



MARSP

Macaronesian Maritime Spatial Planning

MSP INSPIRE data model

Conceptual development model, templates and data specs.

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INSPIRE conf, Workshop – 12 of June 2020

Exploring and applying INSPIRE principles within Maritime Spatial Planning

Coordinated by

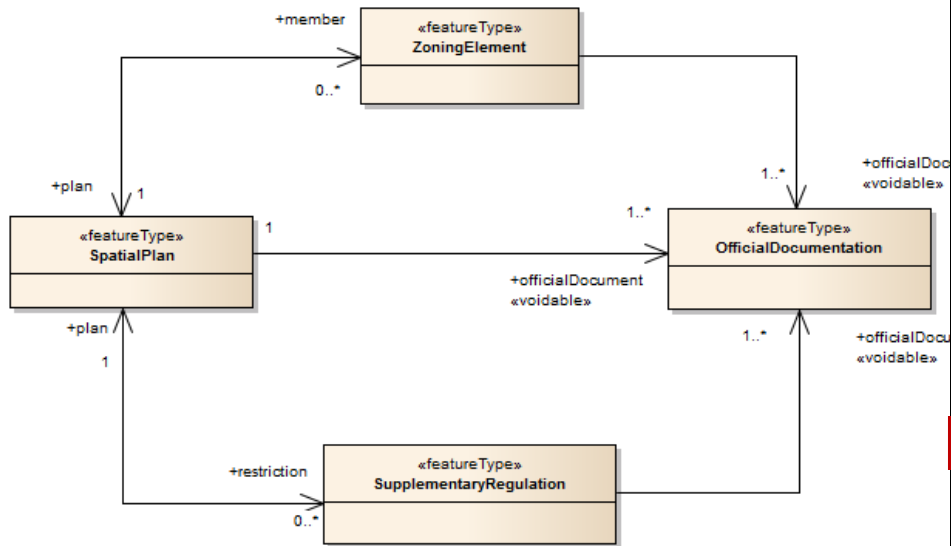


Funded by

Partners



Planned Land Use data model - HILUCS



«featureType» ZoningElement

```

+ inspireId :Identifier
+ geometry :GM_MultiSurface
+ hilucsLandUse :HILUCSValue [1..*]
+ regulationNature :RegulationNatureValue

«voidable»
+ validFrom :Date [0..1]
+ validTo :Date [0..1]
+ hilucsPresence :HILUCSPresence
+ specificLandUse :LandUseClassificationValue [1..*]
+ specificPresence :SpecificPresence
+ processStepGeneral :ProcessStepGeneralValue
+ backgroundMap :BackgroundMapValue
+ dimensioningIndication :DimensioningIndicationValue [0..*]

«lifeCycleInfo, voidable»
+ beginLifespanVersion :DateTime
+ endLifespanVersion :DateTime [0..1]
  
```

Extended HILUCS & extension/use alternatives

«featureType»
MSP_ZoningElement

- + inspireId: Identifier
- + geometry: GM_MultiSurface
- + hilucsLandUse: HILUCSValue [1...*]
- + hilucsMSP: marineNarrowerHILUCSValue [1...*]
- + regulationNature: RegulationNatureValue

Voidable

- + Valid from: Date [0..1]
- + Valid to: Date [0..1]
- + hilucsPresence: HILUCSPresence
- + specificLandUse: LandUseClassificationValue [1...*]
- + specificPresence: SpecificPresence
- + processStepGeneral: ProcessStepGeneralValue
- + backgroundMap: BackgroundMapValue
- + dimensioningIndication: DimensioningIndicationValue

lifeCycleInfoVoidable

- + beginLifespanVersion: DateTime
- + endLifespanVersion: DateTime

«codeList»
LandUseClassificationValue

narrower extension of HILUCS - MarineNarrowerHILUCS

tags
asDictionary: True
extensibility: Narrower
vocabulary: <http://www.geoportal.ulpgc.es/registro/plannedLandUse/HilucsExt/>



ECOQUA
WWW.ECOQUA.EU

HILUCS Extended register



Description: This is the HILUCS Extended register developed by Ecoaqua Institute in order to cover Marine Spatial Planning specific features. It includes original records referenced by original links and extended record clearly identified and explained.

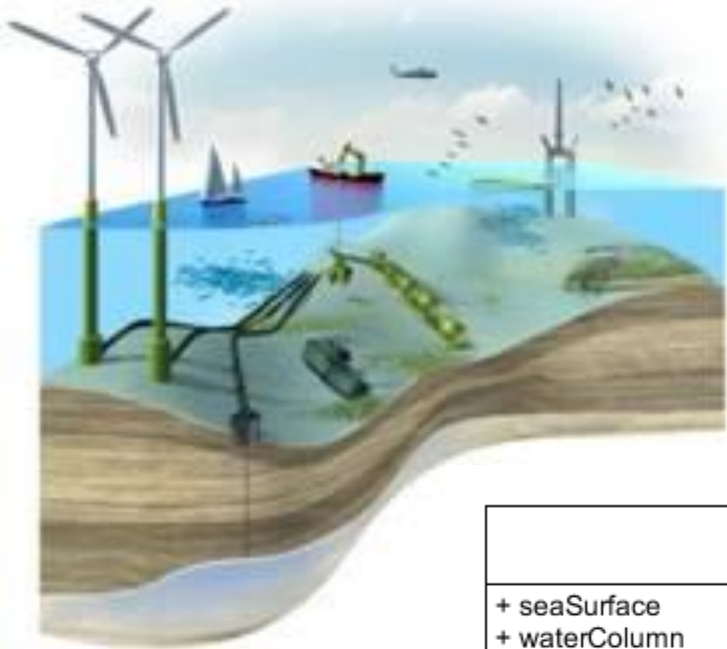
Childs:

- primary production
- secondary production
- tertiary production
- transport networks logistics and utilities
- residential use
- other uses

Marine Spatial Planning Features:

This record doesn't have MSP features

Maritime activities distribution



«featureType» MSP_ZoningElement
<ul style="list-style-type: none"> + inspireId: Identifier + geometry: GM_MultiSurface + hilucsLandUse: HILUCSValue [1...*] + hilucsMSP: marineNarrowerHILUCSValue [1...*] + regulationNature: RegulationNatureValue <li style="border: 2px solid red;">+ verticalDistribution: verticalDistributionValue [1..4]
Voidable
<ul style="list-style-type: none"> + Valid from: Date [0..1] + Valid to: Date [0..1] + hilucsPresence: HILUCSPresence + specificLandUse: LandUseClassificationValue [1...*] + specificPresence: SpecificPresence + processStepGeneral: ProcessStepGeneralValue + backgroundMap: BackgroundMapValue + dimensioningIndication: DimensioningIndicationValue

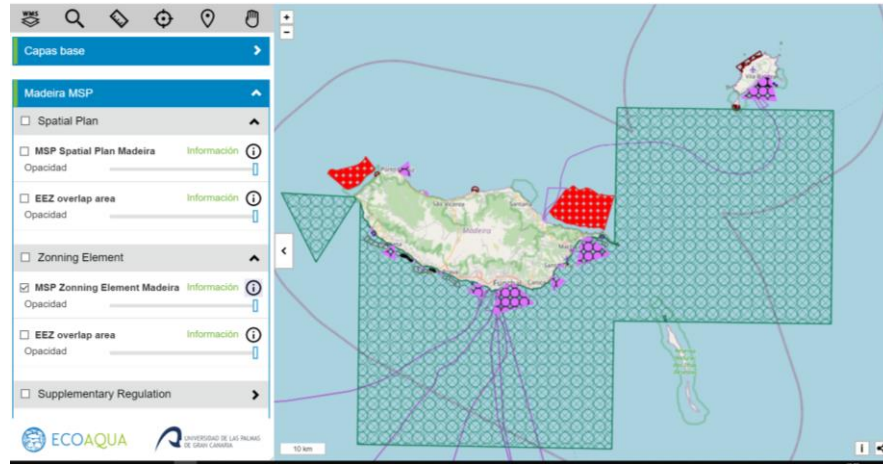
«codeList» VerticalDistributionValue
<ul style="list-style-type: none"> + seaSurface + waterColumn + seaBed + subSoil
tags asDictionary: True extesibility: Narrower vocabulary: http://www.geoportal.ulpgc.es/registro/plannedLandUse/VerticalDistribution/

Technical workshop and capacity building

14-15th March 2019, Tenerife



- Organized by ULPGC and Spanish Institute of Oceanography
- **Discussed & tested** developed solutions
- **Hands on session (flat version of the data model)**
- Participants had opportunity to apply MSP data model
- For their MSP or **MSP draft of Madeira (kindly offered by DRM)**
- Working templates (XSD-gml, GeoPackage)



Potential use of MSP data model

- We can harmonize MSP on the level of the marine region(s)
- Basis for coherent MSP regional development
- Maritime Spatial Plan encoded with MSP data model can be **harmonized** with INSPIRE **land use data** & INSPIRE **planned land use data** (Using HILUCS & extended HILUCS)
- a **base for Land-sea interaction** analysis - application development
- A **base for cumulative impact analysis** (PLASMAR+ 2020-2022)
- Appropriate for MSP e-reporting, could be done similar as it is **reporting flow organized for environmental legislation** (using XML, can be done as GML)
- Reports structured and spatial plans harmonized on level of the marine basin
- Reports can be **delivered using national already operational INSPIRE SDI** (download and discovery services)

Thank you for your patience

