



Results and Recommendations on future actions by the Baltic LINES project

HELCOM-VASAB MSP Working Group - 27th March 2019 Hamburg

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Baltic LINES – The mission

- Promote pan-Baltic connectivity in maritime space
- Ensure transnational coherence of shipping lanes and linear energy infrastructure



Key question

Which methods can be used to plan coherently across borders?

WP 4: Coherent planning of linear infrastructure in MSP

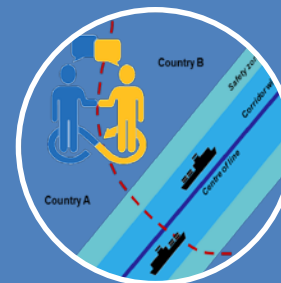
Development of three deliverables with the following objectives:



Identification of planning mismatches and suggestions for planning solutions



Assessment of national approaches and planning criteria (differences)



Practical guide for the planning of ship corridors and energy infrastructure in MSP



All reports available under <https://vasab.org/project/balticlines/project-outputs/>

Step-wise planning approach for ship corridors

Practical guide to the designation of ship corridors

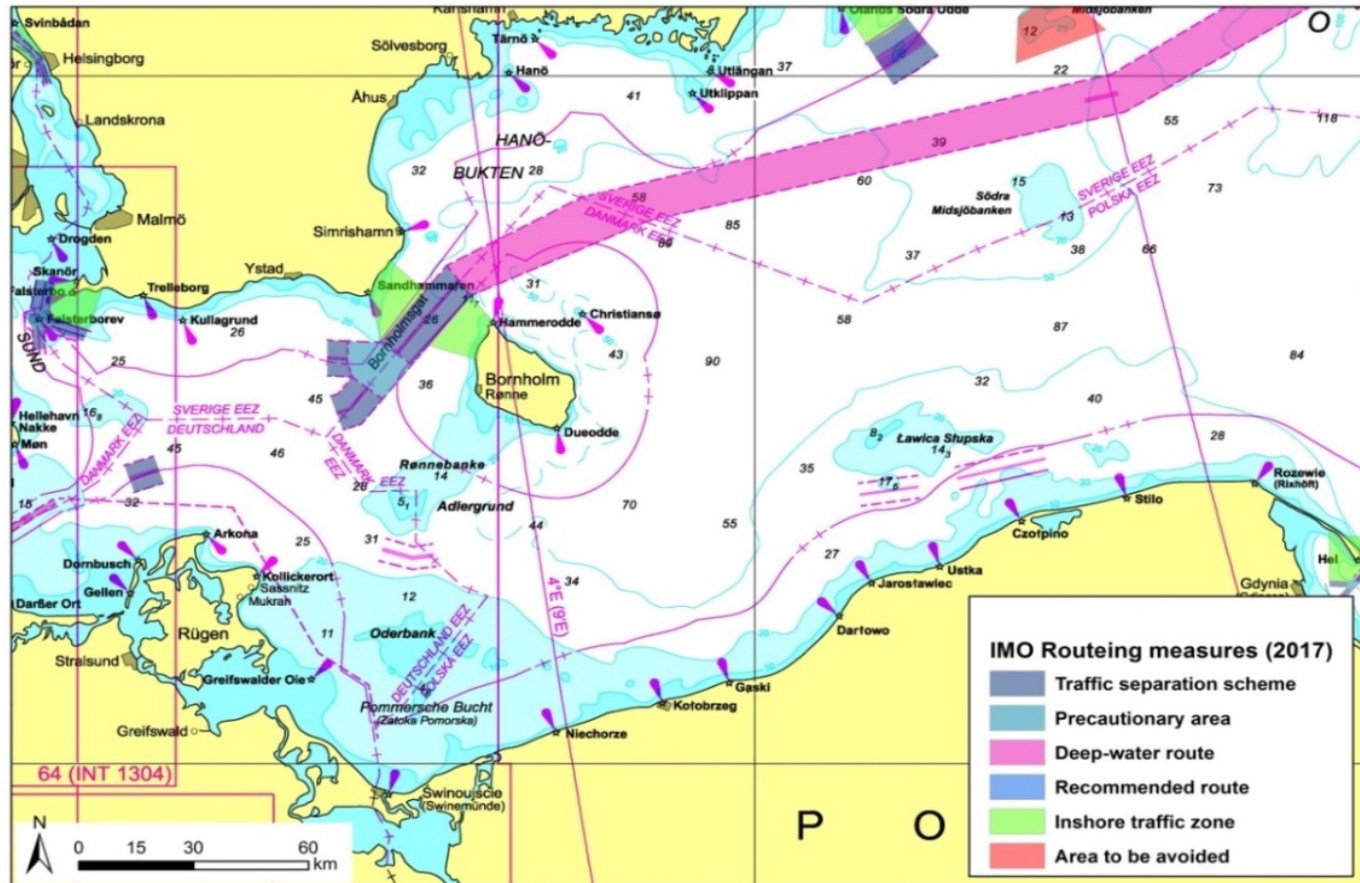
Why did we develop this practical guide?

- Avoidance of planning mismatches by using similar or at least comparable methods for the designation of ship corridors
- Coherency enhances safety at sea → contributes to better environmental conditions, lower economic costs, reduces risk for the loss of human life
- Common approach increases the comparability and mutual understanding of national decisions

What can the planning approach not provide?

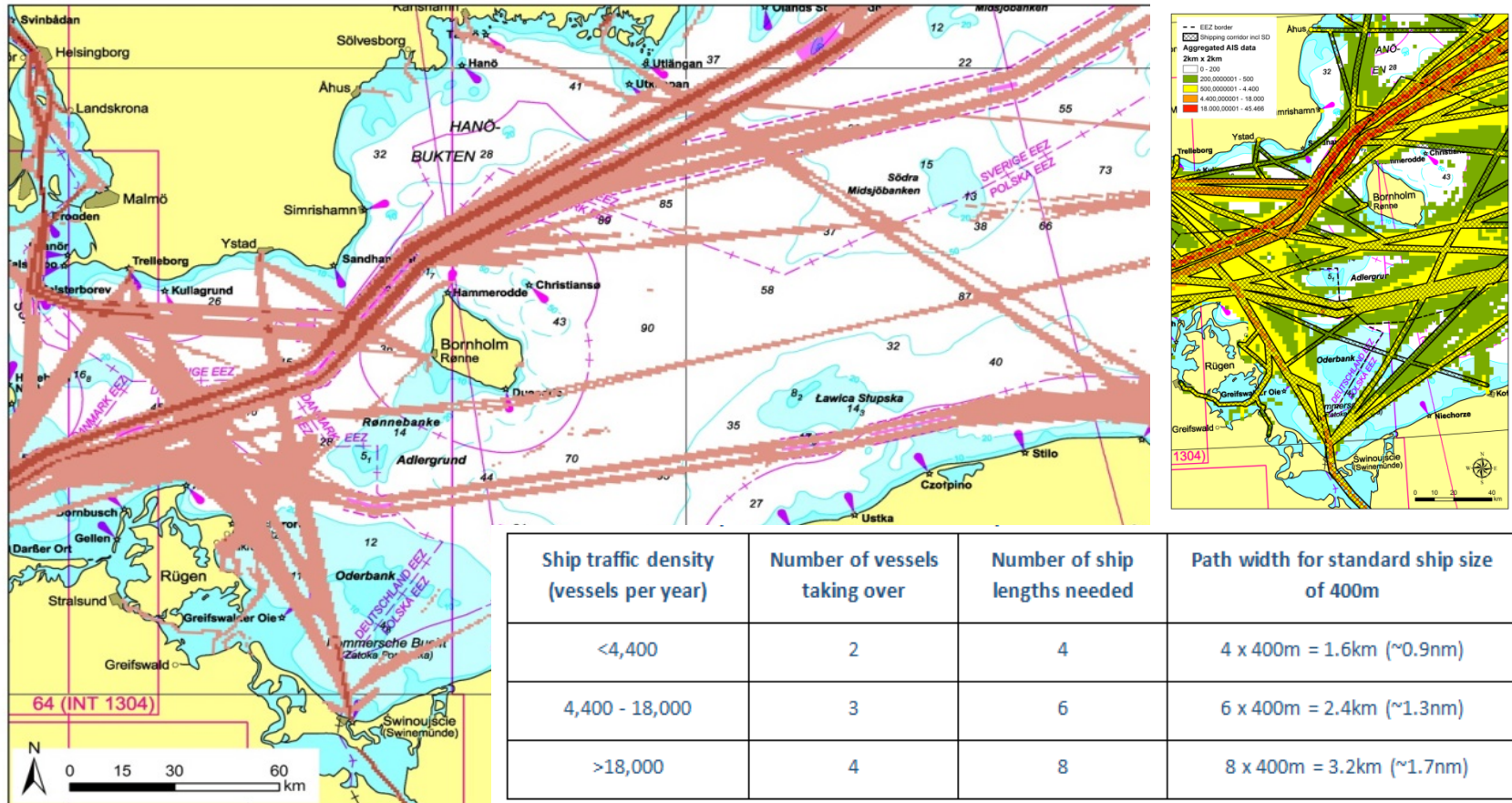
- Cannot present the one-and-only way to designate ship corridors
→ dependent on national context other methods may be preferable
- Cannot replace Formal Safety Assessments (FSA)
- Cannot substitute weighing process to balance between sectoral interests

Step-wise planning approach shipping



Step 1: Transfer of different types of IMO routing schemes to the MSP

Step-wise planning approach shipping



Step 2: Analysis of AIS data and draft of continuous ship corridors*

* HELCOM AIS Expert Working Group agreed on a methodology to produce density maps and statistics from AIS data (Annex I of the [Maritime Assessment](#)).

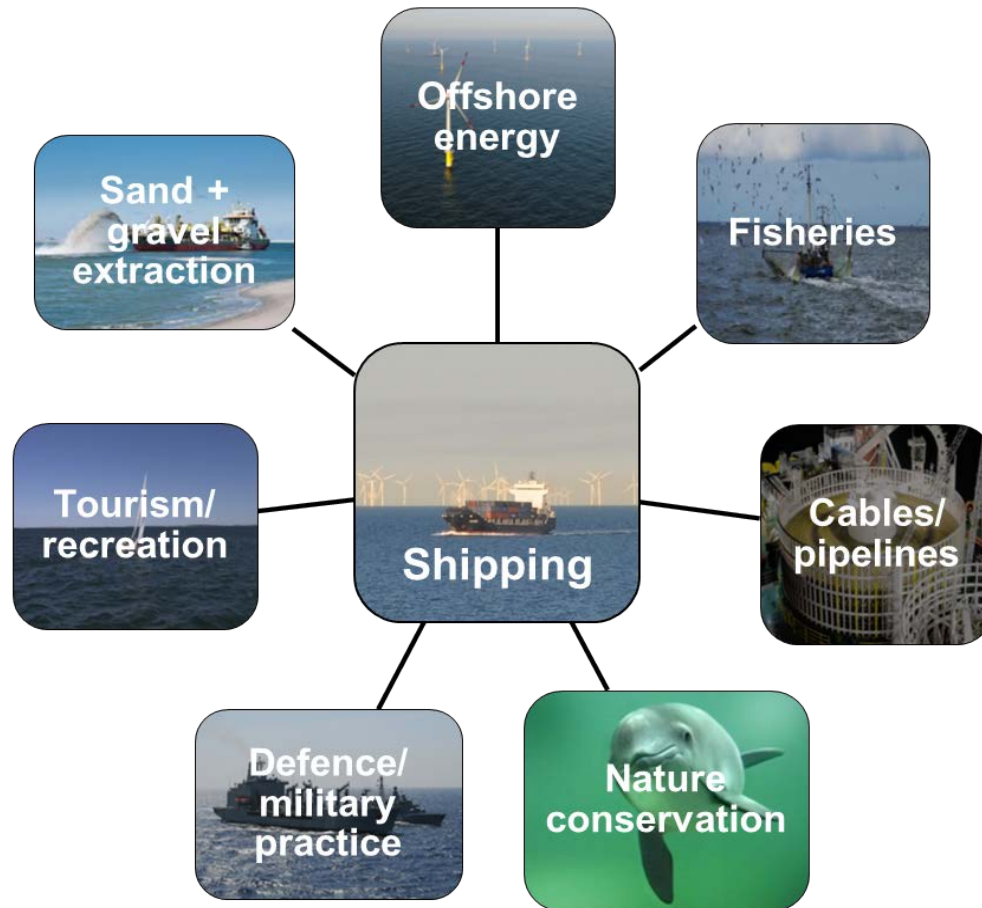
** Method developed by MARIN

Step-wise planning approach shipping



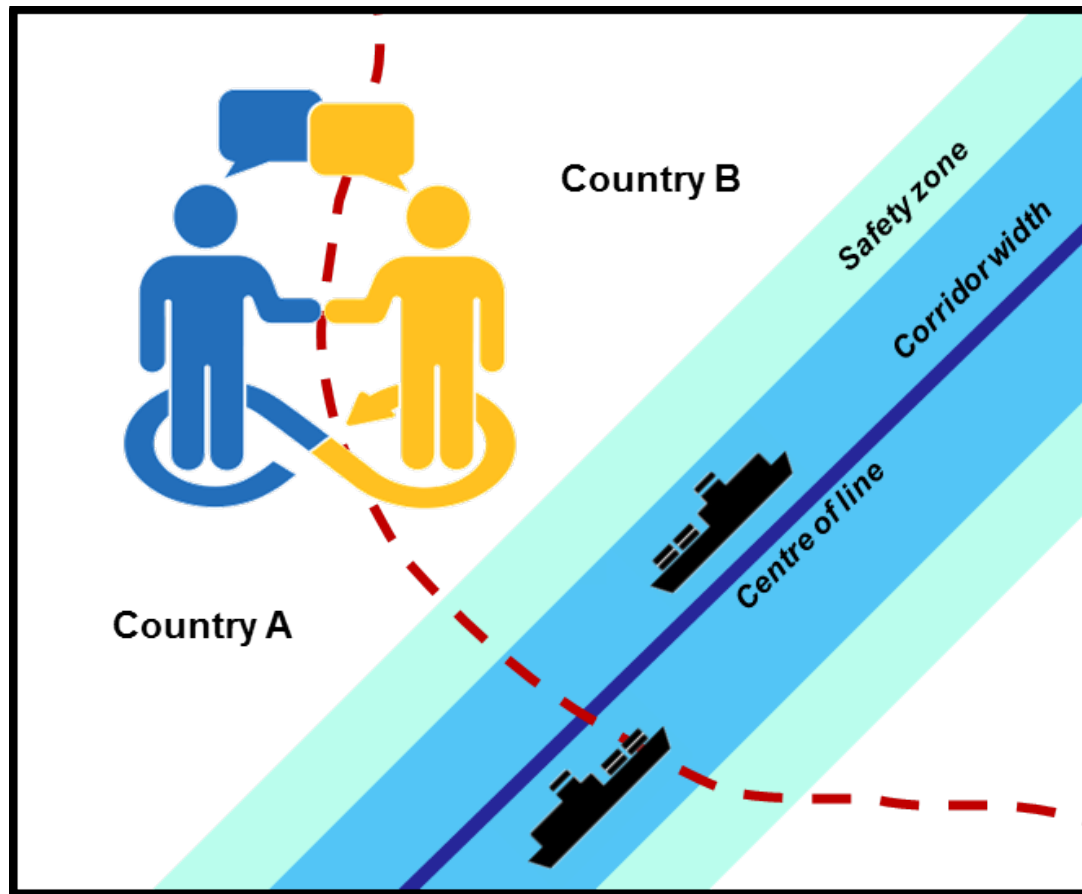
Step 3: Assessment of future developments and related spatial demands

Step-wise planning approach shipping



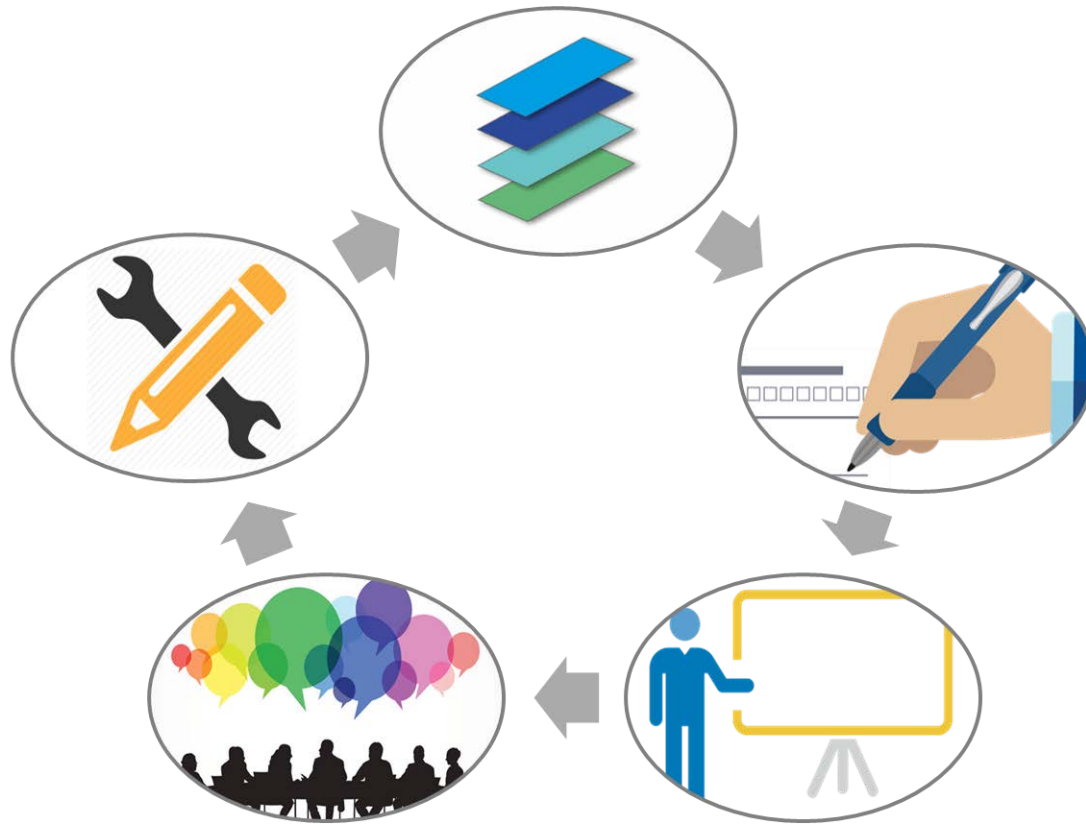
Step 4: Assessment of spatial demands across sectors

Step-wise planning approach shipping



Step 5: Transnational exchange between planners to increase coherency of designations

Step-wise planning approach shipping



Step 6: First draft including area categorization and related textual regulation open for consultation

Energy Planning Criteria

Step-by-step guidance

Collection of the material

- Literature
 - Previously published planning criteria or related information
- Group works in partner meetings
 - Planning criteria and ranking
 - National description of the MSP and offshore energy
 - Interviews per country

Technical infrastructure and connections	Environmental habitats and species	Physical and natural conditions	Other sea uses	Economic factors	Policies	Social aspects
						15
Future (planned) development potential of the grid (connections, extensions) (2)	Marine and coastal protected areas (Natura 2000 areas) (5)	Ground conditions and type of sea bed (example: sandy sediments vs. rocky substrates; preferably homogenous) (5)	Shipping - lanes (TSS), anchoring areas and routes (no-go areas) (example: buffer zones) (5) AND safety of navigation (4)	(Regional) Demand for electricity (2)	Climate policy trends and targets (nationally and globally) (2)	Visual impact on the landscape and views from the coast - nationally important landscape areas (4)
Distance to shore and to construction/ operation/ maintenance port (4) (example: distance from coast as soft constraint, proximity favored)	Biotopes (1)	Wind - annual mean wind at defined height (e.g. 100m) or other measures of wind speed at the location (8)	Pipelines and cables (4)	Local employment and growth stimulation (2)		Stakeholder involvement (1)
Availability of connections and distance to (onshore) grid and its substations/links (8)	Mammal (seasonal) distribution (1)	Water depth - average depth of the sea, depth of certain areas (8)	Other existing permanent infrastructure (3) AND local priority areas / restrictions of other sectors (3) AND existing leases (1)	Trends in energy sector		
Space demand per turbine	(Concentrated) Bird migration routes (2)	Ice conditions (3)	Fishing – (regional) fishing zones, spawning and nursery areas (soft constraint) (3)	Economic profitability		
Area and project size (space demand per turbine (3)	Important bird areas (1) (<i>different than bird N2K areas</i>)	Waves, currents	Dumped munitions (3) (no-go areas)			
Grid capacity (2)			Proximity of existing wind farms in operation / construction and wind farm test sites (2)			
			Cultural heritage (underwater; ship wrecks) - world heritage sites (2)			
			Radars (meteorological, aviation, military) (2)			
			Military (prohibited) zones (2)			
			Marine mineral resources (extraction) (1)			

The role of MSP in locating OWE

DK	Until now sectoral decision-making, MSP in progress
EE	After MSP is in force, exclusive
FI	Probably no area designations
DE	Binding “Site development plan” for EEZ and TS soon to be published. Linked to MSP
LV	MSP will show suitable areas, not exclusive
LT	MSP shows potential areas, exclusive
PL	After MSP is in force, exclusive
SE	MSP will show suitable areas, not exclusive

The role of MSP in locating OWE

- The obvious:
 - The outcome of locating OWE is an interplay of MSP, sector authorities' and operators' decisions and actions
 - The weight of MSP in this differs between countries
- The picture is changing
 - Previously initiatives by the operators have been driving the process, now national coordination is becoming stronger
 - often within MSP processes

Use of planning criteria

	Baltic Sea		North Sea
DK	A set of criteria is used by the energy authority	BE	A set of criteria is used by the MSP authority
EE	No use for a fixed set of planning criteria	NL	A set of criteria is used by the MSP authority
FI	Not needed for MSP, regional sets of criteria are used	NO	No existing criteria
DE	A set of criteria is being developed	SCOT	A set of criteria is used by the MSP authority
LV	A set of criteria is used in MSP		
LT	A set of criteria is used in MSP		
PL	Research projects have developed sets of planning criteria		
SE	An indicative list exists, but always case by case		

Different limits for the same criteria

Wind conditions

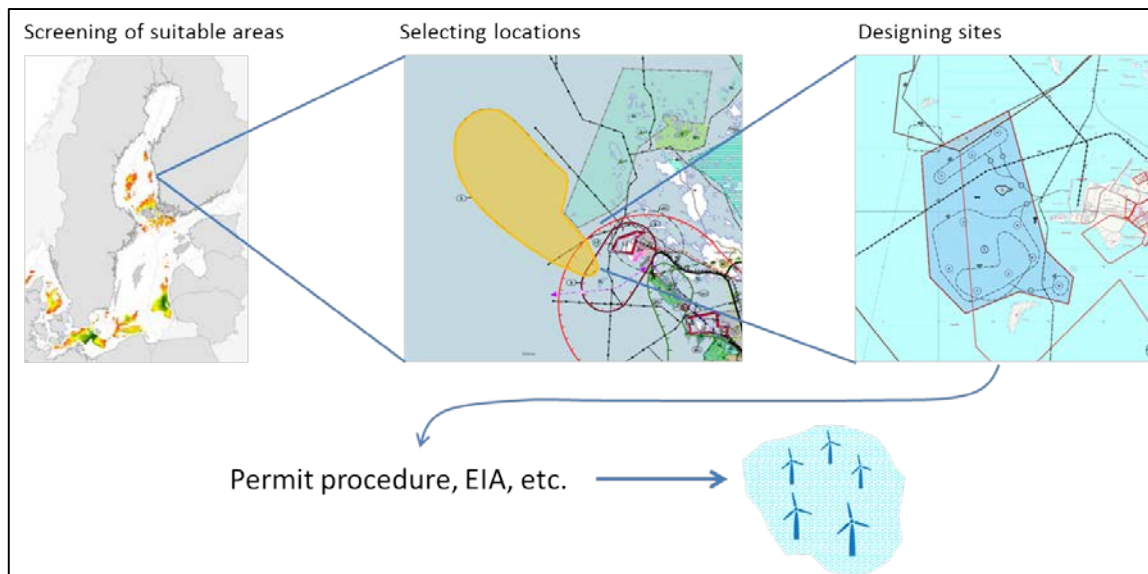
- >9m/s (NorthSEE project);
- In Uusimaa regional plan in Finland >6m/s
- In Latvian MSP, >7,5-8,5m/s

Depth

- Latvia <60m (recently changed from <30m)
- Lithuania 20-50m
- Sweden <40m

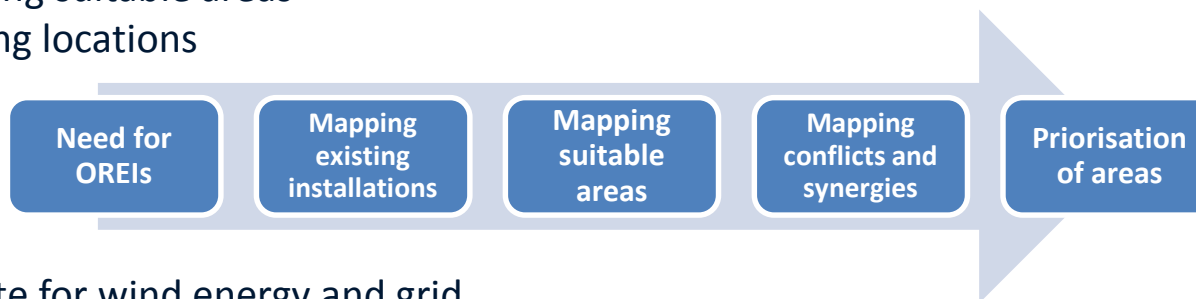
Distance from the shore

- Denmark
 - Smaller turbines located between 4 and 20 km
 - Large turbines are located > 15 km distance
- Estonia
 - Hiiumaa >12 km
 - Pärnu bay >10 km
- Latvia > 8km
- Poland >22,2 km (EEZ=12nm)



Steps of the guidance document

- Screening suitable areas
- Selecting locations



- Separate for wind energy and grid

Step 1: define the need for development (wind)

- *Analyse political goals*
- *Identify priorities of development*
- *Check priorities of neighbouring countries*
- *Analyse future trends*

Step 2: Mapping the existing designations and installations (wind)

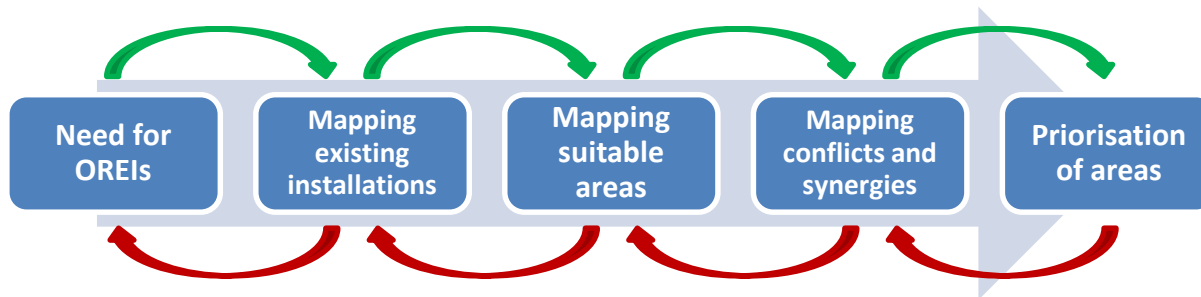
- *Take existing energy sector plans as a starting point*
 - *Swedish example*
 1. *Take the existing national energy plan*
 2. *Analyse applicability of old areas and identify new ones (with the sectors)*
 3. *Include them into your MSP*
- *Other uses (hard constraints)*

Step 3: Mapping suitable areas (general planning criteria) (wind)

- *Physical conditions*
- *Demand for energy in the area*
- *Grid connections*

Step 4: Mapping conflicts and synergies with other uses (wind)
- Organise cross-sectoral discussions

Step 5: Define priority areas for offshore wind energy (wind)
→ the plan



Recommendations

How did we develop project recommendations

Development of project recommendations

We took the following documents into account to develop the Baltic LINES recommendations:

- Baltic LINES activities and reports
- Good practices identified during the course of the project
- The analysis of recommendations provided under previous and parallel ongoing MSP projects

The recommendations have been discussed and validated by project partners and other external stakeholders during various meetings:

- 3 partner meetings within the last year
- The Connecting Seas conference held in Hamburg on the 13th and 14th February, 2019

Connecting Seas conference



- Common NorthSEE and Baltic LINES conference
- First time that MSP experts and stakeholders from both the North and Baltic Sea Regions gathered to exchange knowledge and experience; more than 200 participants

Connecting Seas conference

The conference hosted 9 interactive workshops gathering more than 50 speakers dealing with the following topics:

- Energy sector
- Shipping sector
- Environmental impact
- Stakeholder involvement
- Other sea uses in MSP
- Data in MSPs
- Synergies and conflicts in MSP
- Future trends and scenarios
- Multi-level governance



Baltic LINES recommendations

Horizontal recommendations

1) Regular update of the planning criteria tables (cf. WP4)

Recommendations:

- Tables should be regularly (at least once per year) reviewed and updated, where necessary, by the national MSP authorities.
- Any changes within these planning criteria should be reported back, with the rationale being explained, during the regular meetings of the HELCOM-VASAB MSP WG.
- Changes could also be presented to other relevant international platforms, such as the HELCOM Group of Experts on Safety of Navigation (SAFE NAV), HELCOM Maritime WG.

Horizontal recommendations

2) Moving towards cooperation on MSP implementation

Recommendations:

- Baltic LINES recommends to define concrete steps towards this goal;
these could include voluntary agreements.
- Such agreements could be especially helpful with regard to linear infrastructure and shipping priority areas while crossing national borders.

Horizontal recommendations

3) When appropriate, consider using the MSP Challenge Baltic Sea Edition

MSP Challenge has proven to be a good way to communicate with the energy and shipping stakeholders and involve them in the MSP process.

At same time it is a good tool to stimulate discussions among planners to identify cross-border issues as well as testing solutions.

Recommendations:

- Use the MSP Challenge Baltic Sea Edition
- Whenever technical possible, underlying data & information used within the Baltic Sea MSP Challenge should make use of BASEMAPS (the tool to access data via MSDI developed under Baltic LINES)

Horizontal recommendations

4) Continue and expand efforts to involve wider range of stakeholders

Recommendations:

- Use the Baltic Planning Forums which are open to a wider range of stakeholders. Invite especially other ministries than those dedicated to MSP, sector associations and related projects & initiatives.
- The MSP platform project called Capacity4MSP, submitted under the Baltic Sea Region Interreg programme in January 2019, plans to organise a series of workshops. Use them as a starting point for these Forums to involve new stakeholders.
- The HELCOM-VASAB MSP WG could maintain an oversight over these ongoing activities and continue to address policy questions as outlined in its work plan.

Horizontal recommendations

5) Increase and continue efforts to take into account land-sea interaction effects

Recommendations:

- HELCOM-VASAB MSP WG should continue to build on existing efforts made under previous projects and initiatives to **develop analytical tools** – especially in view of the transnational dimension of such land-sea interactions.
- Especially take into account:
 - Pan Baltic Scope
 - The approach of the Maritime Institute and the Institute of Development in Poland on land-sea interactions
 - BaltSpace ('Spatial Cost Benefit Analysis Tool')
 - ESPON

Energy recommendations

1) Invite and involve the energy sector in the HELCOM-VASAB MSP working group

Recommendations:

- the HELCOM-VASAB MSP working group should organise **dedicated energy sessions** or workshops at least once a year.
- regular **invitation of energy stakeholders** such as TSOs, Offshore Wind Farms developers or civil servants responsible for renewable energy policy

Energy recommendations

1) Invite and involve the energy sector in the HELCOM-VASAB MSP working group

Topics which could be discussed by Baltic coastal states in this framework:

- The templates presenting the energy profile of each Baltic Sea country should be validated and subsequently agreement sought on a regular review and update to be done by all BSR countries.
- The coordination for linear infrastructure in MSP and on the definition of strategic corridors. The establishment of gates should be explored as well.
- The limitations of terrestrial transmission grid for the development of an offshore grid and the transfer of power from offshore energy installations should be addressed.
- Align and take into account the results and recommendations of dedicated energy projects, such as the Baltic InteGrid project.

Energy recommendations

2) Establish a technical Pan Baltic Offshore energy and grid stakeholder group

Recommendations:

- Building on the good practice established by the North Sea Energy Initiative, **create a technical Pan Baltic Offshore energy and grid stakeholder group/initiative** made up of experts, which could actively feed into future projects (e.g. platform projects).

Shipping recommendations

1) Extend the mandate of an existing group or improve the cooperation between existing groups on MSP issues in relation to shipping, safety and seaport issues

Recommendations:

- Develop specific 'Terms of reference', which should explore how HELCOM Safe Nav, HELCOM Maritime and HELCOM-VASAB MSP WG should **practically cooperate** on that matter and what specific topics should be discussed on MSP issues dealing with shipping. The approval of parent bodies (HELCOM and VASAB) should be obtained.

Shipping recommendations

Topics which could be discussed by Baltic coastal states in this framework :

- common positions towards the IMO in view of possible shifting of shipping lanes
- how to better integrate and align IMO terminology within national MSPs
- discuss and prepare an agreement establishing that a central shipping line should be used as a common starting point for shipping lines defined within national MSPs
- discuss further results on how and whether MSPs can take into account future developments within the shipping sectors
- discuss the results / future possible development of the few existing tools to assess land-sea interaction effects between shipping, ports development and further on-land transportation of goods.

Data recommendations

1) Update the Terms of Reference of the Baltic Sea Region MSP Data Expert Sub-group (BSR MSP Data ESG) under the HELCOM-VASAB MSP Work Group

Recommendations (1/2):

- The BSR MSP Data ESG should work to **support the data availability** in the newly created tool to access BASEMAPS and make sure that their national data is included.
- The status of the data availability should be **followed up** at each group meeting of the BSR MSP data ESG. The data ESG should inform the HELCOM-VASAB MSP WG on the status of BASEMAPS' completion.

Data recommendations

Recommendations (2/2):

- BASEMAPS should be the focal point for getting an overview on MSP related spatial data stemming from national Marine Spatial Data Infrastructures (MSDIs). Therefore, **BASEMAPS could be the starting point for cataloguing relevant data** to be used by MSP related spatial decision support tools.
- BASEMAPS should be continuously fed and its data layers **extended to other sectors** such as aquaculture, underwater cultural heritage, etc.
- The BSR MSP Data ESG should encourage MSP data providers to establish **English as an additional language** to provide MSP transboundary data.
- BSR MSP Data ESG should work to support a **common symbology** for MSP data and establishment of common term vocabulary to achieve semantic interoperability.

Thank you for your attention!