



COCONET Project

Collaborative project

Theme: OCEAN.2011-4

Grant agreement no: 287844



COCONET

Towards COast to COast NETworks of marine protected areas (from the shore to the high and deep sea), coupled with sea-based wind energy potential

WEBGIS MANUAL

Version: v3

Date:05/08/2015

Work package: WP9

Authors: Valentina Grande (CNR-ISMAR), Federica Foglini (CNR-ISMAR)

Participants: CNR-ISMAR, UkrSCES.

Contents

The WebGIS platform	3
1. Navigation panel and Table Of Content	4
2. Identify.....	4
3. Query table	6
4. Erase	8
5. Table of content visualization	8
6. Advanced search.....	9
7. Print map	11
8. Download.....	13

THE WEBGIS PLATFORM

The WebGIS platform is built with ArcGIS server 10 software improved adding a CMS GIS (Content Management System GIS) called Moka. The application is built in flex technology and Moka allows to manage and organize the contents of the GIS application. The WebGIS merges all the Geodatabases in an unique structure, with a specific order and symbology. Through the WebGIS the COCONET partners can visualized and query all the data, they can create maps and download part of data accepting a data policy document. The Moka application allow us to manage the users, we created different groups with different degree of access to the WebGIS functions.

The WebGIS application is free accessible through the following URL address:

<http://192.167.168.56:8080/cocoweb.html>

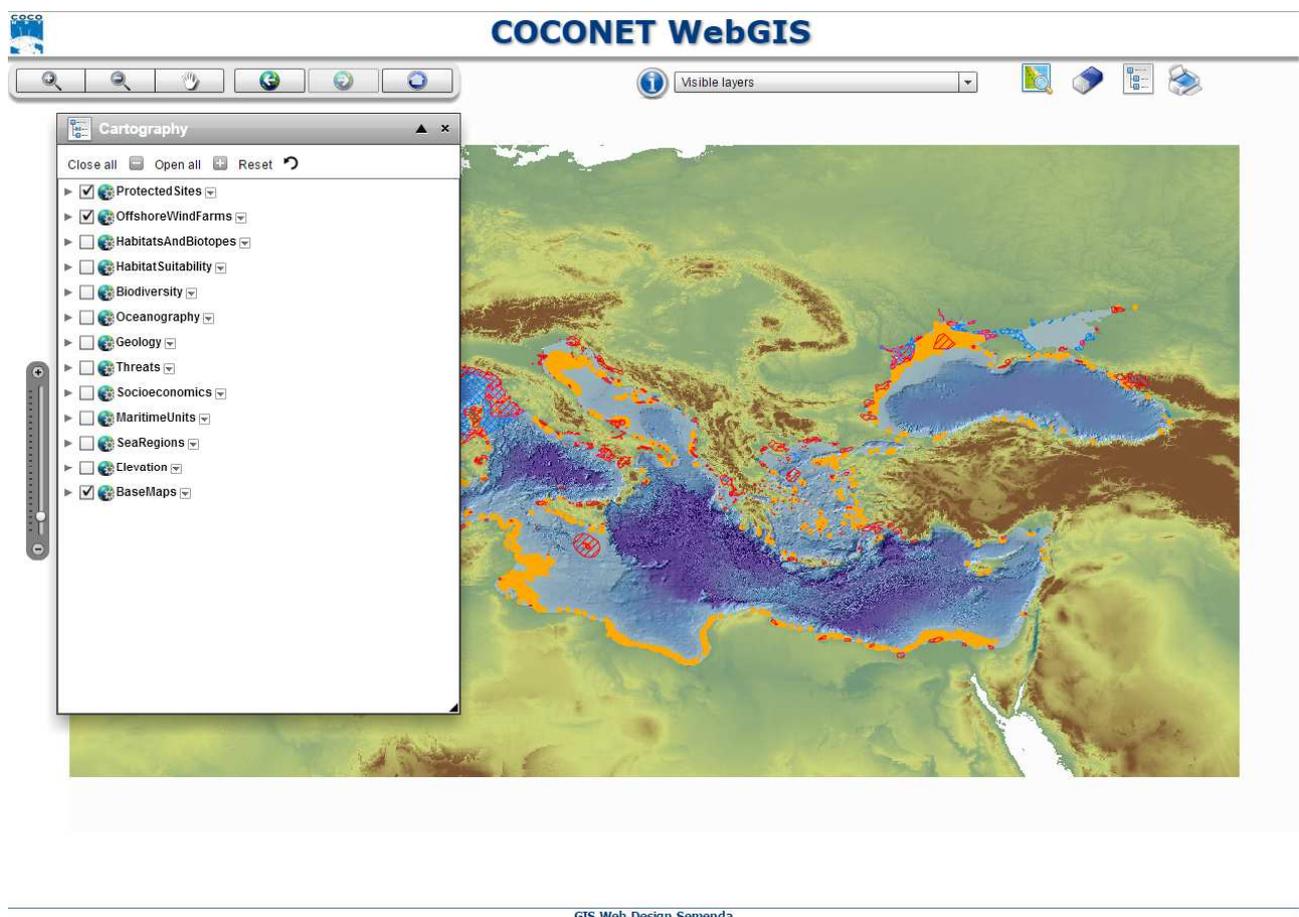


Fig 1: The figure shows how the WebGIS looks like at the first access.

The downloading function (on the upper right side) is not visible with the public access (see paragraph 6). In the following paragraphs all the functions are described.

1. NAVIGATION PANEL AND TABLE OF CONTENT

These two elements allows the user to move in the platform, to visualize and hide objects.

1. The Table Of Content allows to manage the visualization of the layers and group layers. In this way he user can choose what kind of data display. Here the user finds to three tools:
 - a) Set transparency (it allows to make transparent the entire group layer)
 - b) Zoom to layer full extent (it allows to go to the scale of the layer extension)
 - c) Visible from scale 1: x (it allows to go to the scale of the layer visualization, sometimes layers are visible only from a scale or out of a settled scale)
2. Zoom in and zoom out bar (left click to see the current scale)
3. Zoom in and zoom out bottom
4. Pan
5. Go back to previous extent and to next extent
6. Go to initial extent

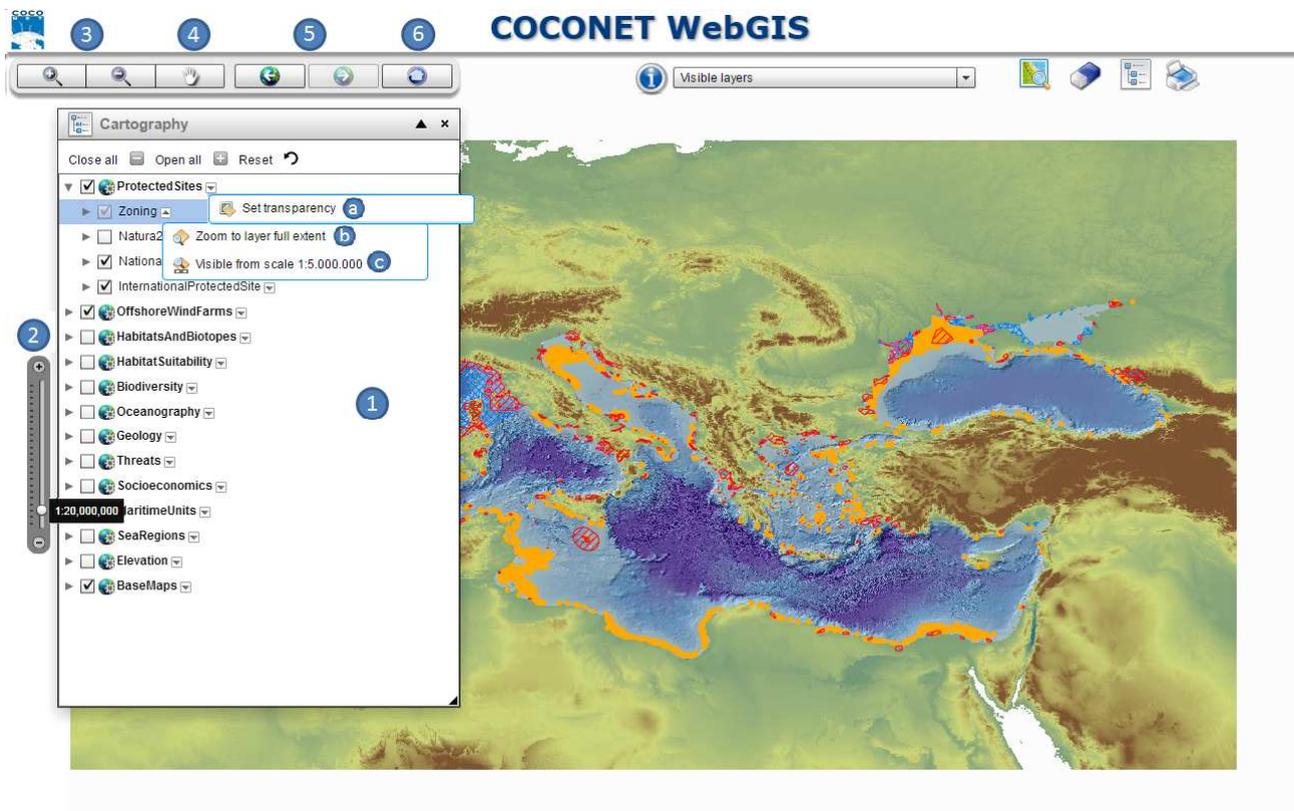


Fig 2: The figure shows how to navigate and visualize layers.

2. IDENTIFY

Clicking a feature on the map with this tool, the user can visualize the information about the top-most layer, the visible layers or choose a specific layer in the drop down menu.

1. Choose the layer to identify
2. Select the tool
3. Click the feature of interest
4. Click on the name to visualize the related information
5. Click on the related table to visualize the information

6. Link to the metadata file

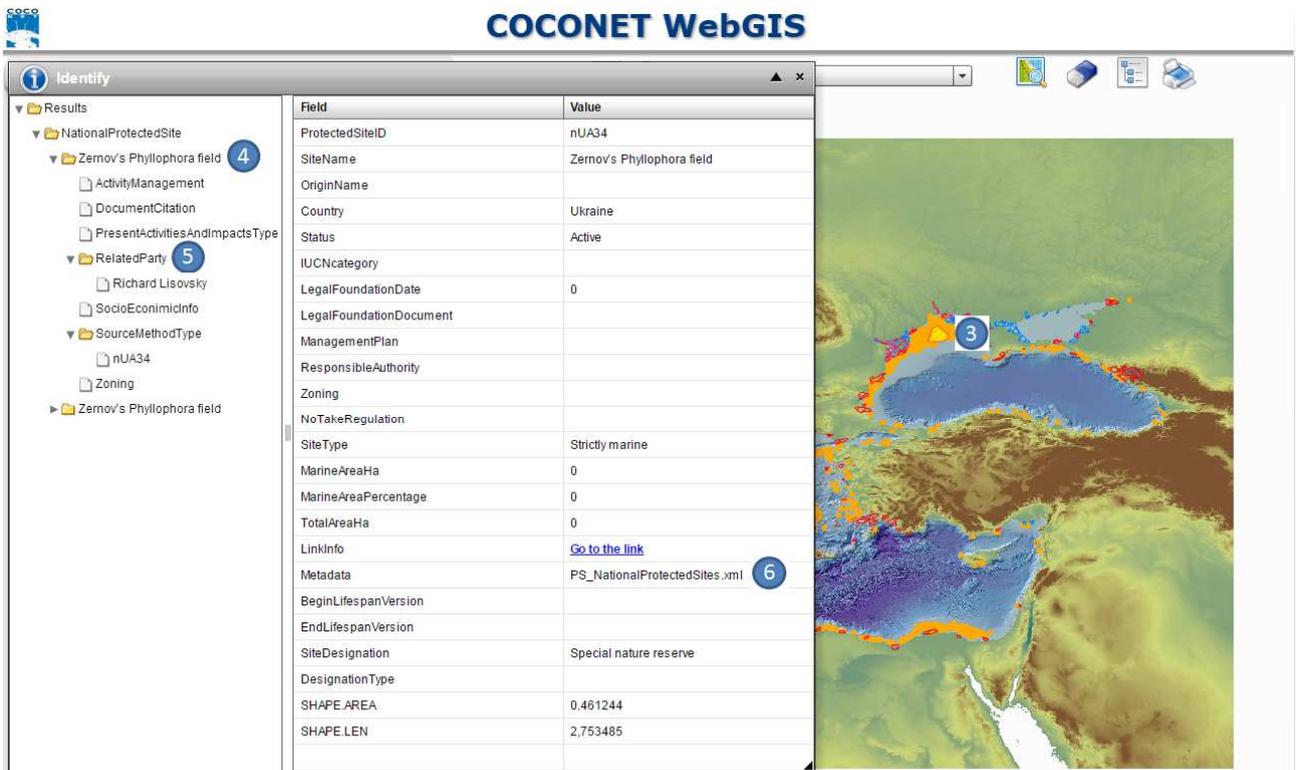
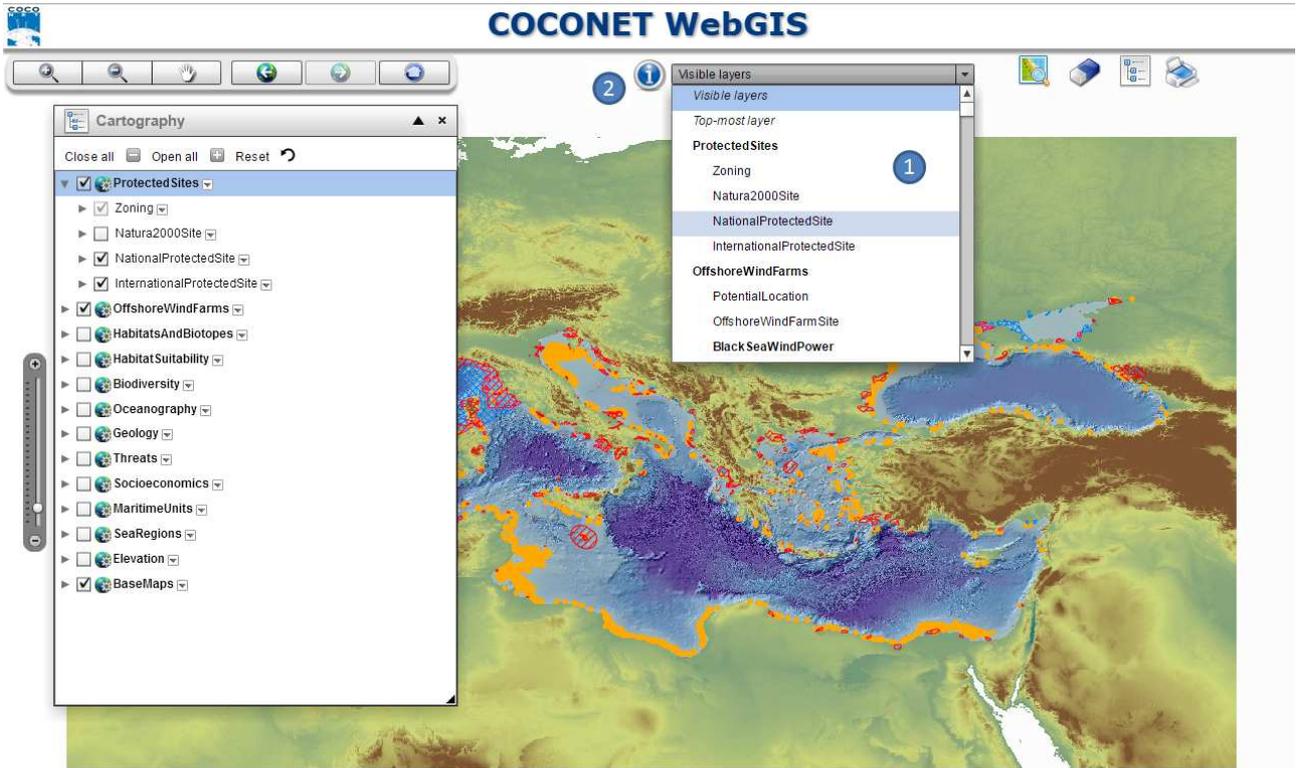


Fig 3-4: The figures show how to identify features.

3. QUERY TABLE

This function permits to apply filters on the layer's attribute tables, in this way the user can build query on the non-spatial information.

1. Select the layer to query
2. Select the tool
3. Attribute table of the layer view
4. The filter data bottom allows to query the fields in the table
5. Choose the filters
6. Visualize or select the features that meet the criteria of the filter

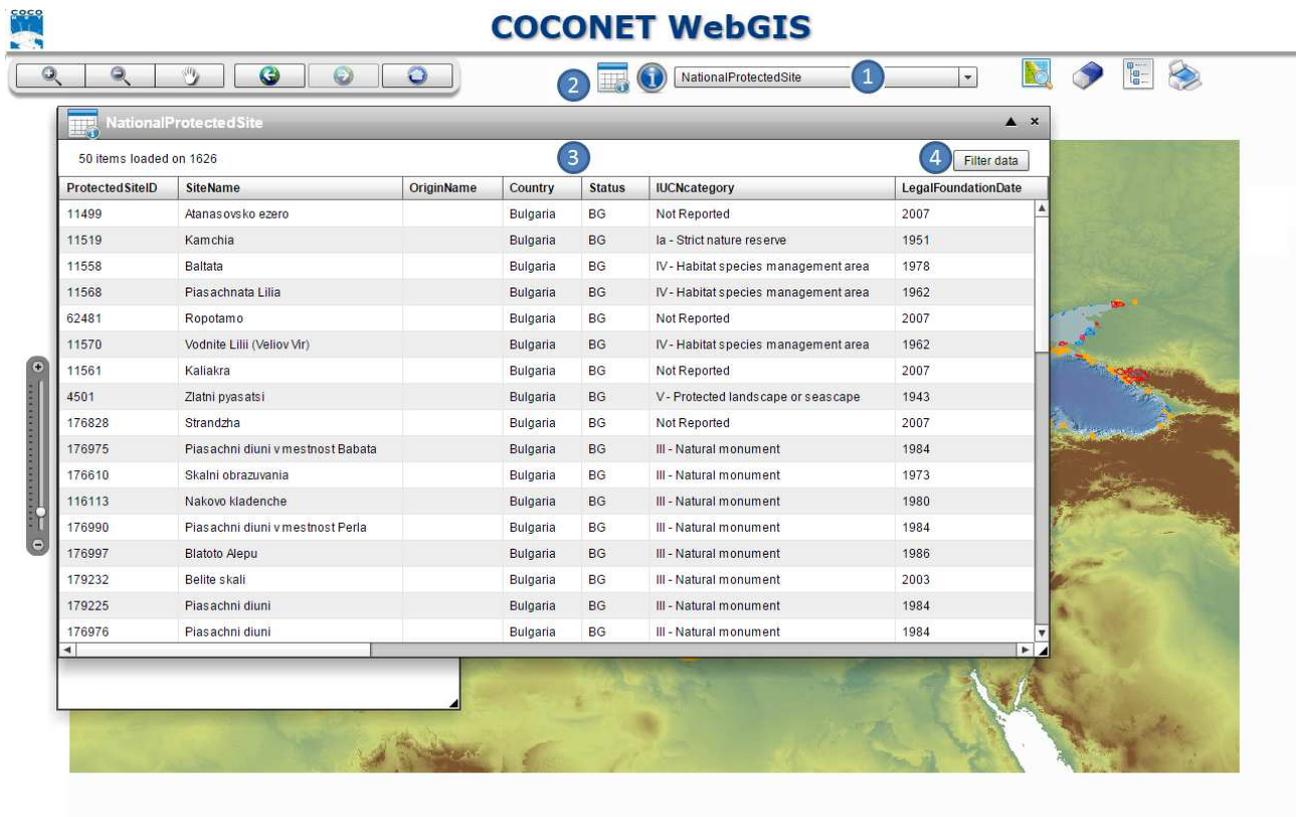


Fig 5: The figure shows how to query the attribute table of a layer.

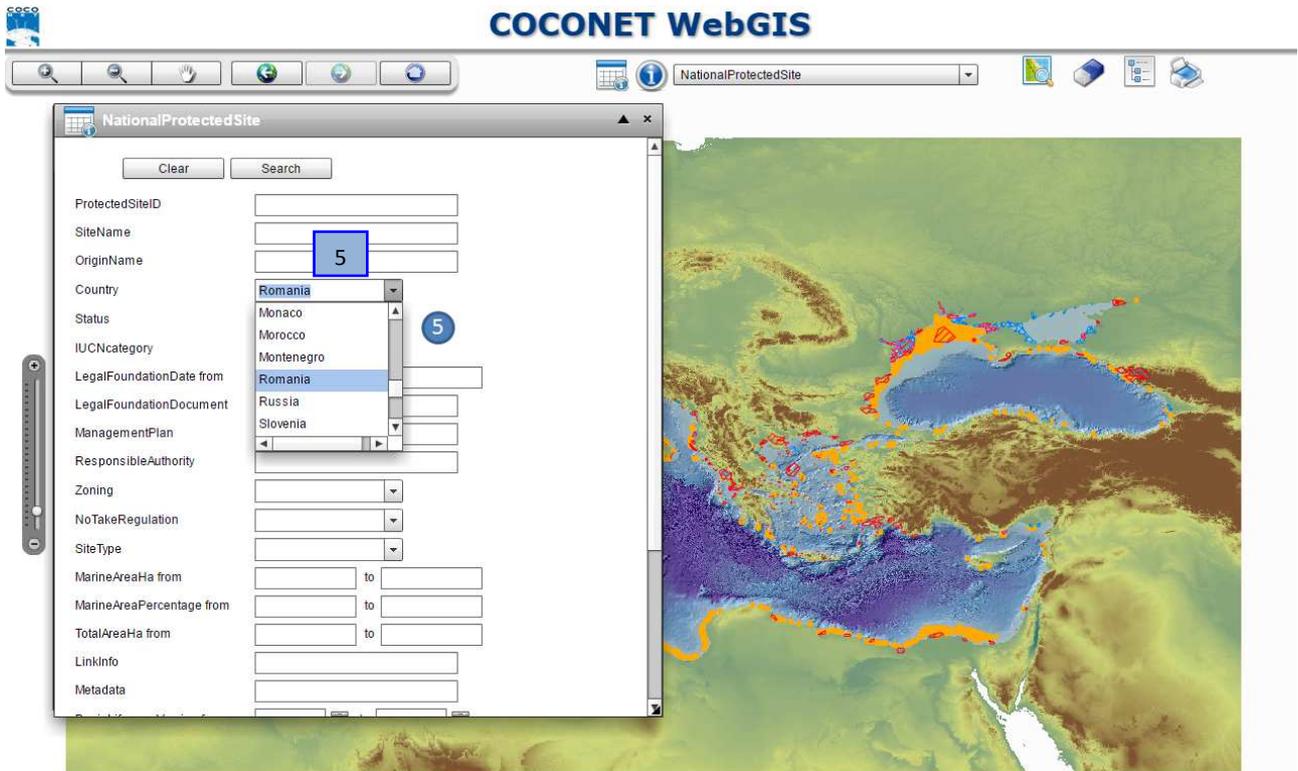


Fig 6: Through this mask the user can filter the data according to his needs

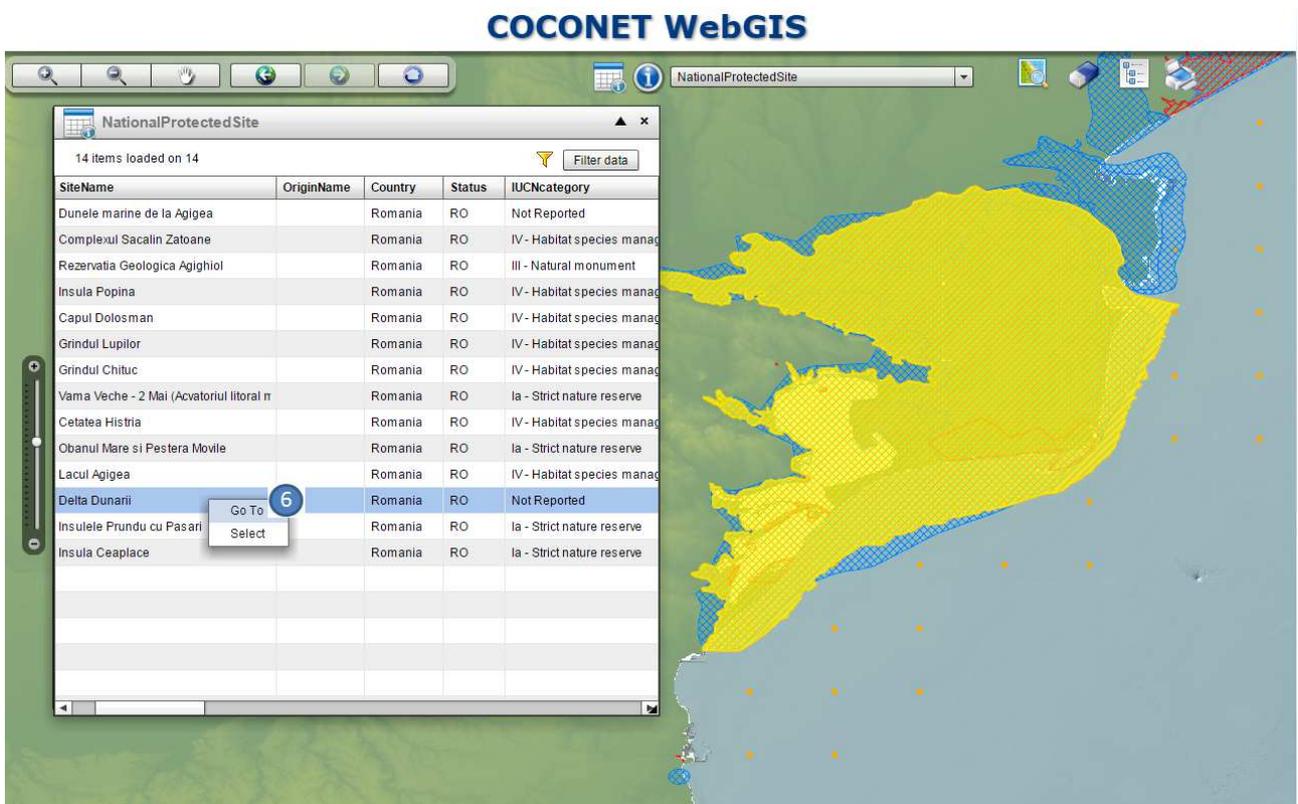


Fig 7: Through these functions the user can visualize or select the features of interest

4. ERASE

The erase function allows to reset the operations (selection, filter, etc)

1. Push the icon

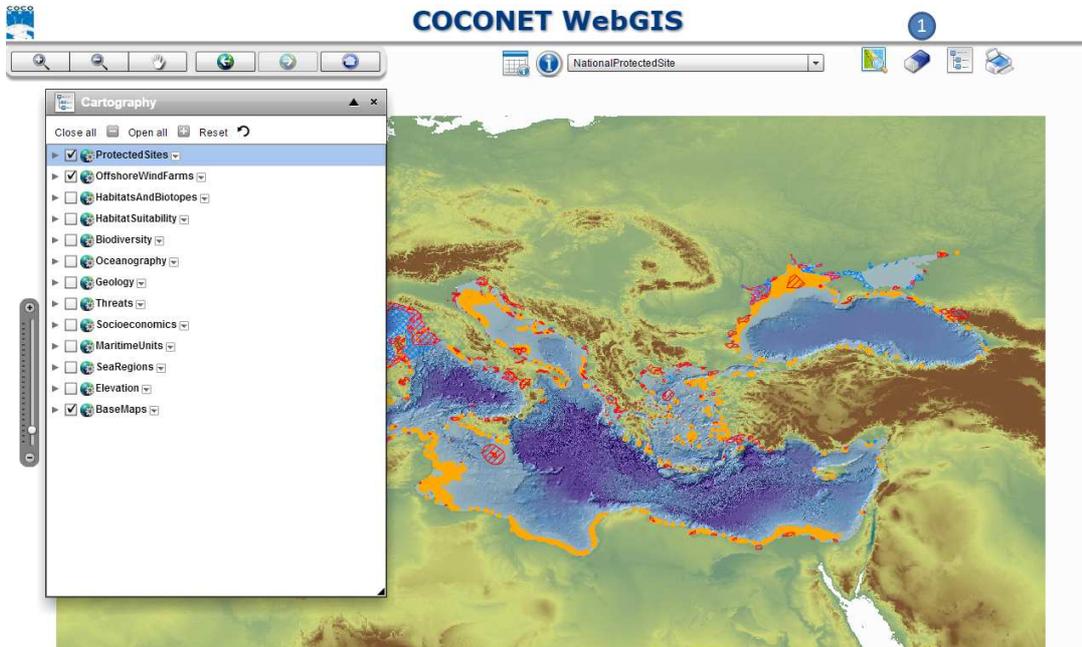


Fig 8

5. TABLE OF CONTENT VISUALIZATION

The tool allows to visualize or hide the table of content

1. Push the icon

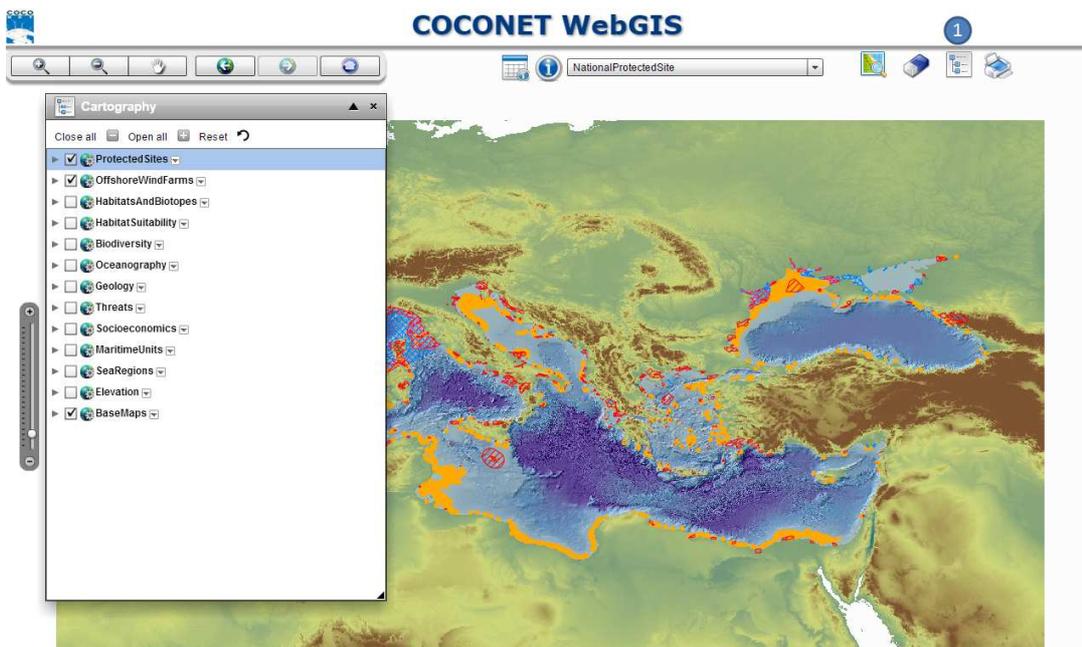


Fig 9

6. ADVANCED SEARCH

With this tool, the user can apply filters to layer's attribute table and relative related tables, then the results can be selected or/and zoomed.

1. Select the tool
2. Choose the layer to query
3. In the second drop down menu it will appear the tables related to the selected layer
4. Apply a filter on the layer
5. Go to or/and select the result
6. Go to the table tab
7. Apply a filter to the related table
8. Return on the layer tab
9. Go to or/and select the result

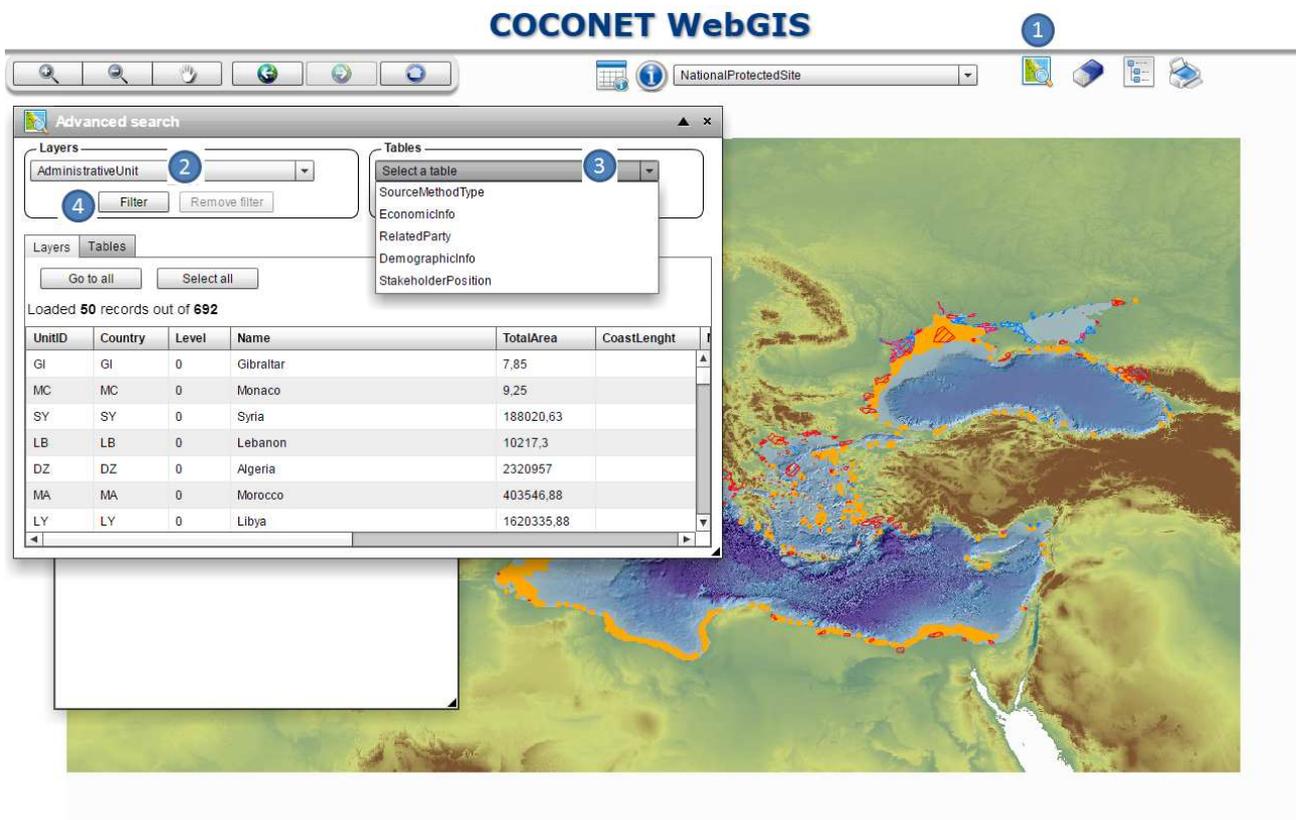


Fig10: The figure shows how to use the Advanced search tool.

COCONET WebGIS

The screenshot shows the COCONET WebGIS interface. The 'Advanced search' window is open, displaying the 'Layers' section with 'AdministrativeUnit' selected. The 'Tables' section has 'RelatedParty' selected. The search results table is as follows:

Country	Level	Name	TotalArea	CoastLength	Metadata
IT	0	Italy	0		NUTS_2010

Fig 11: How to visualize the result of the filters on the layer.

COCONET WebGIS

The screenshot shows the COCONET WebGIS interface. The 'Advanced search' window is open, displaying the 'Layers' section with 'AdministrativeUnit' selected. The 'Tables' section has 'RelatedParty' selected. The search results table is as follows:

IndividualName	PositionName	Role	Contact	OrganisationCode
Federica Fogliani	Researcher	Point of contact	federica.fogliani@bo.ismar.cnr.it	CNR-ISMAR
Federica Fogliani	Researcher	Point of contact	federica.fogliani@bo.ismar.cnr.it	CNR-ISMAR
Federica Fogliani	Researcher	Point of contact	federica.fogliani@bo.ismar.cnr.it	CNR-ISMAR
Federica Fogliani	Researcher	Point of contact	federica.fogliani@bo.ismar.cnr.it	CNR-ISMAR
Federica Fogliani	Researcher	Point of contact	federica.fogliani@bo.ismar.cnr.it	CNR-ISMAR
Federica Fogliani	Researcher	Point of contact	federica.fogliani@bo.ismar.cnr.it	CNR-ISMAR
Federica Fogliani	Researcher	Point of contact	federica.fogliani@bo.ismar.cnr.it	CNR-ISMAR
Federica Fogliani	Researcher	Point of contact	federica.fogliani@bo.ismar.cnr.it	CNR-ISMAR

Fig 12: How to filter the related tables.

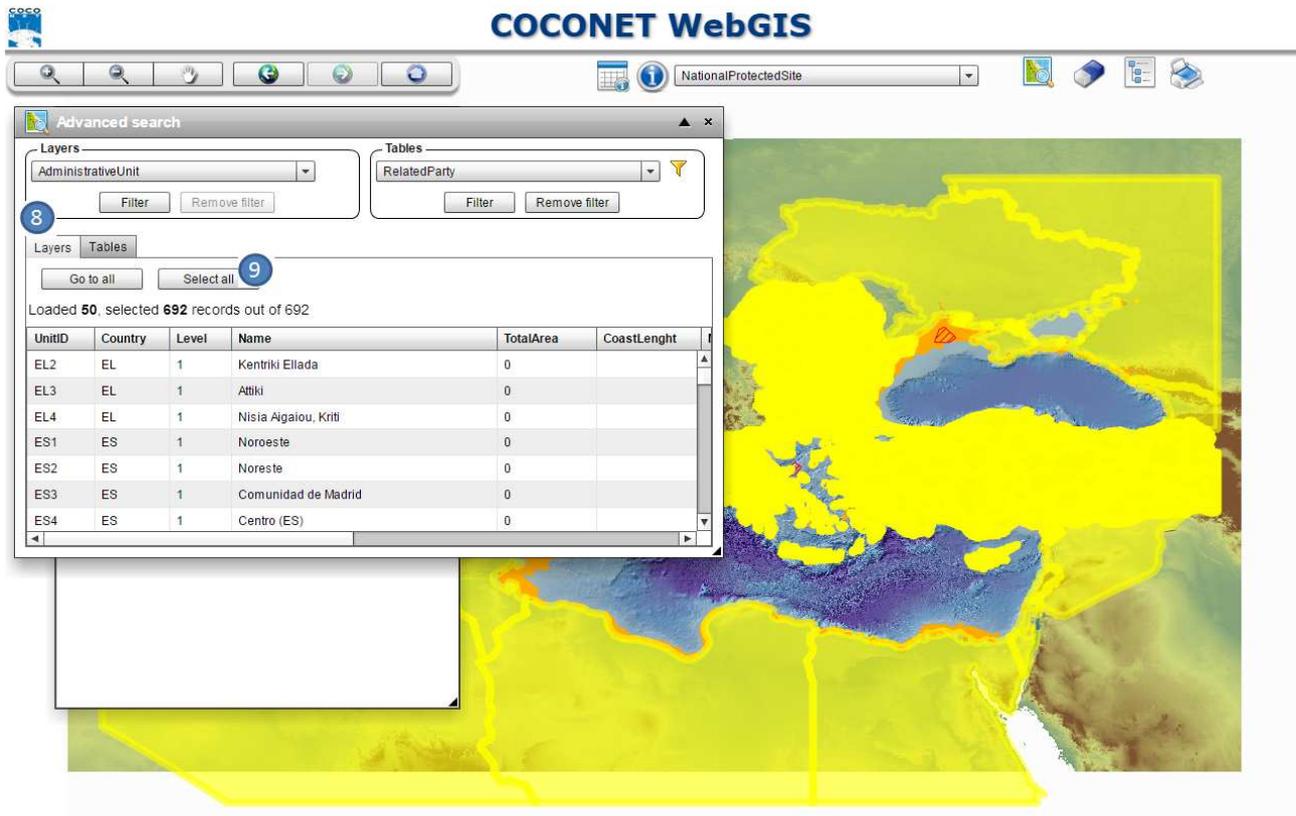


Fig 13: How to visualize or\and select the result of the filters on the table.

7. PRINT MAP

This function allows to create a map.

1. Select the tool
2. Choose the print type (pdf, jpeg, tiff, png), the print style (A4, A3), the scale (not mandatory) and the presence or absence of the legend in the map. If the scale is not set, the current extent will be print.
3. It will be create the .pdf with the legend or a georeferenced image.

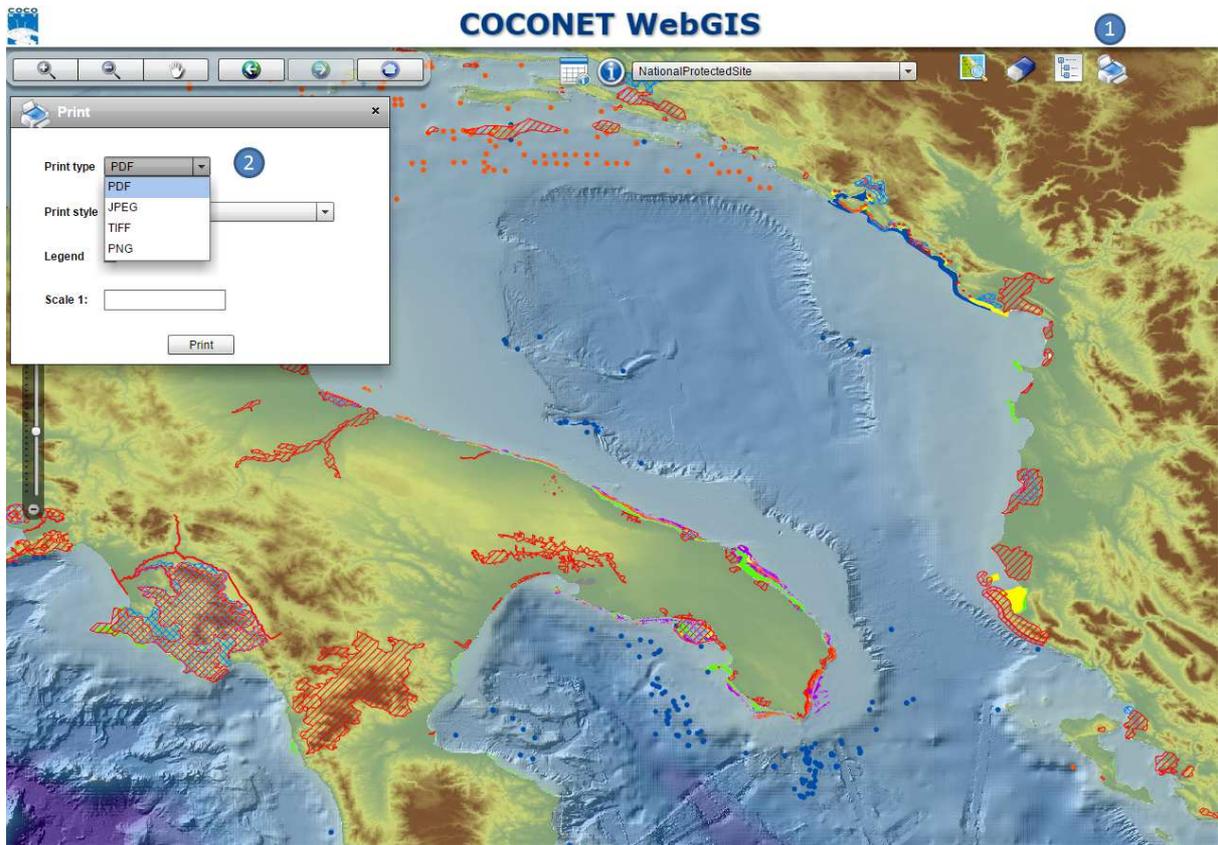


Fig 14: The figure shows as print a map.

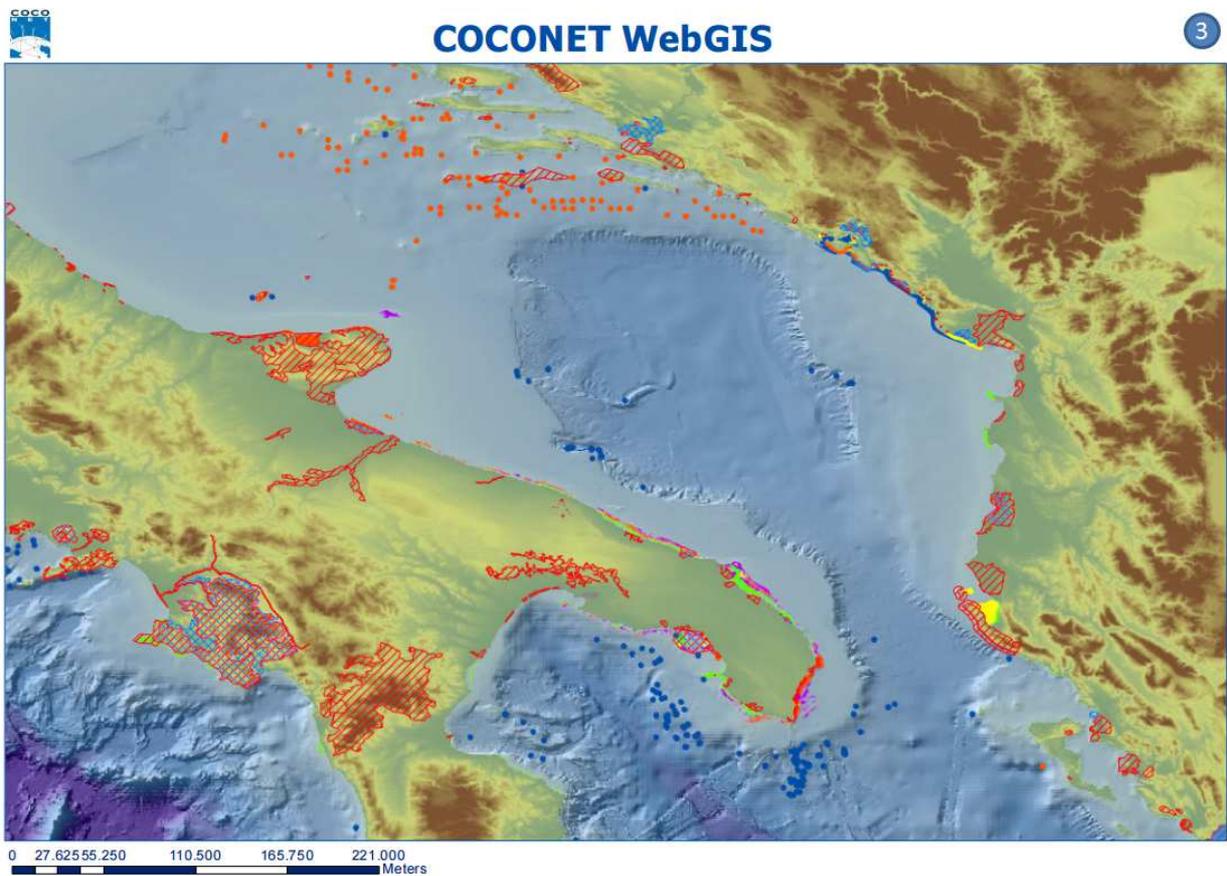


Fig 15: The resulted .pdf map.

8. DOWNLOAD

With this function the user can download part of the data from the COCONET WebGIS. If the user is able to see the downloading function, he has to follow the procedure below:

1. Select the tool
2. Choose if draw a rectangle or a polygon that includes the part of map you want to download otherwise you can decide to download the part of the map you are currently visualizing (in the following example we choose to draw a rectangle).
3. Choose the group layer
4. Choose the layer\|s to download or to cut
5. Put the output spatial reference or keep the current one
6. Fill with the e-mail where data will be send
7. You will receive an e-mail with a link to the .zip file. The last one consists of (Fig 17):
 - a shapefile (the GIS file is the downloaded layer and it consists of 4 single files)
 - report.txt file (Metadata information)
 - a .mxd file (the file contains a map description, map layout, etc)

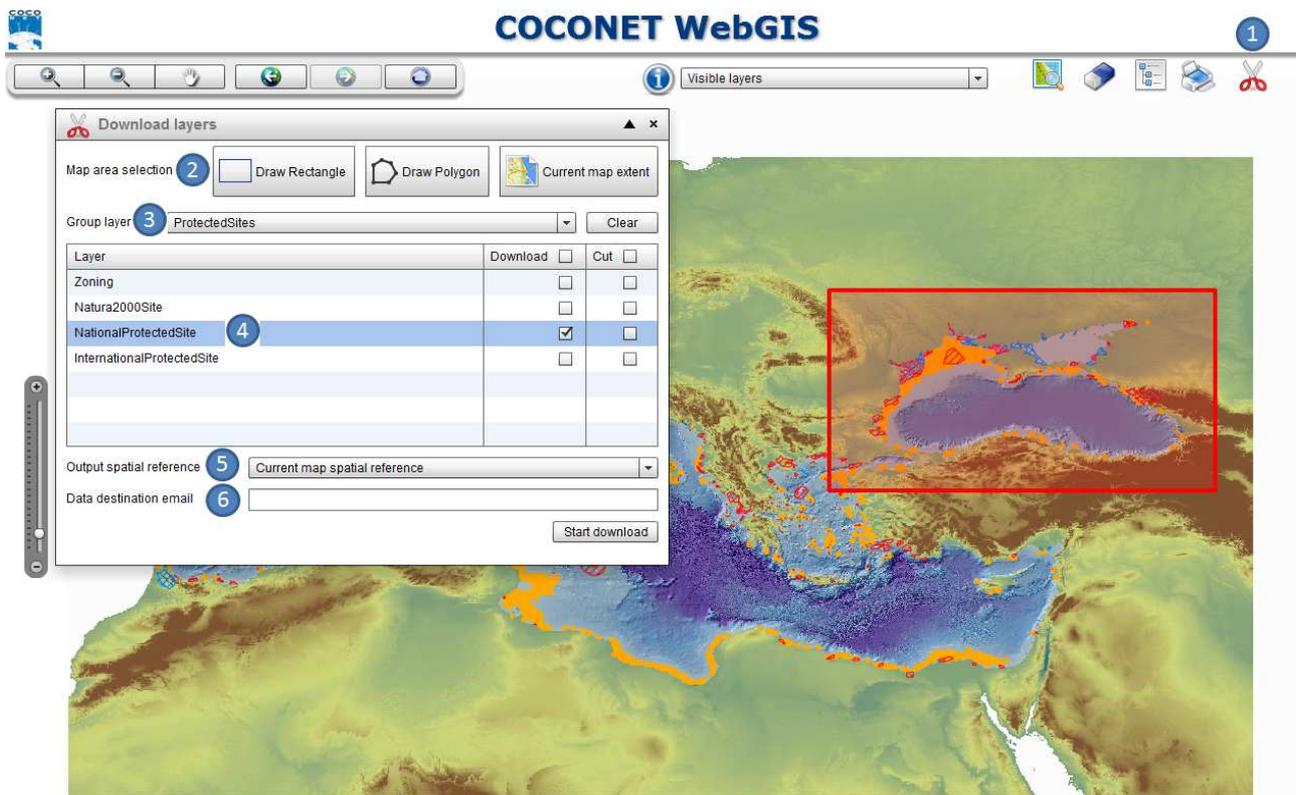


Fig 16: Through this mask the user can define the characteristics of his download.

Nome	Tipo	Dimensione compr...
 AHabitatDistributionUnit.dbf	File DBF	6 KB
 AHabitatDistributionUnit.prj	File PRJ	1 KB
 AHabitatDistributionUnit.shp	File SHP	140 KB
 AHabitatDistributionUnit.shx	File SHX	1 KB
 Habitats and Biotopes.mxd	ESRI ArcMap Document	9 KB
 report.txt	Documento di testo	1 KB

Fig 17: The figure shows the content of the .zip file.

How to activate the downloading function

1. The user has to download the Data policy document at the following link:

http://coconetgis.ismar.cnr.it/documets/COCONET_DataPolicy.pdf

2. The user has to accept the data policy and fill the application form
3. Then he has to send it to the administrator by e-mail

4. The administrator will send the personal credentials to access the download function

