



RESISTANCE Project

WP3 – Act. 3 Awareness raising and engagement

Deliverable Number D.3.1.3

Joint user-friendly integrated platform, called IWP Resistance platform

Final Version of 27/06/2023



Project Acronym RESISTANCE

Project ID Number 10419754

Project Title Raising Awareness of Maritime Spatial Planning

Importance

Priority Axis Environmental and cultural heritage

Specific objective 3.3

Work Package Number 3

Work Package Title Clustering thematic activities

Activity Number 3.1

Activity Title Exchange and exploitation of projects' results

Partner in Charge University of Ferrara – PP4

Partners involved All partners

Status Final

Distribution Public



RESISTANCE PLATFORM

Thanks to the collaboration of the partnership, PP4 collected in the platform data of geochemical survey on sediments and water bodies, geochemical features of dredging sediments and Total Organic Carbon (TOC), Total Nitrogen Analysis (TN) from ECOMAP database; description of characterization of the biodiversity of the project sites and gathering up-to-date information on the distribution and quality of seagrasses, monitoring data, especially those concerning the retreat or surface increase dynamics and the measured impacts and assess trends in biodiversity from SasPas project; data of marine litter collection during survey activities and data of their geolocalization and caracterization and data from questionnaries submitted from ML-Repair project; marine litter photos and data collected by Drone (OBU DATA), data model, plastic index and lab data analysis collected and analyzed from NET4mPLASTIC database.

The main functionalities and a detailed list of tasks, to fully operate the platform, are described in the next paragraphs. In detail this document will cover the following aspects:

- Main page login and main navigation menu;
- Operate Map Sections
- Operate Data Sections
- Operate Multimedia Sections
- Others

Moreover, at the end of the document, a brief explanation on how to upload new content is provided.

Source code of the platform have been implemented in open source structure, using PHP, Javascript and Google Maps Free API and represent an annex for this document.



Main Page – Enter the Site

A picture of the main page of the site is depicted here below, reachable at the address:

www.resistance-it-hr.net/login.php

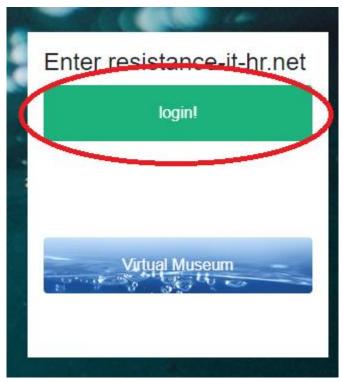




Main Page

Login procedure is auto-performed by the system that will lead the operator into the php-javascript, DB loaded environment. To enter in the site it is just necessary to click on the Login! Green button, like circled in the picture below.



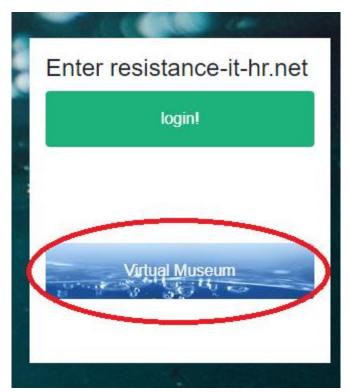


Enter the Site

The system will then forward the login request to the hosting server and the main interface will appear.

For ease, a link to the virtual museum has been applied also. That consist in a hypertext redirect to the html webpages hosting the contents of the virtual museum, that stores the documents, pictures and podcasts that synergize with the data present in the platform and integrates it whereas it was not possible to represent them in the more "technical" environment, requiring a more "textual" and "narrative" one.

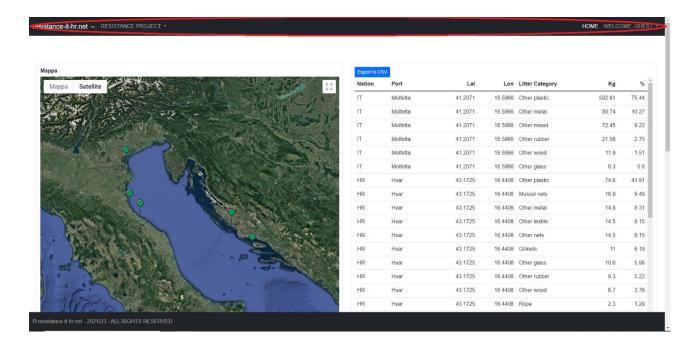




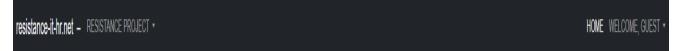
Move to Virtual Museum

After entering the site, the main navigation menu takes part on the upper part of the screen, as highlighted in the picture below.





Main navigation menu location

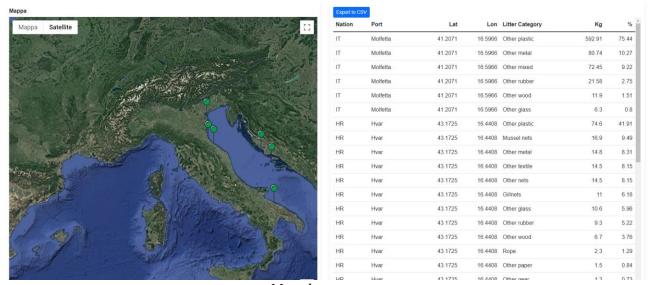


Main navigation menu detail



Operating Map Section

In the picture below is illustrated the map/data model section page. This section contains collected data that have been geo-localized and instantiated with collected plastic litter concentration.



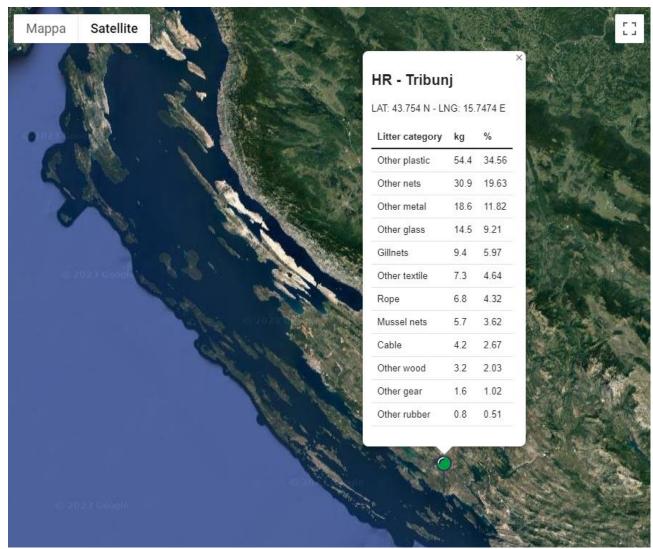
Map data page

The Map section data page is divided in three macro sections:

- Maps section, showing the point of interests;
- Table section, showing the requested value in table format;
- Graph section, showing the requested value in pie chart graph format.

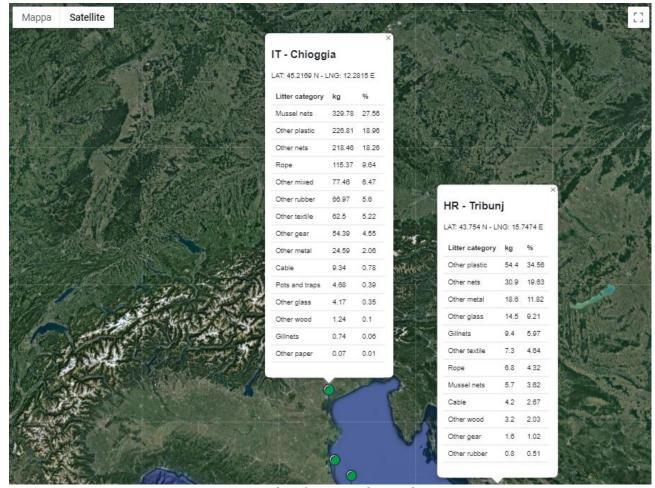
Data are automatically retrieved from the database and posted on the right side of the page, while as the POI (points of interests) are dynamically loaded on the map, on the left. Here below is depicted a detail of the Map view.





Map view detail – Summary of POI data





Map view detail - zoomed in and out

Every point in the map correspond to where the data has been collected. To highlight a point just click on the POI green pin on the map and the summary data will appear directly on the map itself, plus the pie chart on the lower right part of the screen will be populated.

The map showing the data has integrated the following functionalities:

- Waypoint info, showing the coordinates by clicking on the waypoints;
- Satellite / Map mode;
- Zoom in / Zoom out;
- Full screen / Windowed mode.

The map can be then scrolled by clicking on the map and keeping the mouse button pressed, while moving with the mouse itself in the desired directions.



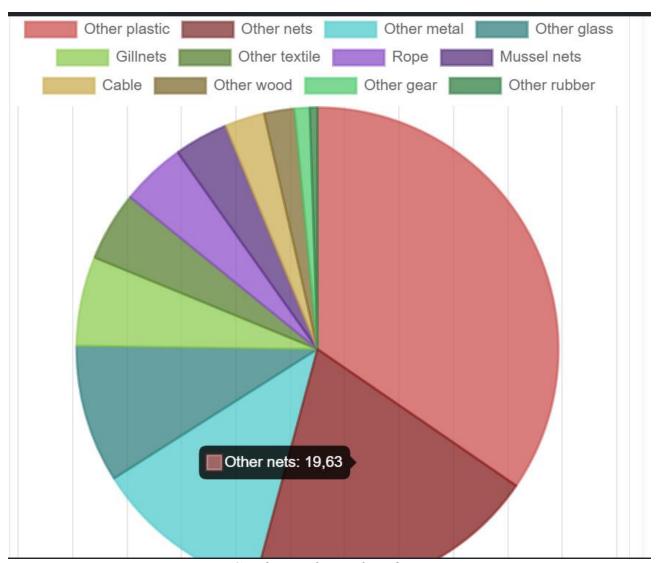
As underlined in the picture below, it is just necessary to press to the related functionality button to have the desired feature executed.



Map Functionalities

Here below are depicted the pie chart Graph view and the table view.





Pie Graph View for a selected point



Export to CS Nation	Port	Lat	Lon	Litter Category	Kg	%	
IT	Molfetta	41.2071	16.5966	Other plastic	592.91	75.44	
IT	Molfetta	41.2071	16.5966	Other metal	80.74	10.27	
IT	Molfetta	41.2071	16.5966	Other mixed	72.45	9.22	
IT	Molfetta	41.2071	16.5966	Other rubber	21.58	2.75	
IT	Molfetta	41.2071	16.5966	Other wood	11.9	1.51	
IT	Molfetta	41.2071	16.5966	Other glass	6.3	0.8	
HR	Hvar	43.1725	16.4408	Other plastic	74.6	41.9	
HR	Hvar	43.1725	16.4408	Mussel nets	16.9	9.49	
HR	Hvar	43.1725	16.4408	Other metal	14.8	8.3	
HR	Hvar	43.1725	16.4408	Other textile	14.5	8.1	
HR	Hvar	43.1725	16.4408	Other nets	14.5	8.15	
HR	Hvar	43.1725	16.4408	Gillnets	11	6.18	
HR	Hvar	43.1725	16.4408	Other glass	10.6	5.96	
HR	Hvar	43.1725	16.4408	Other rubber	9.3	5.22	
HR	Hvar	43.1725	16.4408	Other wood	6.7	3.70	
HR	Hvar	43.1725	16.4408	Rope	2.3	1.29	
HR	Hvar	43.1725	16.4408	Other paper	1.5	0.84	
HR	Hvar	43.1725	16.4408	Other gear	1.3	0.7	

Table view for all the set of geographical points

By overing with the mouse on a slice of the pie chart it is possible to read the related percentage. To export an image of the pie chart Graph view, it is just necessary to right-click on the pie chart Graph and choose "Save Image". The object will dynamically generate a picture file to be saved, to be eventually inserted in documents or report.

To get the selected data in CSV format, it is just necessary to press on the blue "Export to CSV" button located in the upper part of the Table view section. A CSV (comma separated value) will be automatically generated and saved on the desired path pre-set on the web browser.

Here below is shown an extract of a generated CSV exported set of data.



Nation, Port, LAT, LON, Litter category, kg, % IT, Molfetta, 41.2071, 16.5966, Other plastic, 592.91, 75.44 IT, Molfetta, 41.2071, 16.5966, Other metal, 80.74, 10.27 IT, Molfetta, 41.2071, 16.5966, Other mixed, 72.45, 9.22 IT, Molfetta, 41.2071, 16.5966, Other rubber, 21.58, 2.75 IT, Molfetta, 41.2071, 16.5966, Other wood, 11.9, 1.51 IT, Molfetta, 41.2071, 16.5966, Other glass, 6.3, 0.8 HR, Hvar, 43.1725, 16.4408, Other plastic, 74.6, 41.91 HR, Hvar, 43.1725, 16.4408, Mussel nets, 16.9, 9.49 HR,Hvar,43.1725,16.4408,Other metal,14.8,8.31 HR, Hvar, 43.1725, 16.4408, Other textile, 14.5, 8.15 HR, Hvar, 43.1725, 16.4408, Other nets, 14.5, 8.15 HR, Hvar, 43.1725, 16.4408, Gillnets, 11, 6.18 HR, Hvar, 43.1725, 16.4408, Other glass, 10.6, 5.96 HR,Hvar,43.1725,16.4408,Other rubber,9.3,5.22 HR,Hvar,43.1725,16.4408,Other wood,6.7,3.76 HR, Hvar, 43.1725, 16.4408, Rope, 2.3, 1.29 HR, Hvar, 43.1725, 16.4408, Other paper, 1.5, 0.84 HR, Hvar, 43.1725, 16.4408, Other gear, 1.3, 0.73 HR, Tribuni, 43.754, 15.7474, Other plastic, 54.4, 34.56 HR, Tribuni, 43.754, 15.7474, Other nets, 30.9, 19.63 HR, Tribunj, 43.754, 15.7474, Other metal, 18.6, 11.82 HR, Tribuni, 43.754, 15.7474, Other glass, 14.5, 9.21 HR, Tribuni, 43.754, 15.7474, Gillnets, 9.4, 5.97 HR, Tribunj, 43.754, 15.7474, Other textile, 7.3, 4.64 HR, Tribunj, 43.754, 15.7474, Rope, 6.8, 4.32 HR, Tribuni, 43.754, 15.7474, Mussel nets, 5.7, 3.62 HR, Tribuni, 43.754, 15.7474, Cable, 4.2, 2.67 HR, Tribunj, 43.754, 15.7474, Other wood, 3.2, 2.03 HR, Tribunj, 43.754, 15.7474, Other gear, 1.6, 1.02 HR, Tribunj, 43.754, 15.7474, Other rubber, 0.8, 0.51 IT, Cattolica, 43.9694, 12.7494, Other wood, 42.9, 42.49 IT, Cattolica, 43.9694, 12.7494, Other plastic, 18.16, 17.99 IT, Cattolica, 43.9694, 12.7494, Other rubber, 15, 14.86 IT.Cattolica.43.9694.12.7494.Mussel nets.9.1.9.01 IT, Cattolica, 43.9694, 12.7494, Gillnets, 6, 5.94 IT, Cattolica, 43.9694, 12.7494, Pots and traps, 5, 4.95 IT, Cattolica, 43.9694, 12.7494, Other nets, 1.5, 1.49 IT.Cattolica, 43.9694, 12.7494, Other textile, 1.34, 1.33 IT, Cattolica, 43.9694, 12.7494, Other mixed, 1,0.99



IT, Cattolica, 43.9694, 12.7494, Other metal, 0.57, 0.56

IT, Cattolica, 43.9694, 12.7494, Other glass, 0.4, 0.4

IT, Cesenatico, 44.2038, 12.3983, Mussel nets, 20.76, 20.89

IT, Cesenatico, 44.2038, 12.3983, Gillnets, 18.36, 18.47

IT, Cesenatico, 44.2038, 12.3983, Other rubber, 17.4, 17.51

IT, Cesenatico, 44.2038, 12.3983, Other plastic, 16.75, 16.85

IT, Cesenatico, 44.2038, 12.3983, Other wood, 9.2, 9.26

IT, Cesenatico, 44.2038, 12.3983, Rope, 4.07, 4.09

IT, Cesenatico, 44.2038, 12.3983, Pots and traps, 4,4.02

IT, Cesenatico, 44.2038, 12.3983, Other metal, 3.71, 3.73

IT, Cesenatico, 44.2038, 12.3983, Other textile, 2.16, 2.17

IT, Cesenatico, 44.2038, 12.3983, Other nets, 1.52, 1.53

IT, Cesenatico, 44.2038, 12.3983, Other glass, 1.46, 1.47

IT, Chioggia, 45.2169, 12.2815, Mussel nets, 329.78, 27.56

IT, Chioggia, 45.2169, 12.2815, Other plastic, 226.81, 18.96

IT, Chioggia, 45.2169, 12.2815, Other nets, 218.46, 18.26

IT, Chioggia, 45.2169, 12.2815, Rope, 115.37, 9.64

IT, Chioggia, 45.2169, 12.2815, Other mixed, 77.46, 6.47

IT, Chioggia, 45.2169, 12.2815, Other rubber, 66.97, 5.6

IT, Chioggia, 45.2169, 12.2815, Other textile, 62.5, 5.22

IT, Chioggia, 45.2169, 12.2815, Other gear, 54.39, 4.55

IT, Chioggia, 45.2169, 12.2815, Other metal, 24.59, 2.06

IT, Chioggia, 45.2169, 12.2815, Cable, 9.34, 0.78

IT, Chioggia, 45.2169, 12.2815, Pots and traps, 4.68, 0.39

IT, Chioggia, 45.2169, 12.2815, Other glass, 4.17, 0.35

IT, Chioggia, 45.2169, 12.2815, Other wood, 1.24, 0.1

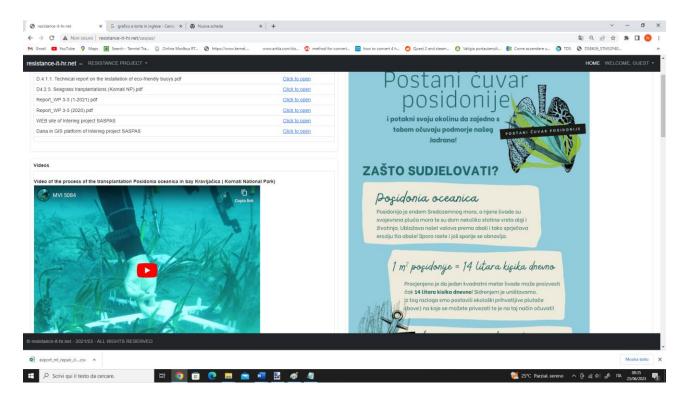
IT, Chioggia, 45.2169, 12.2815, Gillnets, 0.74, 0.06

IT, Chioggia, 45.2169, 12.2815, Other paper, 0.07, 0.01



Operate Data Section

In the picture below is illustrated the multimedia section. This section is a repository of documents, pictures and video that has been stored on the platform.



Multimedia Data Section

By clicking on the link it is possible to download the highlighted documents and/or redirect to webpages inherent the project. Provided video on YouTube have been directly interlinked to be able to visualize them directly from the pages.

Others

Software is scaled to be portable also on Android/MacOS tablet/smartphones. The functionalities are exactly the same and the system is auto-adaptative due to the CSS formatting standard of the interface. Here below are depicted, as example, some screenshot taken from an Android smartphone, showing the functionalities described above.



