MarSP 2nd Capacity Building Workshop:
MSP INSPIRE data model

IEO facilities @ Tenerife, Spain
14-15th March 2019

In development of the INSPIRE *Planned Land Use data model*, as specified in the Technical Guidelines document on "*INSPIRE Data Specification on Land Use*" the uses and planning of the sea were considered, but not elaborated in detail. MSP data model concept has been developing from 2014, applying INSPIRE data management concepts for marine planning and data, trough **Marine Pilot project (EC Joint Research Centre 2014-2016)** and continuing with project **PLASMAR (INTERREG–V 2017-2020)**. The results and findings delivered has been published in the paper "**Maritime spatial planning supported by infrastructure for spatial information in Europe (INSPIRE)**" published in Ocean & Coastal Management Journal, February 2018: https://ec.europa.eu/jrc/en/publication/maritime-spatial-planning-supported-infrastructure-spatial-information-europe-inspire

Macaronesian Maritime Spatial Planning (MarSP) project is a perfect opportunity to finalize data model development, but what is more important to test results and develop use cases in Macaronesian for Canary Islands, Azores and Madeira archipelago. **MarSP and PLASMAR projects in collaboration have been organizing a series of capacity building workshops** that deal with **data management related to the Maritime Spatial Planning**. The first capacity building workshop was organized in Lagoa, San Miguel, Azores in April 2018, where participants learned and tested how to share spatial information using spatial data infrastructure, developing and cataloging metadata.

This second event is a technical workshop where should be discussed and tested concepts and technical solutions developed by University Las Palmas de Gran Canaria (ULPGC) and the Spanish Institute of Oceanography (IEO). Participants will have a chance to discuss, if necessary, propose modifications or/and endorse concept of **MSP data model**. The technical solution that includes data model with specifications in different formats needs to be tested, using the standard GIS software, applying developed tools for the MSP interoperability (as registries, harmonization process, Styled Layer Descriptor, etc.). **To test technical solutions**, it will be delivered "**hands on**" **session,** where participants will be leaded by presenters to test data model. It is expected that participants have already finalized plan, draft, or just part of the MSP for Azores, Madeira, or Canary Islands (or any other marine region will do) that can be used for the testing. The use case can be invented, but should include number of maritime activities, that are near reality.

Finally, during this workshop will be presented **Azores, Madeira and Canary Islands MSP platforms,** related architecture and innovative solutions for MSP process as "**one stop shop**" and use of specialized software for crowd sourcing (SeaSketch, Wiki-style mapping…).

Event is open for proposals to include any good practices, experiences, etc. that are related to workshop topic. If you would like to submit proposal, please contact andrej.abramic@ulpgc.es
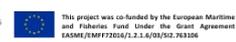
Participants should attend with personal laptop, with installed GIS software (ArcView, QGIS, gvSIG), and should install HALE studio: https://www.wetransform.to/downloads/

Expected participants are:

GIS users, MSP experts, Governments bodies responsible for MSP process (and reporting), marine/maritime/data scientist.

Inscription is free of charge as for the project participants and to anyone else, but it needs to be applied trough the web form:

https://goo.gl/forms/QIz9S59oe8oRZfsa2

Agenda (Draft version 6.02.2018)

1st Day, Thursday, 14 of March 2019

10:30. - Registration and coffee

11:30. - Welcome

12:00. - Framework applying INSPIRE concepts (ULPGC)

- PLASMAR project that applies INSPIRE data management concepts

- MarSP - development of INSPIRE compliant MSP data model

12:20. - MSP INSPIRE data model concept development (ULPGC)

- Planning Land Use data model

- Extensions modelled with UML

- Potential of use of MSP data model for e-reporting required by MSP Directive 2014/89/EU

  in 2021

12:40. - Discussion (ULPGC & IEO)

- UML conceptual extension

- Potential for MSP Directive e-reporting

- Name of MSP data model

13:30. - Lunch and coffee

15:00. - MSP data model development (ULPGC & IEO)
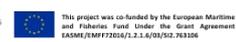
- Developed SHP, XSD and GML schemas;

- Maritime activities register - extended HILUCS;

- Data transformation **.shp** to **.gml** INSPIRE compliant

- MSP data model Styled Layer Descriptor (SLD)

- Different encodings GeoJSON

- Discussion

16:00. - Coffee

16:30. - MSP data model "hands on" session 1st part (ULPGC & IEO).

- Exercise for the development of the MSP data model:

  1. Preparation of SHP file.

  2. Mapping marine activities in extended HILUCS.

  3. Transformation of SHP file into a INSPIRE compliant GML.

  4. Application of SLD (Styled Layer Descriptor).

- The exercise will be developed with a case provide by the organizers, although interested participants can provide their own real case. If interested in this opportunity, that would allow you to develop the exercise on your own real case, please contact Alejandro García (alejandro.garcia@ulpgc.es) in order to provide your MSP template.

Session ends at 18:30

2nd Day, Friday, 15 of March 2019

9:00. - MSP data model "hands on" session 2nd part (ULPGC & IEO)

10:30. – Coffee

11:00 MSP Platform Azores development, with focus on "One stop shop" (DRAM)

11:30 MSP Platform Madeira, cloud transformation (DROTA)

12:00 MSP Platform Canarias (ULPGC)

12:30 SeaSketch presentation (UA/FGF)

13:00. - Final discussion and wrap-up

13:30. - Lunch and session ends

In collaboration with PLASMAR project
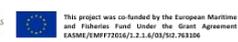
Practical Information for Participants

1. **Getting to Santa Cruz de Tenerife from the airport**

   1.1 From "Los Rodeos" airport (Northern Tenerife)
   - Bus from airport to Bus Station: nº 102; timetable: every 30 minutes (from 6.00 h. to 22.00 h), and 22.00 h., 23.30 h.; trip duration: ~ 15 minutes; 3 Euros.
   - Taxi from Bus station to the city centre: around 20 Euros.
   - A Google map is in the Annex.

   1.2 From "Reina Sofía" airport (Southern Tenerife)
   - Bus from airport to Bus Station: nº 111; timetable: every 30 minutes (from 5.30 h. to 22.30 h.) and from 22.30 h.-5.30 h. (lower frequency); trip duration: ~ 1 hour; around 10 Euros.
   - Taxi from Bus station to the city centre: around 90 Euros.
   - A Google map is in the Annex.

2. **Meeting venue**

   Centro Oceanográfico de Canarias - Instituto Español de Oceanografía (IEO)
   Vía Espaldón, Dársena Pesquera PCL 8
   38180 Santa Cruz de Tenerife. Islas Canarias.

   A Google map is in the Annex.

3. **Transport to and from the meeting place**
   - Public transport: Bus from Santa Cruz to Meeting place: nº **910**; timetable: every 10 minutes (from 5.15 h. – 22.00 h.); trip duration: ~ 15 minutes; around 1.5 Euros. www.titsa.com

4. **Hotels in Santa Cruz**
   Participants are expected to make their own hotel reservations. A list of hotels is provided in the Annex.

HOTELS IN SANTA CRUZ DE TENERIFE
(Indicative for August 2018)

NAME	CAT	ADDRESS	SINGLE	TWIN	Observations
		In the "Rambla" Zone			
Mencey	*****	**José Naveiras, 38** Ph.: +34 922609900 WEB: www.granhotelmencey.com e-mail: hotel.mencey@iberostar.com		85.68 €	- Special business rate
				100.22 €	- B & T - Special business rate
Colón Rambla	****	**Viera y Clavijo, 49** Ph.: +34 922272550 WEB: www.hotel-colonrambla.com e-mail: reservas@colonrambla.com		86 €	
				95,90 €	- B & T
Contemporáneo	***	**Rambla G. Franco, 116** Ph.: +34 922271571 WEB: www.barcelo.com e-mail: santacruzcontemporaneo@barcelo.com	74 €	88 €	
			85 €	89 €	- B & T
Taburiente	****	**José Naveiras, 24-A** Ph.: +34 922276000 WEB: www.hoteltaburiente.com e-mail: reservas@hoteltaburiente.com		90 €	
				102 €	- B & T
		In the City Centre			
Adonis Plaza	***	**Plaza Candelaria, 9** Ph.: +34 922272453 WEB: www.adonisresorts.com e-mail: hotelplazal@adonisresorts.com		44.99 €	
				48.74 €	- B & T
Príncipe Paz	***	**Valentín Sanz, 4** Ph.: +34 922249955 WEB: www.hotelprincipepaz.com e-mail: reservas@principepaz.com		73.80 €	
				81.90 €	- B & T
Adonis Capital	**	**Cruz Verde, 24** Ph.: +34 922243184 WEB: www.adonisresorts.com e-mail: capital@adonisresorts.com		37.49 €	
				42.49 €	- B & T
Atlántico	**	**Castillo, 12** Ph.: +34 922246375 WEB: www.hotelatlanticotenerife.com e-mail: info@atlanticotenerife.com	43.87 €	55.64 €	- B & T
Adonis Pelinor	**	**Bethencourt Alfonso, 8** Ph.: +34 922246875	35.99 €	35.99 €	

		WEB: www.otelpelinor.com	39.74 €	39.74 €	- B & T
		e-mail: reservas@hotelpelinor.com			
NH	***	**Candelaria, 3**	**84 €**	**89.44€**	
		Ph.: +34 922534422	**104 €**	**118.91€**	- B & T
		WEB: www.nh-hoteles.es/hotel/nh-tenerife			
		e-mail: nhtenerife@nh-hotels.com			

**B & T: Including Breakfast and Taxes**

1. **Map from "Los Rodeos" Tenerife Norte Airport to Santa Cruz de Tenerife**
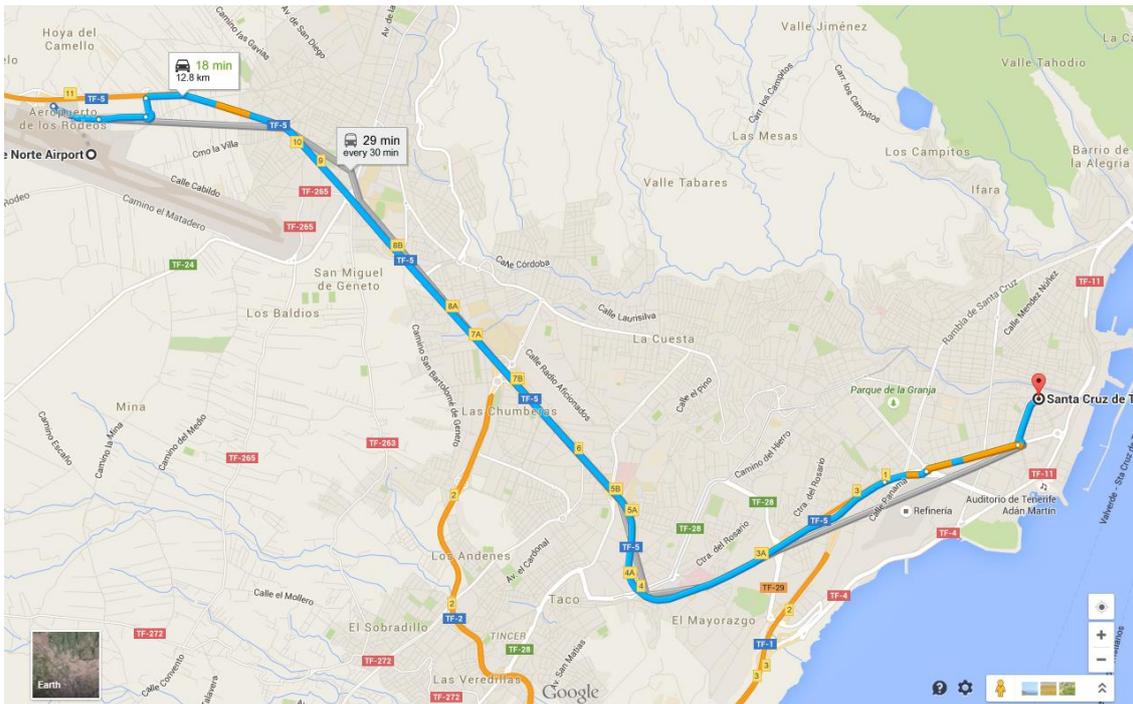
2. **Map from "Reina Sofía" airport (Southern Tenerife) to Santa Cruz de Tenerife**
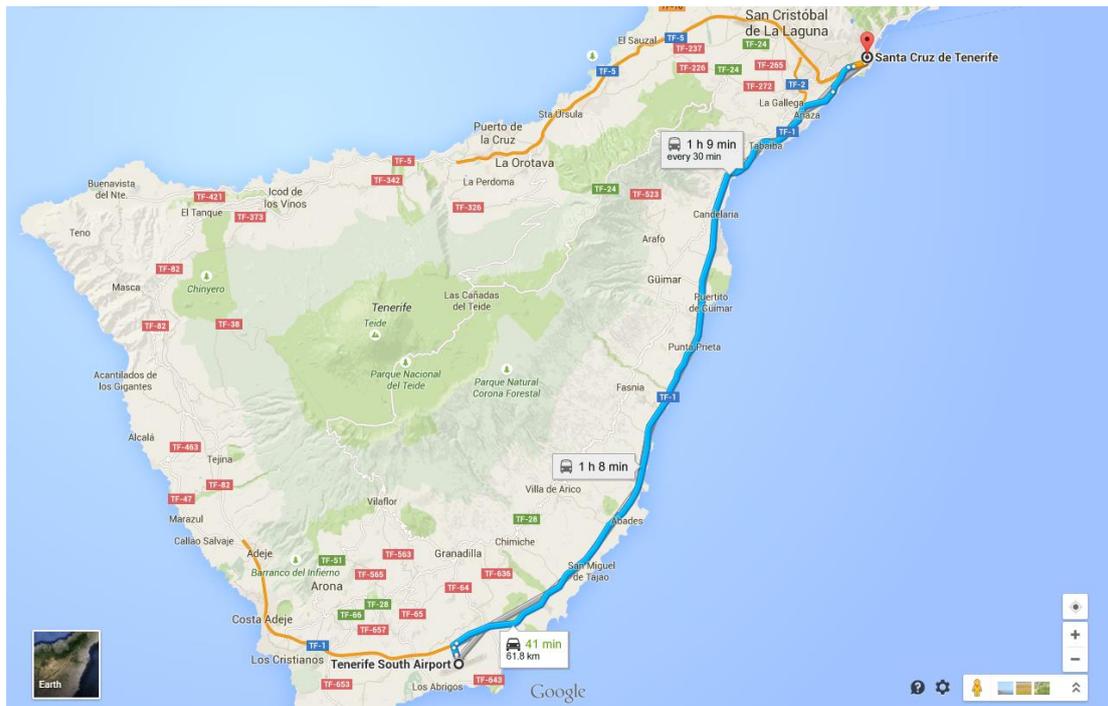
3. **Map from Santa Cruz de Tenerife to the meeting venue:** Centro Oceanográfico de Canaria-Instituto Español de Oceanografía (IEO), Dársena Pesquera, PCL 8. 38180 Santa Cruz de Tenerife