

# Prostrorno planiranje mora

Uvod i kratki sažetak razvoja u EU

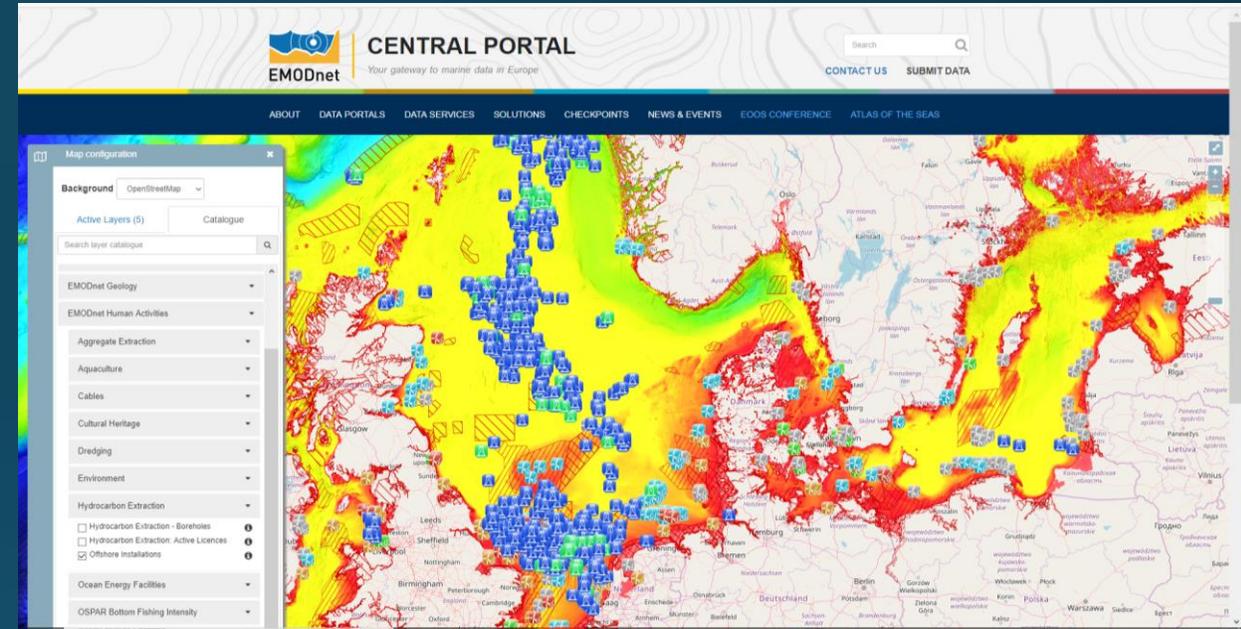
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# Uvod u prostorno planiranje mora

- Javni proces analiziranja i distribucije (prostorne i vremenske) pomorskih aktivnosti za postizanje ekoloških, gospodarskih i društvenih ciljeva;
- Proces prostornog planiranja je baziran pristupu temeljen na ekosustavu (EBA) – ravnoteža zahtjeva društva; ekonomskog razvitka i očuvanje okoliša;
- Praktičan način za stvaranje i uspostavljanje racionalnijeg korištenja pomorskog dobra i interakcije među njegovim korisnicima.
- Proces se bazira na podacima i znanstvenim bazama



- Povećana potražnja za pomorskim resursima;
- Natjecanje za pomorski prostor;
- Razvoj pomorskog sektora;
- Promjena uvjeta okoliša i klime;
- Smjernice politike i zakonski zahtjevi



# Projekti MSP u Europskoj Uniji

- Više-sektorsko planiranje ključno je za maksimiziranje gospodarskih, društvenih i ekoloških ciljeva;
- Iako postoje najbolji primjeri iz prakse za prostorno planiranje mora, ne postoji plan za sve
- no one-size-fits-all plan.



# Problem uskladivanja podataka (input & output)

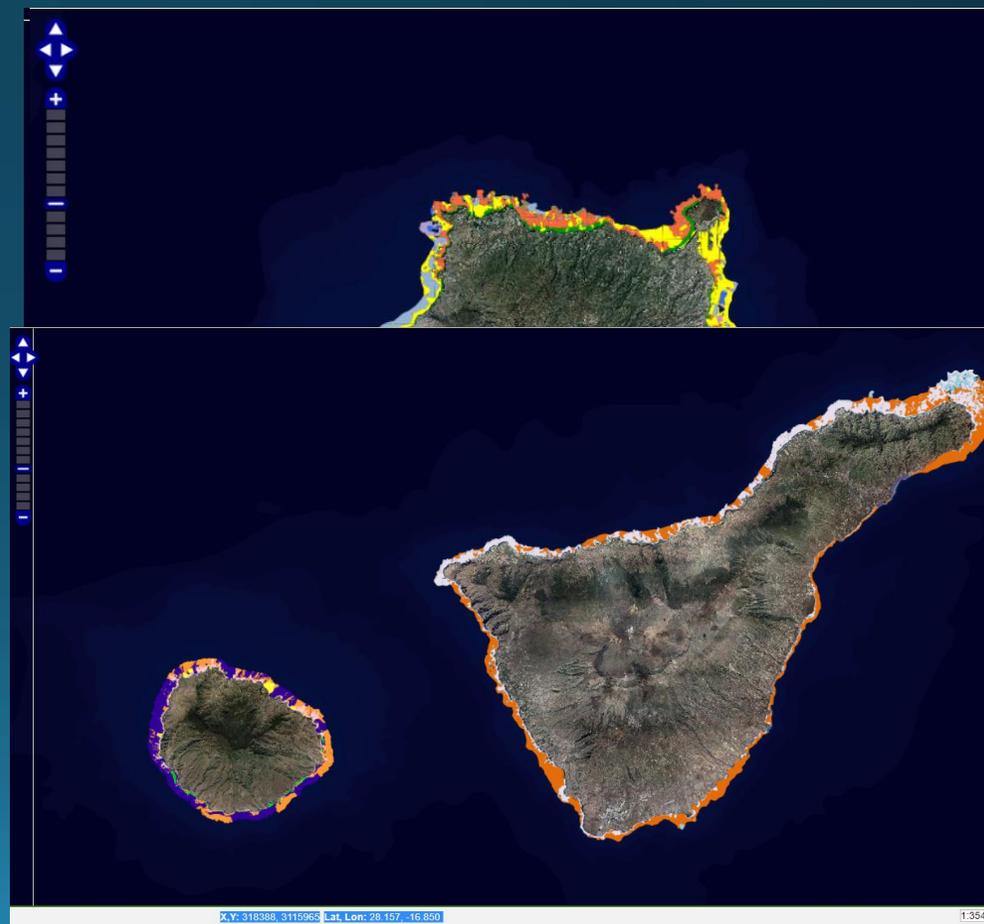
- Prekograničnom prostoru, pomorskoj regiji....
- Podaci o okolišu mora, pomorskim aktivnostima, sektorima...
- Oceanografski podaci;

# Uskladivanje "input" podataka

Use case: Kartografija bentoskih staništa, Kanarsko otocje ,projekt PLASMAR(2017-2020)

"Estudios Ecocartográficos de Canarias": benthic habitats cartographies for all islands and depths 0-50m.

Island	Years	Authors	Nr. cats. legend
Lanzarote, Graciosa y Alegranza <sup>1</sup>	2000 (2000-2003)	UTE: HIDTMA, IBERINSA, CIS y TOPONORT	39
Fuerteventura y Lobos <sup>1</sup>	2003 (2003-2006 8??)	UTE: HIDTMA e IBERINSA	12
Gran Canaria <sup>1</sup>	Norte 2005 (2006-2007)	TYPSA	20
	Sur 2001 (2000-2002)	UTE: INTECSA-INARSA, TECNOAMBIENTE y GEOMYTSA	16
Tenerife <sup>2</sup>	2001-2006 - Buenavista-Arona 2001-2002 - Arona-Fasnia 2003 - Fasnia-R. Anaga 2004-2005 - R. Bermejo-Buenavista: 2006	UTE: LA ROCHE CONSULTORES, S. L., ESTUDIO ITAC S.L.	25
La Palma <sup>1</sup>	2003 (2003-2004)	UTE: ALATEC, ESGEMAR S.A., GRUPO INTERLAB S.A.	13
La Gomera <sup>1</sup>	2003 (2003-2006)	UTE: INTECSA-INARSA, TECNOAMBIENTE y GEOMYTSA	38
El Hierro <sup>1</sup>	2003 (2003-2006)	UTE: INTECSA-INARSA, TECNOAMBIENTE y GEOMYTSA	12
			<b>176</b>



# INSPIRE model za staništa "Habitats & Biotopes"

«featureType»  
**Habitat**

+ inspireId :Identifier [0..1]  
+ geometry :GM\_Object  
+ habitat :HabitatTypeCoverType [1..\*]

«voidable»

+ habitatSpecies :HabitatSpeciesType [0..\*]  
+ habitatVegetation :HabitatVegetationType [0..\*]

«dataType»  
**HabitatTypeCoverType**

+ referenceHabitatTypeId :ReferenceHabitatTypeCodeValue  
+ referenceHabitatTypeScheme :ReferenceHabitatTypeSchemeValue

«voidable»

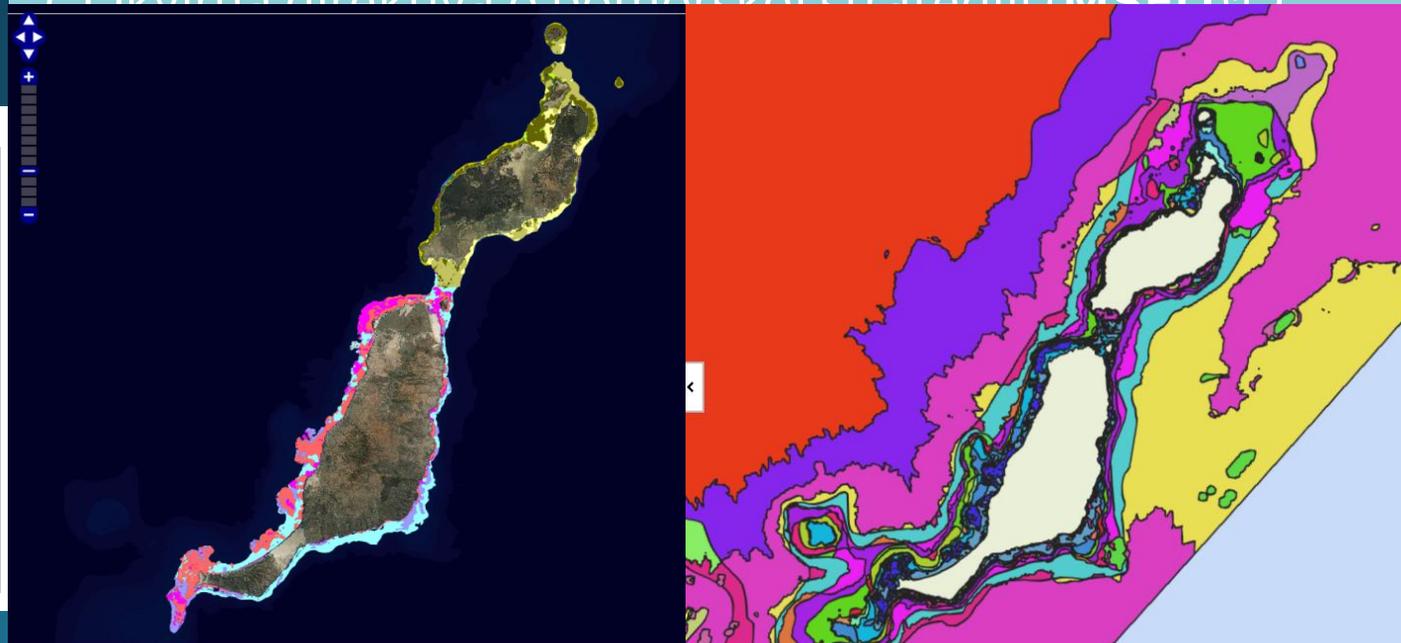
+ referenceHabitatTypeName :CharacterString  
+ localHabitatName :LocalNameType [0..1]  
+ areaCovered :Area [0..1]  
+ lengthCovered :Length [0..1]  
+ volumeCovered :Volume [0..1]

Uz model podataka INSPIRE koristili smo tri klasifikacijska standarda:

1. Europski informacijski sustav za okolis (EUNIS)

- 26 kategorija; srednja kvaliteta klasifikacije za proces mapiranja Kanariskih otoka

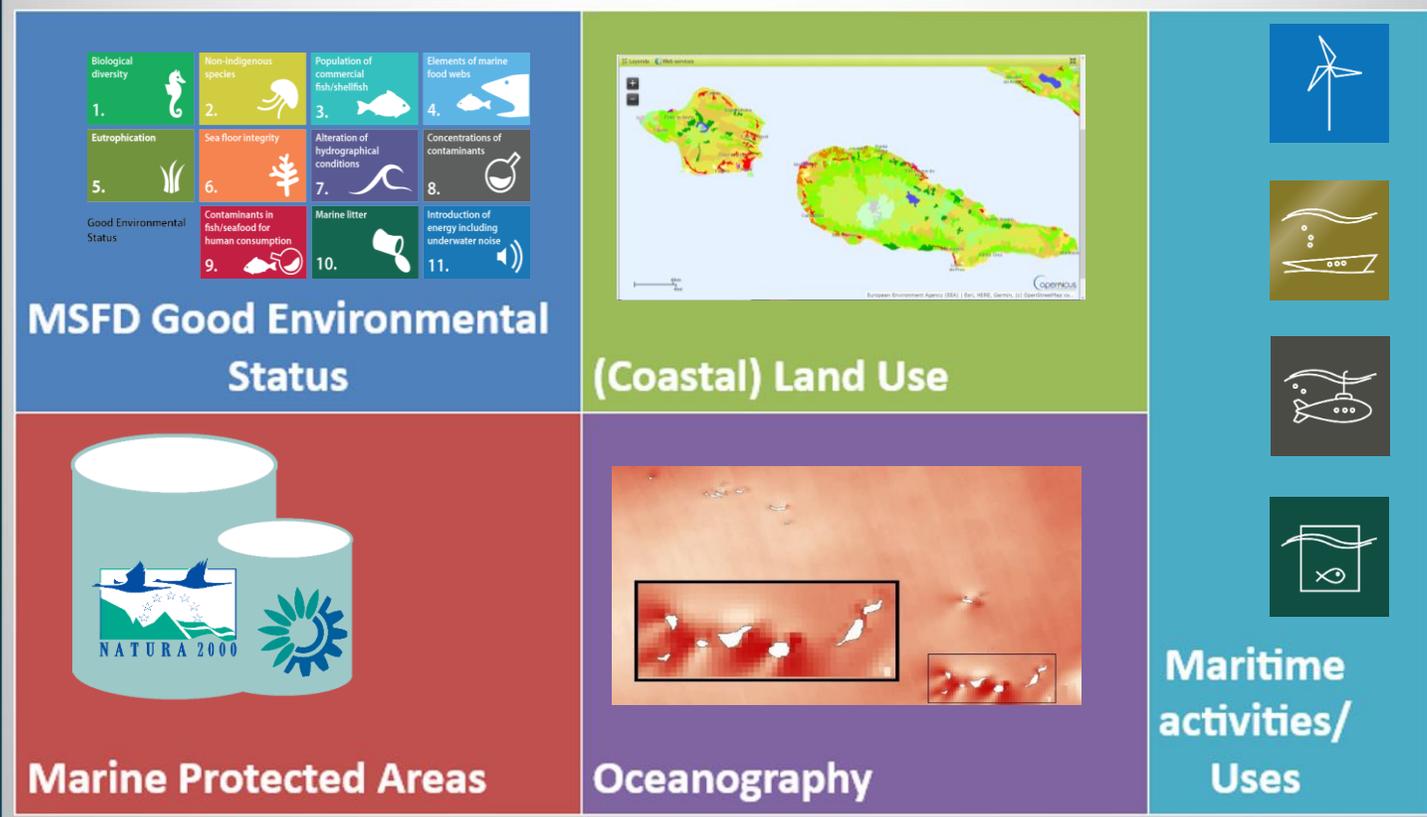
2. Okvirna direktiva o pomorskoj strategiji (MSFD) 12



# MSP data framework

## step forward 4 input data harmonization

### PLASMAR MSP data framework

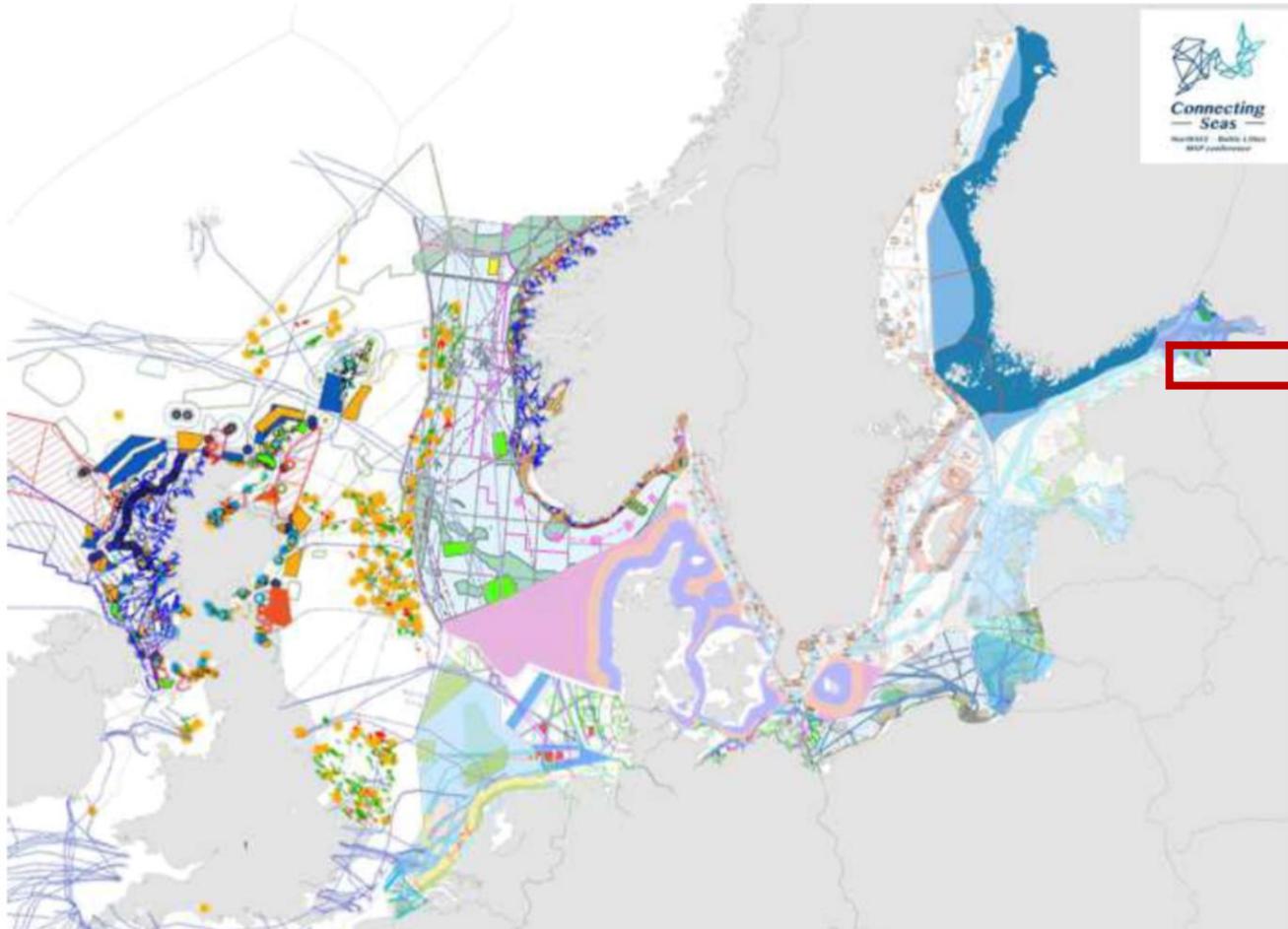


#### MSP Input Data

required for analysing initial conditions

- **Oceanographic spatial information**  
(ocean temperature, waves, currents...)
- **Data on marine environment**  
(eutrophication level, benthic habitat status...)
- **Marine conservation**  
(extension and objectives of Marine Protected Areas...)
- **Information on coastal and maritime activities**  
(aquaculture, ocean energy facilities, coastal tourism, ports and harbours...)
- **Socio-economic information**  
(coastal population, unemployment, income by sector...)
- **Governance information**  
(administrative units, prospecting permits...)

# Uskladivanja podaka Prostornih Planova Mora (output data)



«featureType»  
SP\_ZoningElement

face

value [1...\*]

overHILUCSValue [1...\*]

tionNatureValue

alDistributionValue [1..4]

Presence

seClassificationValue [1...\*]

cPresence

cessStepGeneralValue

oundMapValue

DimensioningIndicationValue

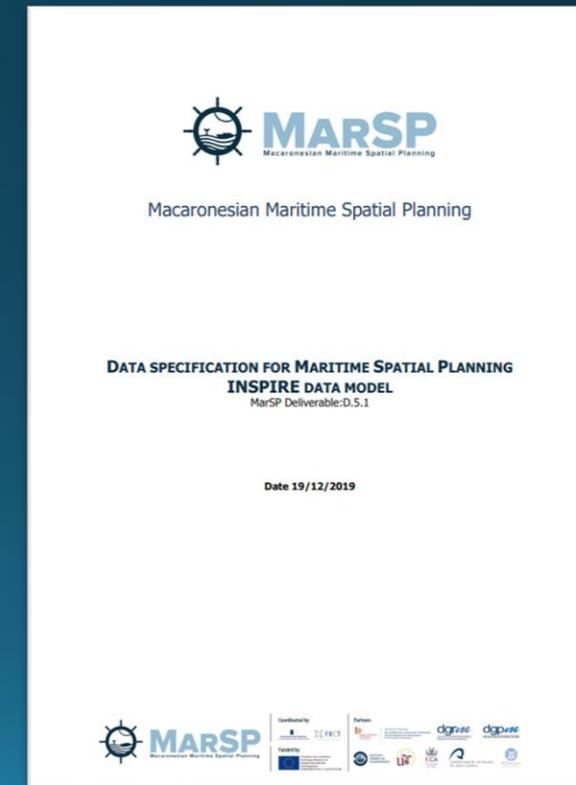
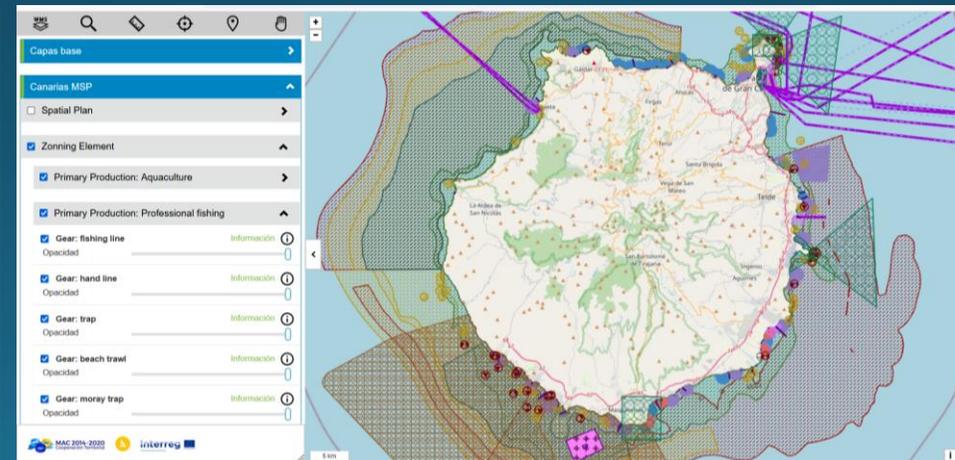
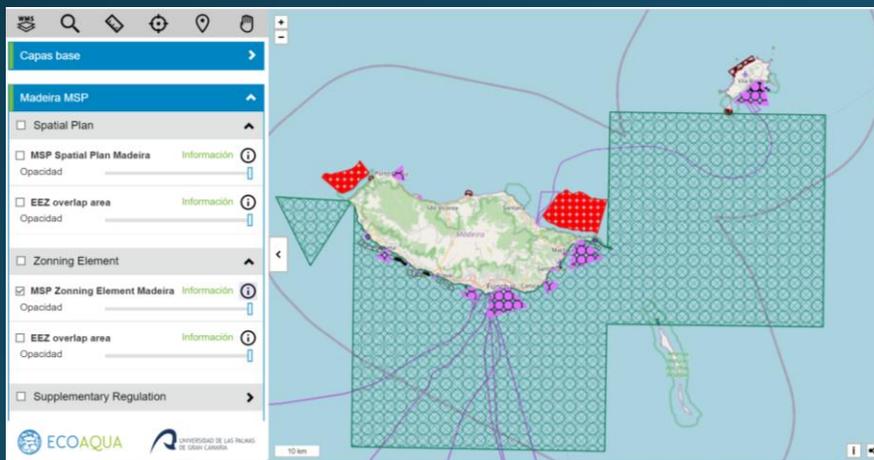
ateTime

eTime

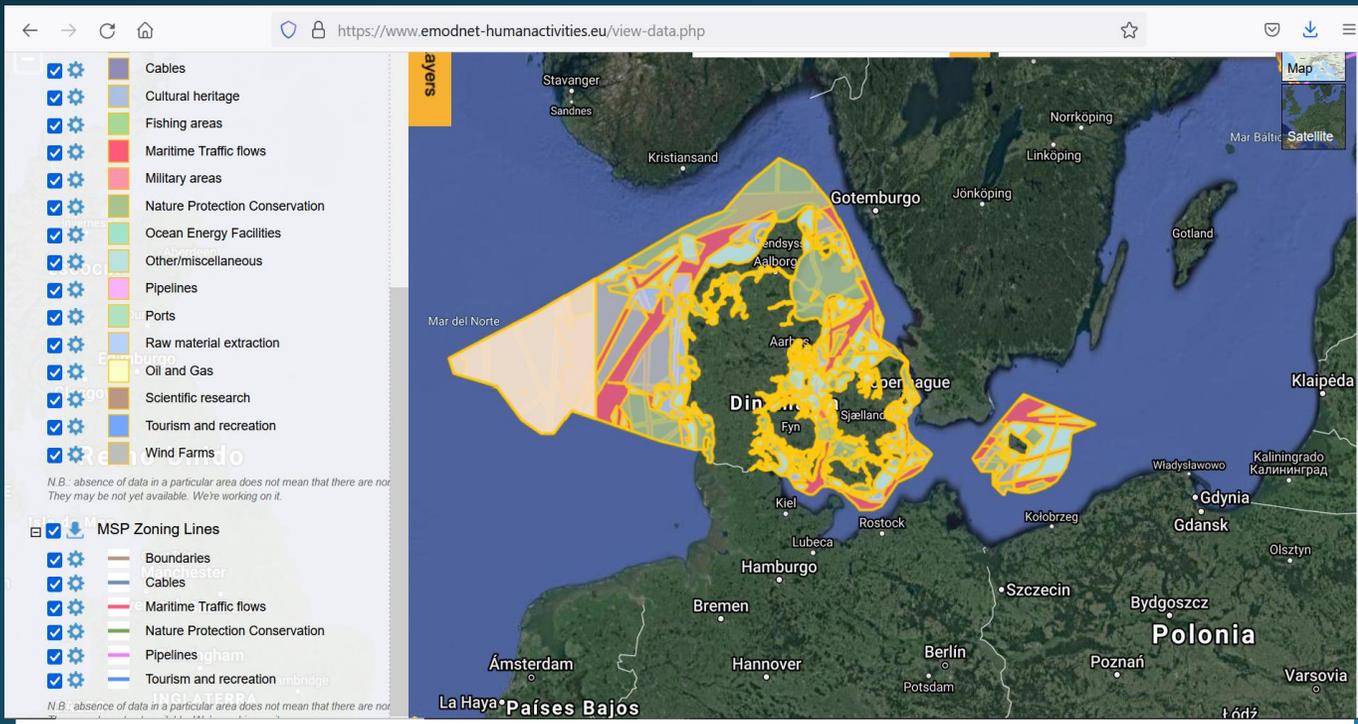
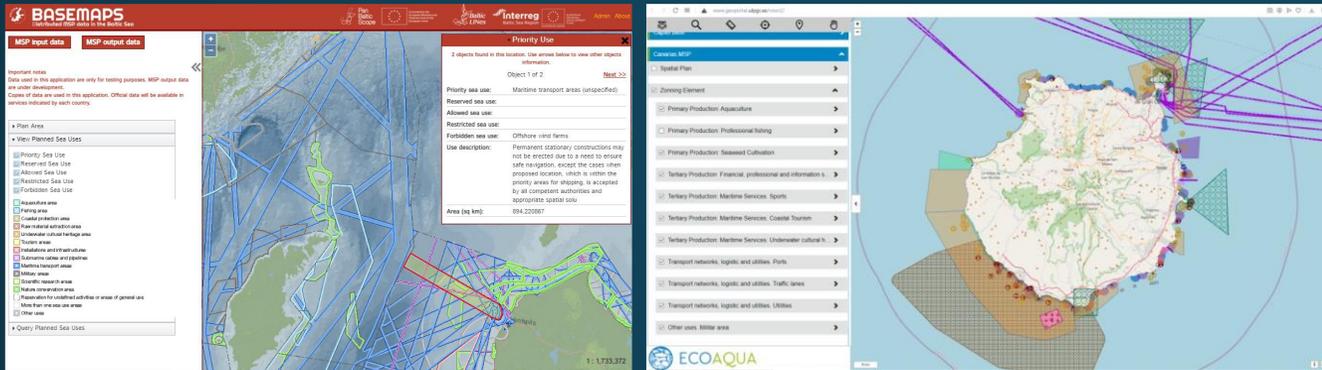
Figure 1: Un-harmonized national MSP's within Baltic and North Sea. Kai Trümpler, presented MSP development on the Connecting Seas conference.

# MSP INSPIRE data model

- Radionica u organizaciji ULPGC i Španjolskog Instituta za Oceanografiju, Tenerife 2019;
- Raspravljen i testiran model podataka, GIS i MSP struchnjaci ;
- Hands on session (ravna verzija podatkovnog modela)
- Sudionici su imali priliku primijeniti stvaran prostorni plan Madeire, Portugal
- Data specifications, primjeri aplikacije, radni predlošci (XSD-gml, GeoPackage, Styled Layer Descriptor)
- <http://geoportal.ulpgc.es/marsp/>



# Technical Expert Group on MSP data



[https://www.msp-platform.eu/sites/default/files/hzo121216enn.en\\_.pdf](https://www.msp-platform.eu/sites/default/files/hzo121216enn.en_.pdf)

# Hvala na paznji

