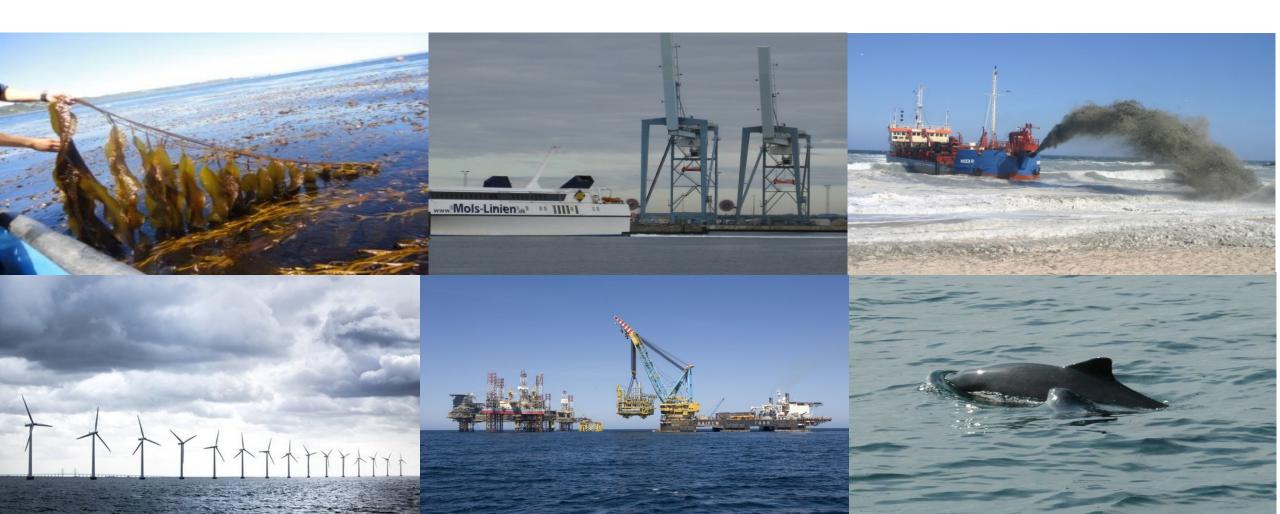
# **Danish MSDI**





## The Danish Maritime Spatial Data Infrastructure (MSDI)



### Geo Data of the Sea

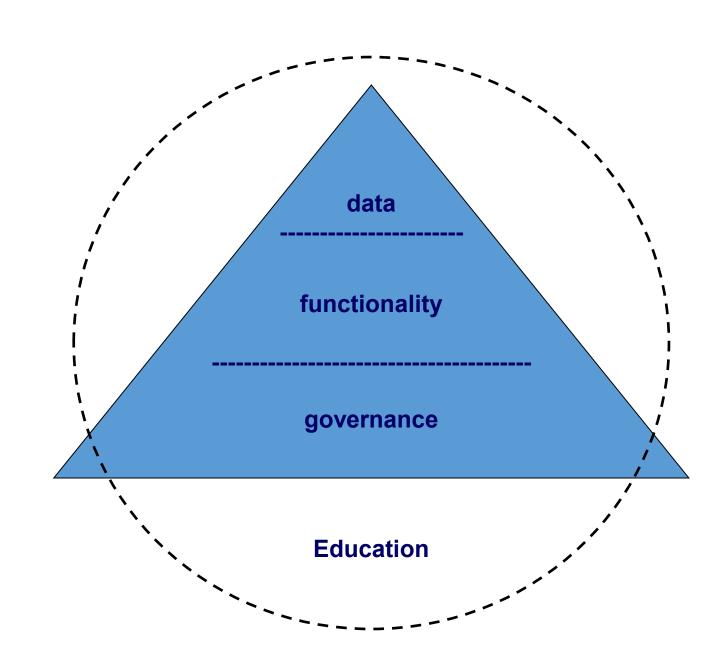
### **Components of an infrastructure:**

**DATA** - metadata, datasets

**FUNCTIONALITY** - spatial data services, web services and other technology

**GOVERNANCE** - Agreements and Organisation – rights and access

**Education** 



### Maritime spatial planning

#### Article 6

Minimum requirements for maritime spatial planning Member States shall establish procedural steps to contribute to the objectives listed in Article 5, taking into account relevant activities and uses in marine waters:

- (e) Organise the use of the best available data in accordance with Article 10.
- (f) Ensure trans-boundary cooperation between Member States in accordance with Article 12.
- (g) Promote cooperation with third countries in accordance with Article 13.



EN 28.8.2014

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#### DIRECTIVES

#### DIRECTIVE 2014/89/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

establishing a framework for maritime spatial planning

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Articles 43(2), 100(2), 192(1), and 194(2) thereof.

Having regard to the proposal from the European Commission

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee (1),

Having regard to the opinion of the Committee of the Regions (2),

Acting in accordance with the ordinary legislative procedure (3),

- (1) The high and rapidly increasing demand for maritime space for different purposes, such as installations for the production of energy from renewable sources, oil and gas exploration and exploitation, maritime shipping and fishing activities, ecosystem and biodiversity conservation, the extraction of raw materials, tourism, aquaculture installations and underwater cultural heritage, as well as the multiple pressures on coastal resources, require an integrated planning and management approach.
- Such an approach to ocean management and maritime governance has been developed in the Integrated Maritime Policy for the European Union (IMP), including, as its environmental pillar, Directive 2008/56/EC of the European Parliament and of the Council (4). The objective of the IMP is to support the sustainable development of seas and oceans and to develop coordinated, coherent and transparent decision-making in relation to the Union's sectoral policies affecting the oceans, seas, islands, coastal and outermost regions and maritime sectors, including through sea-basin strategies or macro-regional strategies, whilst achieving good environmental status as set out in Directive
- The IMP identifies maritime spatial planning as a cross-cutting policy tool enabling public authorities and stakeholders to apply a coordinated, integrated and trans-boundary approach. The application of an ecosystem-based approach will contribute to promoting the sustainable development and growth of the maritime and coastal economies and the sustainable use of marine and coastal resources.

Position of the European Parliament of 17 April 2014 (not yet published in the Official Journal) and decision of the Council of

<sup>(4)</sup> Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for Community action in the field of marine environmental policy (Marine Strategy Framework Directive) (OJ 1. 164, 25.6.2008, p. 19).

### The Danish Components of an infrastructure:



### **Appendix:**

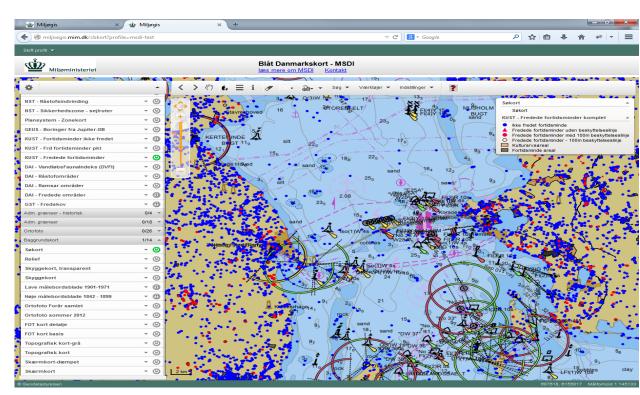
- 1. GOVERNANCE model Agreements and Organisation rights and access
- 2. Financial model

3. **Technical description –** Functionality - spatial data services, web services and other technology,

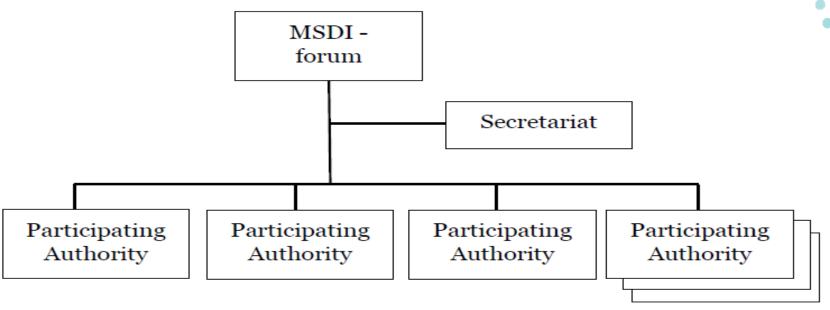
metadata

- 4. **Description of DATA** datasets
- 5. Implementation plan

**WEB GIS solution –** "The Blue Danish sea map"



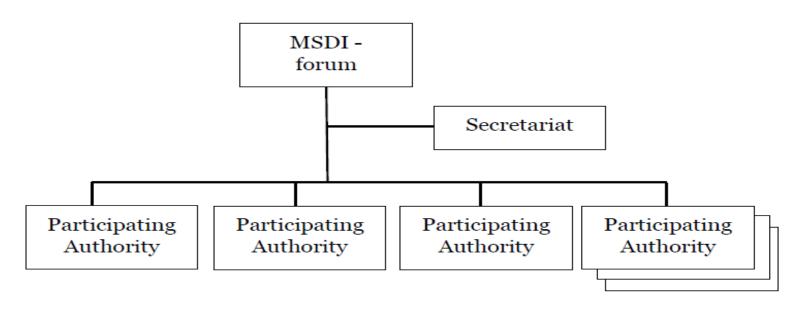




The MSDI-forum has amongst other tasks to:

- Approve cooperation agreements
- Approve the upcoming yearly budget
- Put forth new proposals to and initiate new developments for within the MSDI area, including to finance small analytical and developmental activities
- Hold meetings in the MSDI-forum based on demand, but at least once a year





The MSDI-secretariat has amongst other tasks to:

- Ensure that standards, services, etc. fulfil the requirements that are described in the technical solution for the MSDI
- Ensure that updates for data and data quality are described and implemented as agreed upon
- Be primary point of contact for technical support for the users of the MSDI
- Propose new initiatives to further develop the MSDI area
- Responsible for the administrative part of the cooperation, herby, produce cooperation agreements and conduct and prepare documents and draft decisions for meetings in the MSDI-forum
- Offer assistance and training of colleagues to the participating authorities



#### **Obligations for participating authorities**

The participating authorities that contribute their data commit to:

- Provide information on metadata and services as agreed upon within the technical description of the MSDI
- Identify a "single point of contact", which the MSDI secretariat can refer to in case of technical problems for an authority
- Participate in the MSDI-forum

### **Financing**

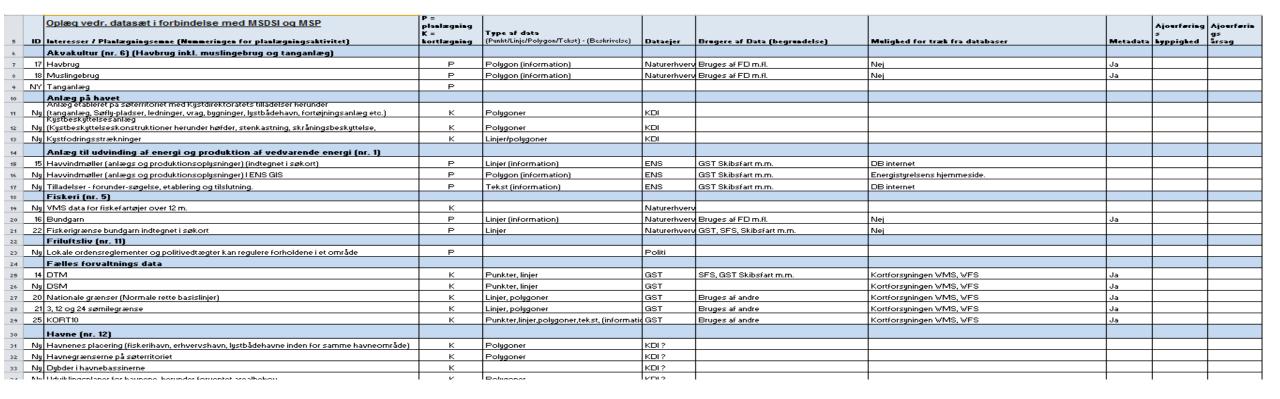
Authorities that want services within the MSDI, pay an annual fee in accordance to the financial model. This applies regardless if a participant provides data or not. Other institutions, such as universities, which, based on agreement with the MSDI-forum, contributes with relevant data to the MSDI, but do not use services from the MSDI, can do this outside of the financial agreement.

#### **Priced data**

For some dataset, which will be included in the MSDI, applies that they are priced, such as nautical chart data. It is the individual data owners that set the guidelines for use of their data including access criteria, payment models and international exchange.

#### Presentations of data sets associated with MSDI and MSP

- Gives an overview of dataset needed for MSP
- Almost 80 datasets identified







Ministry of Environment and Food of Denmark

Agency for Water and Nature Management









Danish Geodata

Agency





Ministry of Environment and Food of Denmark

Environmental Protection Agency



Ministry of Environment and Food of Denmark















DANMARKSKORT



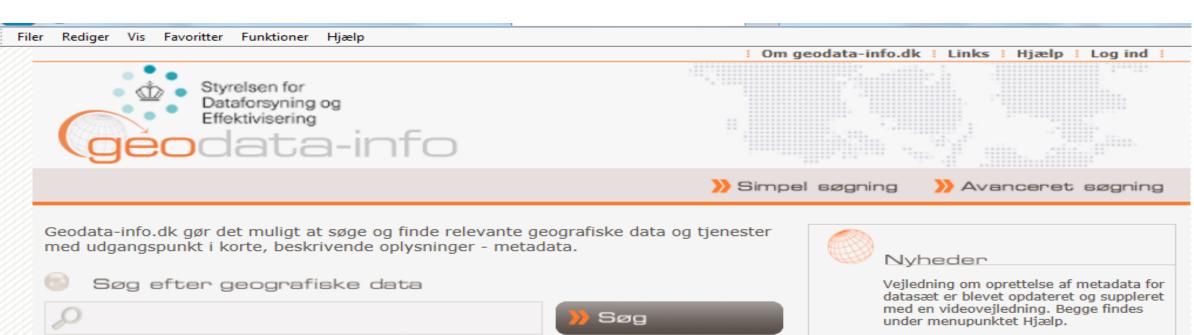




#### DATASÆT

METABATA	DATA	STATUS
Se meradasa	Fiskerigstense bundgam indtegnet i sakort (Bekendtgarelsen)	likke klasgjort
Se metadata	Skibstrefikmansber; omnåder, fervende, lob og render som skibene reelt benyfter I og uden for enbefalede ruter inklusiv bufferponsk i forhold till andre aktiviteter	lide klergjort
Se meradera	Skilbsruter (an befalledie) og skilbstrafi ksystemer indtagnet på sekort m.m.	linia klargjort
Se meradura	Øvrige forbudsområder sprængstoffer exct. Ammunition og sprængstoffer	Bise klargjort
Se metadata	Adverseliftrarådningsom råder indtegriet i sakort, tillstedeværelse af ammunition og sprængstoffer	Brice klangfort
Se metadete	Anlong ladser inchagnet i sekort	Note klargjort
Se metadota	Lodsopsamlingssteder indregnet i sakort	Rike klargjort
le metadata	Eiroer over sej Itarit farvand	like klargjort
Se metadata	Fyr finje, fervendsefmærkning m.m. indtegnet i sekont	Bike klangjort
Se metadata	Kapsejladsbaner officielle indtegnet i sakort	livke klargjort







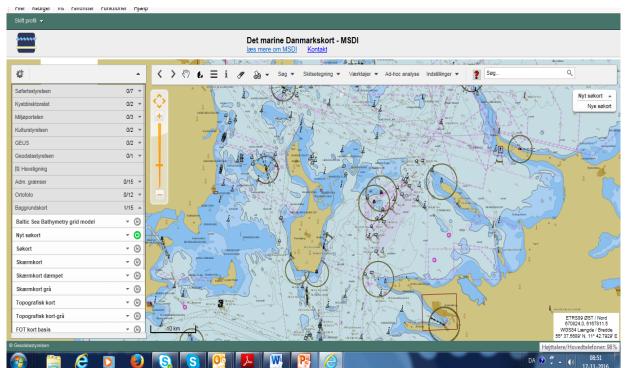


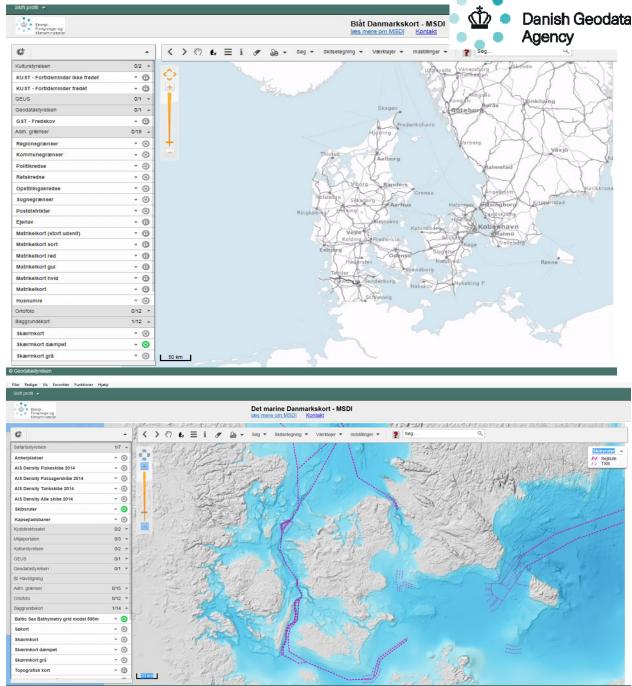


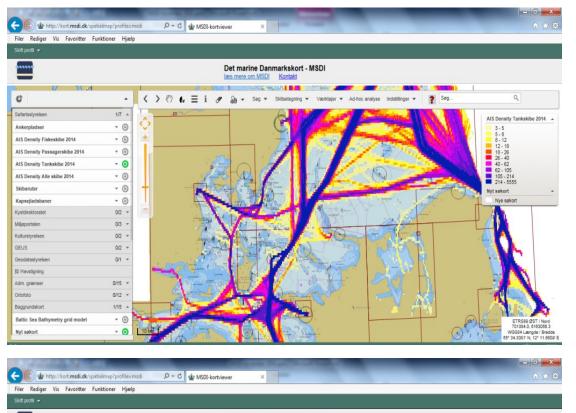
#### Sidst opdateret

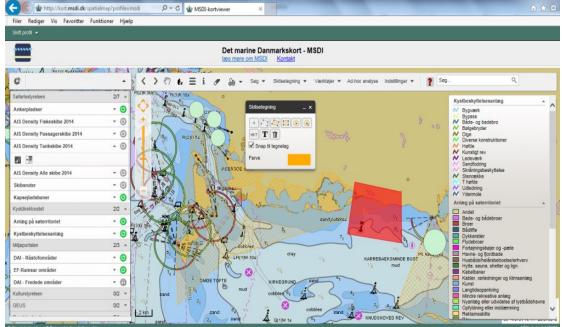
- WFS for INSPIRE/ELF Land Cover Vector
- WFS for INSPIRE/ELF Administrative Units
- WFS for INSPIRE/ELF Geographical Names
- Natura2000 planer
- Vandplaner

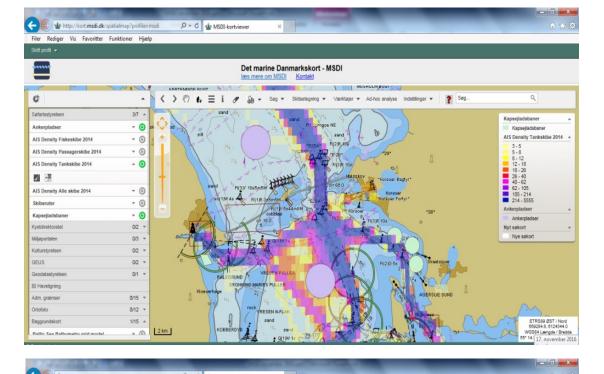
Access to the Danish MSDI gives the different agencies many opportunities to visualize data and use data

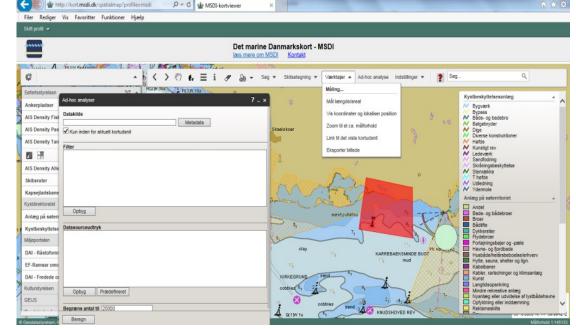








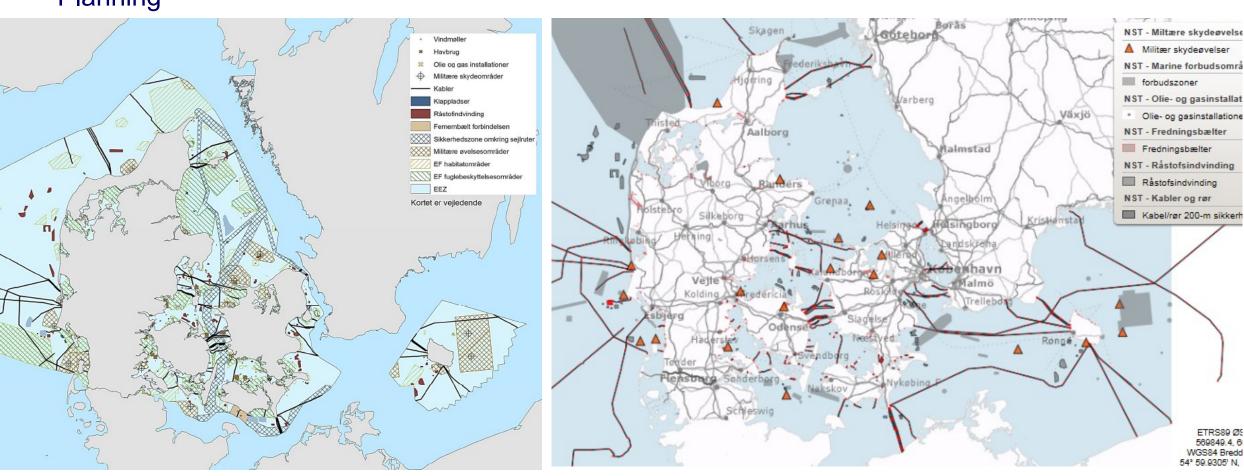




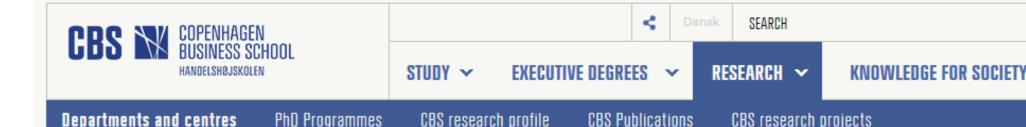
## **MSDI** – seen from a Danish perspective

Planning across borders MSP data set used for:

- Overview/Charting
- Planning







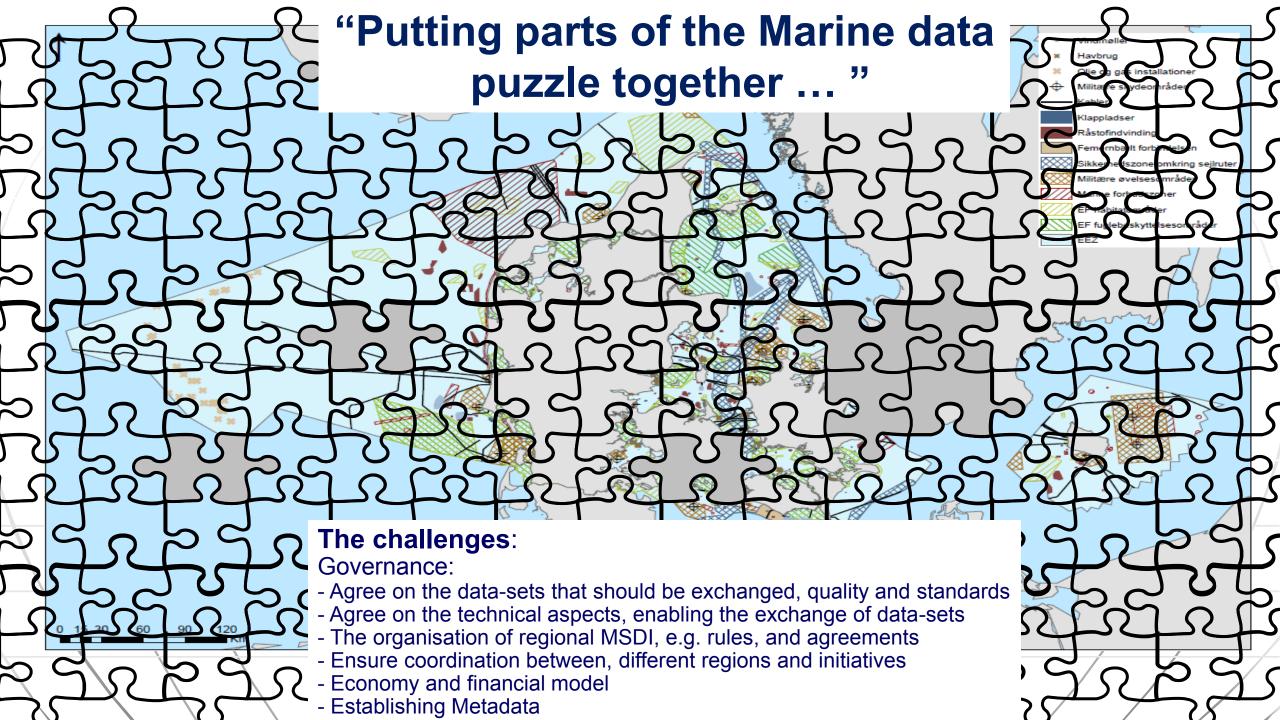
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MSDI = accessible data picture that supports activity in the sea and coastal

hinterland

- Land Use
- Tourism
- Oil &Gas
- Mariculture
- CoastalDefence
- Ports & Navigation
- Military Activities
- Culture
- Conservation
- Dredging & Disposal
- Submarine Cables



Fishing

RenewableEnergy

MarineRecreation

Mineral Extraction