# Central management of rural resources, agri-food and forestry
# Service for hunt, fish resources and biodiversity

# ECOSEA PROJECT

# ACTION. 3.3. - FISH.GIS – Guidelines
## Document by ARPA FVG

This document covers the instructions to be followed during the organization and delivering of the data to be implemented in the Fish.GIS database.

The development of Fish.GIS will be based on the work done under the project AdriBLU (Interreg IIIA - ADRI.BLU project) and will be extended to those Adriatic areas that weren't originally covered. New thematic content will be added to grant support to WP4 (pilot areas for active restocking) and WP5 (support to management models).

Data already collected for the Atlas GIS Project Shape-Adriatico (IPA Adiatico) will be directly integrated.

To enable further integration with the European spatial databases all data collected into Fish.GIS will be meta-dated according to the INSPIRE standards.

A web consultation will be provided alongside with the distribution of thematic content trough WMS and WFS protocols and and shp file format.

The core dataset will also be distributed trough a MS Windows installable package. In this way any Windows based laptop using GPS could be used to live surf the Fish.GIS content.

The Fish.GIS geodatabase and all web services will be held by ARPA Friuli Venezia Giulia servers and will be entirely based on open source software.

## Fulfillments

Project partners should provide their staff with data entry experience on spreadsheets and shp files and shall report the identity of a contact person who will oversee the collection and formatting of data according to the standards that will be required from time to time.

For the organization and sending of the requested data each expert should coordinate with the experts by the Region of Friuli Venezia Giulia.

Support to experts in the Friuli VG must be provided, through digitization of themes that will be considered as necessary for the completion of the project.

The reference system chosen for the geographical layers is ETRS89/ETRS (EPSG 3045) or alternatively (i.e. GPS navigation purposes) the reference system WGS1984 (EPSG 4326).

The webgis coordinates will be displayed as EPSG 3045 and EPSG 4326 to facilitate the use by common GPS hardware.

If some partner will not be able to provide data with these projection systems, it must be specified the origin datum / projection and relative EPSG code.

The data exchange format chosen for vector features is shape files (.shp). Raster data should be provided preferably in geoTIFF (LZW compressed) or Erdas Imagine (.img).

Any material not available in digital form will be scanned and supplied as Tiff (i.e. cartography to be georeferenced), or as doc, rtf or pdf in case of documents (laws, ordinances, etc. ..).

Any maps attached to the documentation collection will be scanned including any grid coordinate or any element useful for geotagging.

Data included in the database will be in Italian and in English.

Croats and Albanians partners are expected to cooperate in the translation of the contents of the WebGIS and the distributed software.

# Data to be extended / developed:

## Basin delimitation / Administrative boundaries

Ø The partners of Croatia and Albania must provide the nautical charts, preferably in digital format, of their national coasts and all the pilot books needed for reference in reading these charts. These pilot books sould possibly be in English language.

Ø All partners will have to provide the coastline in shp format with a reference scale as much detailed as possible.

Ø Coastal administrative areas for the Italian side will be derived from the Atlas SHAPE, the partners across the border will have to provide the administrative limits of any provinces / municipalities / counties or other administrative boundary.

Ø Italian partners will identify the limits of the maritime compartments, while the partners of Croatia and Albania will have to identify which areas can be used for the distinction of "maritime administrative areas" (eg fishing sectors (zones AG) for Croatia) and will provide the characteristics and extension of these areas.

## Seabed Features

Ø All partners shall provide data depth, where available, i.e. releves not already be found on the official nautical charts

Ø Where available the areas at different sedimentological texture shall be provided.

Ø Data on seagrass and soft bottom biocenosis shall be provided.

## Discharging activities

Ø The partners must provide data on the location of sediment dumping, coastal abandoned military and the location of the underwater sewage ducts.

## Regulated and protected areas - Fishing zones

Ø Croatian and Albanian partners will provide the national / regional / local rules affecting the fishing activities in the sea.

Ø Italian partners will have to provide the legislation concerning fisheries at regional level, all exemptions and ordinances by the harbour authorities. All documents must be provided in digital format including any attached cartography.

Ø All the locations of marine protected areas (MPAs), the Biologically Protected Areas, the Oasis underwater parks, the SCIs and SPAs as well as Nature Reserves must be provided.

### Fishery resources available

Ø Data on available resources (MEDITS-Adriamed) must be provided, plus any data on studies of fishery resources available in the larger scale. The data shall be provided at low aggregation level, such as annual average trends and / or seasonal catch for target species for the different marine-coastal areas. These data shall be directly accessible via communication protocols between the server that will host Fish.GIS and those servers hosting original data; if this workflow isn't possible to achieve a channel for transferring data, according to predefined patterns and timing, will be set up. The data on resources and their exploitment must be submitted by methods similar to those described above, these data could come from organizations like the Chioggia Socio-Economic Observatory for fishing activities. These channels must keep the dataflow afterwards the project execution time. This should allow the maintenance of informations needed for the formulation of future management plans.

Ø In addition to data on the fishery availability/exploitation, information should be provided on mariculture, in particular the siting of mariculture, the areas given in concession for the mussel collection. These areas should be possibly accompanied by information on the management and production.

Ø All partners shall provide the extension and characteristics of quality areas classified for shellfishing.

### Fishery

Ø If not already derivable from the European register of fleet (Fleet Register), all partners shall provide information on the composition of the fishing fleets and the location of the fishing ports along the coasts of their pertinence.

### Various kind of data

Ø The partners shall provide the location of wrecks, platforms and other artifacts in marine / coastal areas.

Ø The areas delegated to facilities for restocking with the documentation that describes the purpose, and realization costs must be provided.

### TIME SCHEDULE

Ø Observations and supplementary proposals may be sent to the PARTNERS LP Within 10 days by the receipt of this document. Subsequently this will be deemed approved.

Ø ARPA - FVG will provide from time to time the standard or the instructions for data collection

Ø All Partners for their Region / County must, as soon as possible, identify and communicate to ARPA FVG the name and e-address of the person in charge for the GIS data collection

Ø Each Partner for its own region will constantly report on the retrieval of the requested data, and must report for any problems and on the relative solving time

Ø The FVG REGION/ARPA will provide the first operational guidelines and a time schedule for future activities to be carried out.

Udine, 26 giugno 2013