# Procedure for spatial data collection and update under ENI SEIS II South Project

# Guidance document 22.01.2019





## Updating spatial layers

## A. Context

In order to collect standardised information the Information and Communication Regional Activity Centre (INFO/RAC) of the UN Environment Programme/MAP together with the European Environment Agency (EEA) are offering to the countries the InfoMapNode, which is the Regional Spatial Data Infrastructure (SDI)<sup>1</sup>.

Together with the InfoMAP Data Centre (IDC), the InfoMapNode (SDI) is part of the InfoMAP Reporting System which represents the infrastructure for supporting and improving data and information flows managed by the INFO/RAC.

### B. Objectives

The objective of this spatial data call is to guarantee standardised format that can be updated on a regular basis and that will serve for different reporting purposes (SDGs, H2020, IMAP, etc.).

The spatial data call will collect raw data (population, administrative units, etc.) for indicators calculation and easy to reach through a single entry point.

The broad objective is to build the Mediterranean catalogue of metadata, which will become a reference for all the spatial layers and will be continuously updated. It is understood that the SDI offers the possibility to manage access and sharing conditions.

Main goal is to create a reference datasets to refer to (regarding socio economic data for instance).

The H2020 assessment will require ancillary data and is not only limited to data collected during this specific data call. In most cases, UN international databases will support the data collection; it is country's responsibility to ensure data coherence with those data. In addition, national statistics will be involved.

### C. Steps

A metadata sheet is attached to each spatial layer, documenting the data itself (sources, access, etc.). Through the SDI we invite the country to fill in the metadata section. Please note that this section is ISO compliant and aligned with international standards.

First, alphanumeric information need to be updated, this concerns especially time series regarding the population.

Second, the object of this exercise is to validate the geometries (lines, polylines and polygons). In most case, administrative units have changed in the last decades due to reforms, cities have grown and extended their boundaries, infrastructures like harbours have shaped the territory.

<sup>&</sup>lt;sup>1</sup> The term SDI indicates a bench of technologies, methods, politics and institutional agreements to facilitate the availability, standardisation and the access to geospatial data.







Finally, textual fields like coastal names need to be corrected and validated by the country as incorrect translation have often led to incorrect nomenclature which make any correspondence with code lists very difficult.

To conclude, this exercise will serve the assessment purposes (e.g. identifying pressures from land to the Mediterranean Sea by calculating the ratio of the population in coastal areas living in cities) and finally yet importantly, user requirements with spatial analysis (e.g. creating new spatial features like 100 km buffer from the coastline).

### D. Geo templates

In order to populate and update the spatial layers a series of 4 Geo templates have been put at your disposal.

It concerns:

- Coastline
- Coastal cities
- Administrative units (per country)
- Catchment areas

In the section B of this document, you will find the description of the spatial layers with all the fields that need to be validated by referencing to existing code lists or simply updated and the specific tasks.

Please refer to the document "Procedure for Reporter to produce H2020 indicators data flow and spatial data collection under ENI SEIS II South Project" to follow the updating procedure using the SDI.

For more advanced functionalities of the SDI please also refer to the document "Spatial Data Infrastructure and Reporting system User guideline".





## E. Spatial layers description

#### 1. Coastal cities



(Source: UN Plan-Bleu)

Prefilled by the EEA

- Country;
- City name;
- Pop1900 (Population in 1990 in thousands)<sup>2</sup>;
- Pop1950 (Population in 1950 in thousands);
- Pop1960 (Population in 1960 in thousands);
- Pop1970 (Population in 1970 in thousands);
- Pop1980 (Population in 1980 in thousands);
- Pop1990 (Population in 1990 in thousands);
- Pop1995 (Population in 1995 in thousands);
- Long (Longitude of the city centroid);
- Lat (Latitude e of the city centroid);
- Surface (in km<sup>2</sup>).

#### Actions required from the countries

- Nomenclature correction of the cities;
- Validation of the data population for the past years;
- Update of the population for 2000, 2005, 2010, 2015,<sup>3</sup>;
- Update if relevant the surface and latitude/longitude.

<sup>3</sup> last year available





<sup>&</sup>lt;sup>2</sup> Population is expressed as a reference of the year (average in the year).

#### 2. Mediterranean coastline



(Source: UN Plan-Bleu)

Prefilled by the EEA

- Country;
- Km (length).

Actions required from the countries

- Update the geometry of the polyline (coastline)
- Update the length (in Km).

#### 3. Administrative units









(Source: GADM4)

Prefilled by the EEA

- Country; •
- RegionName;
- VarName1 •
- VarName2 (occasionally)

Actions required from the countries

- Update the correct nomenclature of the region; •
- Indicate the alternative or also used name of the region (optional). •

#### 4. Catchment areas (hydrological basins)



(Source: UN Plan-Bleu)

Prefilled by the EEA

- Area;
- Perimeter;
- Name.

Actions required from the countries

Update name. •

<sup>&</sup>lt;sup>4</sup> GADM <u>https://gadm.org/</u> which is an international database that provides administrative areas of all countries, at all levels of sub-division. For this exercise the level 2 or 3 (depending on the country) have been selected.







## F. References

More help on Reporting Data Repository is available from https://idc.info-rac.org/help. For any request of information about data reporting please contact INFO/RAC System Manager: info@info-rac.org and michael.assouline@eea.europa.eu







