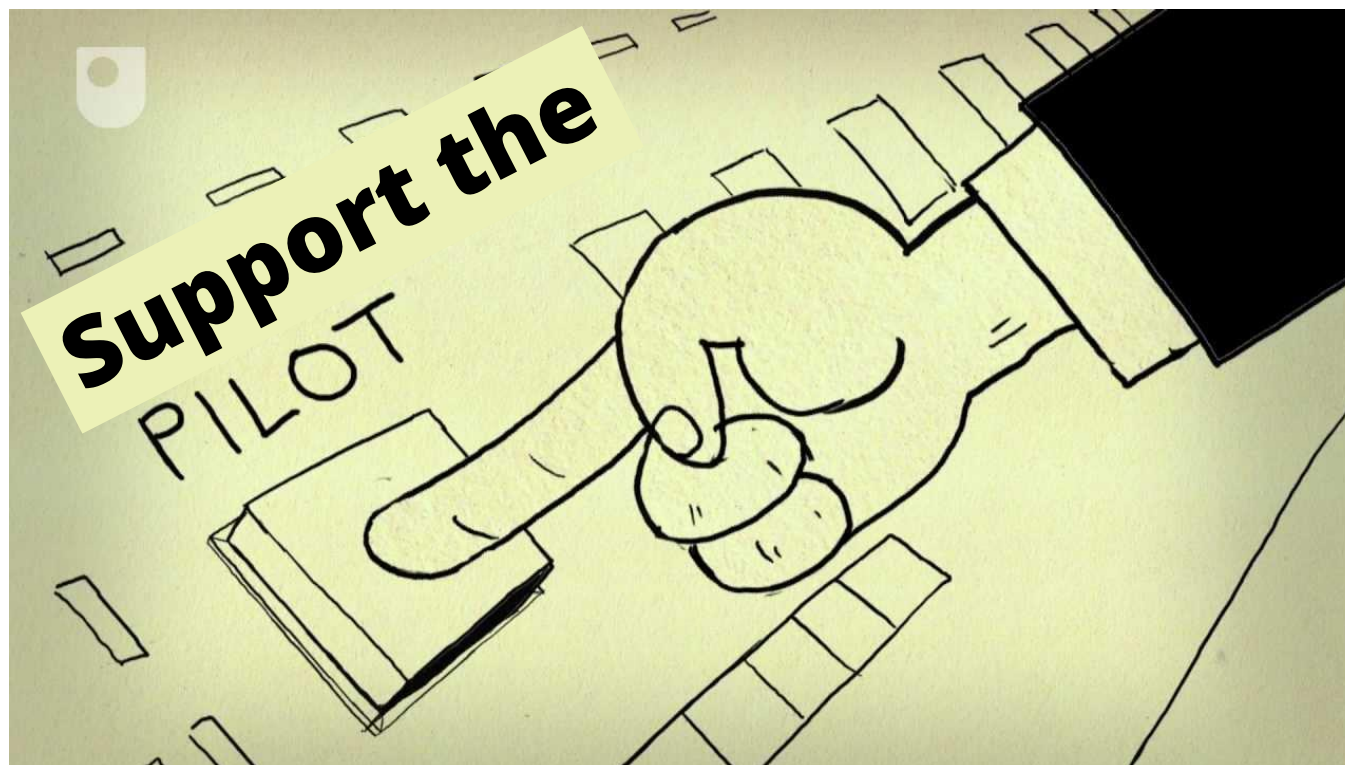


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Topics in the North and Baltic  
Sea Regions

## **Workshop intro**

**Nathalie Scheidegger (LNV)**



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SCENARIO 1: Data availability



SCENARIO 2: Safety, data and a Maripark



SCENARIO 3: Install a Maripark



SCENARIO 4: Market readiness



Roles/aims



Group discussion



# Discussion



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**What specific challenges have you encountered while implementing data sharing practices within MSP - how have you addressed those?**

① Start presenting to display the poll results on this slide.

slido



**What innovative tools are effective in stakeholder participation for MSP processes?**

① Start presenting to display the poll results on this slide.



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Sea Regions

## **Conclusions & wrap-up**

**Marijn Rabaut (BC)**



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# Wrap-up



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**What is your main - take away?**

ⓘ Start presenting to display the poll results on this slide.

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**What topic needs further research/in depth discussion?**

① Start presenting to display the poll results on this slide.



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# Thank you

