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 have 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 and, what is more important, to test results and develop use cases in the Macaronesia for the Canary Islands, Azores and Madeira archipelagoes. **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 that proposes the discussion and testing of 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 a 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**, a "**hands on**" **session** will be delivered, where participants will be led by presenters to test the data model. It is expected that participants have already finalized a 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 the **Azores, Madeira and Canary Islands MSP platforms** will be presented, as well as the 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 the workshop topic. If you would like to submit a proposal, please contact andrej.abramic@ulpgc.es

Coordinated by: Governo dos Açores, FRCT
Partners: dgrm, dgpm, UCA, ECOAQUA, Universidad de Las Palmas de Gran Canaria
Funded by: This project was co-funded by the European Maritime and Fisheries Fund Under the Grant Agreement EASME/EMFF72016/1.2.1.6/03/SI2.763106

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/QIz9S590e80RZfsa2

Agenda (Draft version 6.02.2018)

1st Day, Thursday, 14 of March 2019

Workshop Facilitator: Olvido Tello, IEO/ Madrid

10:30. - Registration and coffee

11:30. - Welcome

- Luis J. López Abellán, director IEO/ Oceanographic Centre of Canary Islands

11:45. Data and Information management in support of marine spatial planning processes

- Alejandro Iglesias Campos, IOC-UNESCO / Marine Policy and Regional Coordination Section

12:00. - Project Macaronesian Maritime Spatial Planning

- Ricardo Haroun Tabraue, deputy director University Institute ECOAQUA / ULPGC

12:15. - Framework applying INSPIRE concepts for MSP process; Andrej Abramic, ULPGC

- MSP & INSPIRE
- Planning Land Use data model
- PLASMAR project that applies INSPIRE data management concepts

12:45. - MSP INSPIRE data model concept development; Andrej Abramic, ULPGC

- Conceptual development of the MSP data model
- Potential of use of MSP data model
- Discussion

13:15. - MSP data model development

- Developed SHP, XSD and GML schemas; Alejandro Garcia, ULPGC
- Maritime activities register - extended HILUCS; Alejandro Garcia, ULPGC

13:30. - Lunch and coffee

15:00. – MSP data model development (continuation of the session)

- Data transformation *.shp to *.gml INSPIRE compliant; Alejandro Garcia, ULPGC
- MSP data model Styled Layer Descriptor (SLD); Luis Miguel Agudo, IEO
- Different encodings GeoPackage & GeoJSON; Luis Miguel Agudo, IEO
- Discussion

15:30. - MSP data model "hands on" session 1st part (ULPGC & IEO).

Exercise for the development of the MSP data model:

- Preparation of SHP file & Mapping marine activities in extended HILUCS; Alejandro Garcia, ULPGC
- Transformation of SHP file into an INSPIRE compliant GML; Alejandro Garcia, ULPGC
- Preparation of the GeoPackage & GeoJSON; Luis Miguel Agudo, IEO
- Application of Styled Layer Descriptor and serving file with GeoServer; Luis Miguel Agudo, IEO

16:30 Coffee
17:00 continuation of the session

Session ends at 18:30

2nd Day, Friday, 15 of March 2019

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

11:00. – Coffee

11:30 MSP Platforms Macaronesia

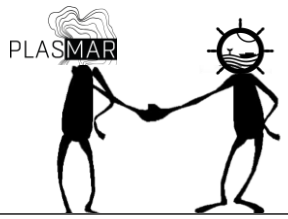
- Azores development, with focus on "One stop shop"; Aida Silva, Paolo Miranda, DRAM
- MSP Platform Madeira, cloud transformation; Vitor Jorge, DROTA
- MSP Platform Canarias; ULPGC
- SeaSketch crowdsourcing software applied in MSP Azores; Aida Silva, DRAM

12:20 Marine Spatial Planning Platform - RENAQUA DSS & ATLAS projects; Felipe Fernández Pérez, IH Cantabria

12:45 EMODNET human activities data models: towards compliance with INSPIRE DATA Specifications; Yolanda Sagarminaga, AZTI Tecnalia

13:00. - Final discussion and wrap-up

13:30. - Lunch and session ends



In collaboration with PLASMAR project

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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.

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MARSP
Macaronesian Maritime Spatial Planning

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	**43.87 €**	**55.64 €**	- B & T

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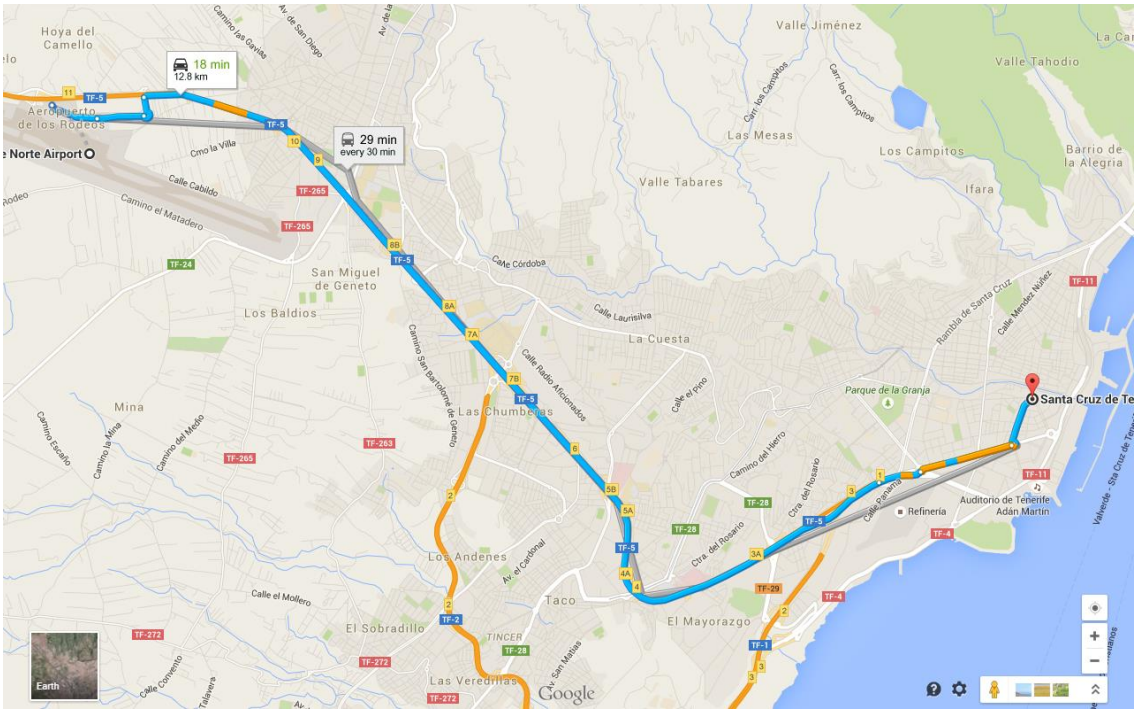
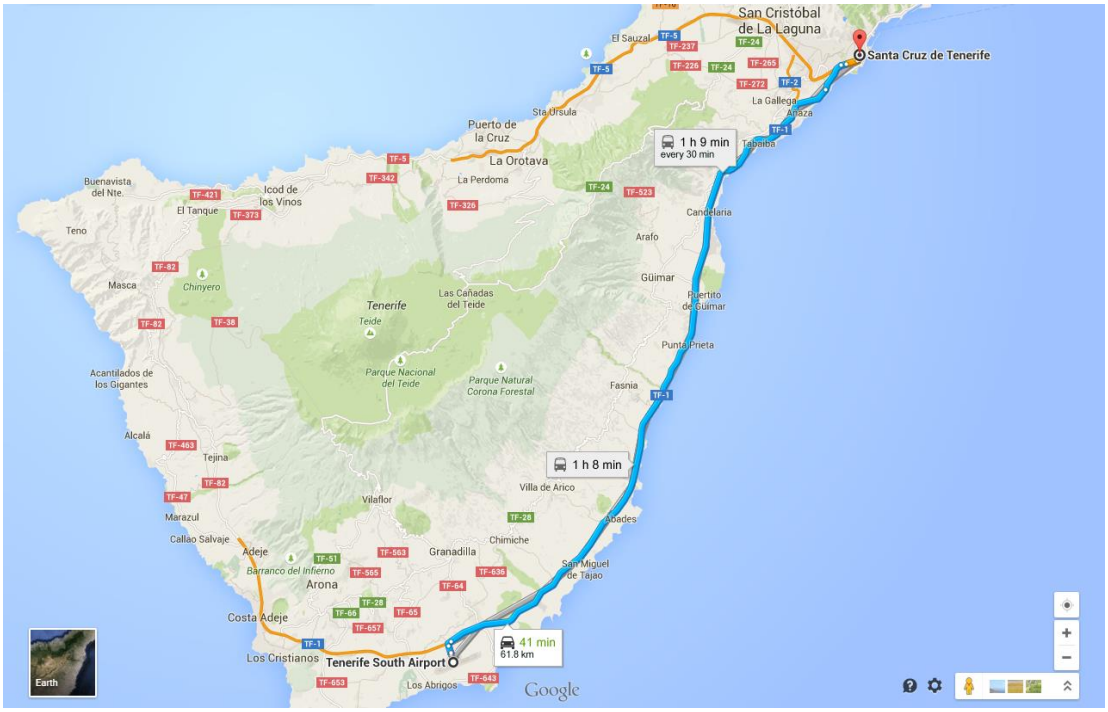
		e-mail: info@atlanticotenerife.com			
Adonis Pelinor	**	**Bethencourt Alfonso, 8** Ph.: +34 922246875 WEB: www.otelpelinor.com e-mail: reservas@hotelpelinor.com	**35.99 €**	**35.99 €**	
			39.74 €	**39.74 €**	- B & T
NH	***	**Candelaria, 3** Ph.: +34 922534422 WEB: www.nh-hoteles.es/hotel/nh-tenerife e-mail: nhtenerife@nh-hotels.com	**84 €**	**89.44€**	
			104 €	**118.91€**	- B & T

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

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