All Ocean Obs

STUDY FOR REPORTING OBLIGATIONS FOR OCEAN OBSERVATION

Deliverable title: Introducing All Ocean Obs - A Comprehensive Guide to Platform Features and Functionality

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Document History:

Version	Date	Description
0.1	23/03/2023	User manual referred to the first draft of the web portal. Released on 24/03/2023
0.2	25/05/2023	User manual referred to the first draft of the web portal. Released on 25/05/2023

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1. Introduction

The present manual refers to the version v2 of the web portal deployed on 25/05/2023 on the web page: https://alloceanobs.s4oceandata.eu/portal/

Specific updates of the present manual will be released contextually with portal release as shown in the release table below (Table 1).

New sections or modified features descriptions in the current version of the manual are highlighted in green to facilitate progress tracking.

Table 1: Web portal releases

Deliverable	Date
D8 (draft1)	24th Mar 2023
D8 (draft 2)	25th May 2023
D8 (draft 3)	25th Aug 2023
D8 (final)	25th Oct 2023

WP 5 Short Description

Work Package 5 Prototype online map viewer and design of a web page: A web portal hosting an online map viewer (digital map) will be produced showing the collected observation plans. The map viewer will be developed to provide the user with a tool to enable better planning and implementation of observation and monitoring programmes, and to understand the timing and location of proposed observations by others. Such a dynamic map viewer will show information about locations, timing, parameters, etc. of running and planned observational campaigns. Users will be able to choose between two ocean observation metadata update tools: a web form (HTML) and a XML upload feature. A web form will guide the user to input metadata according to the defined template, while dictionaries and standard vocabularies will be linkable and discoverable. The portal backend will be based on Geoserver, Postgresql, PostGIS, Leaflet, Angular that provide open standard tools to develop and manage WebGIS data and metadata as required by the tender. The metadata carried by the XML will update the DB (Postgresql) data that generates a GIS dataset (PostGIS+Geoserver) that can be consumed by the mapviewer to present and query data. The map.emodnet-physics.eu mapviewer is adopting a similar workflow. The portal will be displayed on a webpage hosted on the Commission's Maritime Forum, compliant with the "europa.eu" domain, and following the Europa Web Guide harmonized rules for websites (group 1). The system will present plans as collected by web forms based on the ocean observation reporting template (WP3) and will allow users to make selections according to metadata e.g. select a certain parameter (physical, chemical, biological, geological or bathymetrical), a certain area or a specific time. The web tool will be designed taking into consideration Contracting Authority (DG MARE/CINEA) needs (WP6) for data presentation and for handover (WP10).

WP	ACTIVITY DESCRIPTION	YEAR 1												YEAR 2			
	TIME FRAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5	Prototype on-line map viewer, web page																
5.1.1	Development of the webportal																
5.1.2	Ocean Observations form																
5.1.3.1	First draft of on-line map viewer (D8)																
5.1.3.2	Second draft of on-line map viewer (D8)																
5.1.3.4	Third draft of on-line map viewer (D8)																
5.1.3.5	Fourth draft of on-line map viewer (D8)																
5.1.4	Handover package																

Figure 1: WP5 Gantt

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2. The platform

All Ocean Obs is a comprehensive system designed to facilitate the visualization of oceanographic campaigns. The platform seamlessly extracts data from the PostgreSQL database and presents it through an Angular-based web page. To retrieve the data, the page sends a request via a GET method to the database, which responds by returning the catalog of missions contained within.
To enable efficient data retrieval, the system includes a structured filter module that utilizes an API to filter the information stored in the database. This feature enables users to access the data of interest with ease.

3. The main page

To access the portal the user must visit the official page of All Ocean Obs (https://alloceanobs.s4oceandata.eu/portal/). The landing page (Figure 2) is characterized by three main sections:

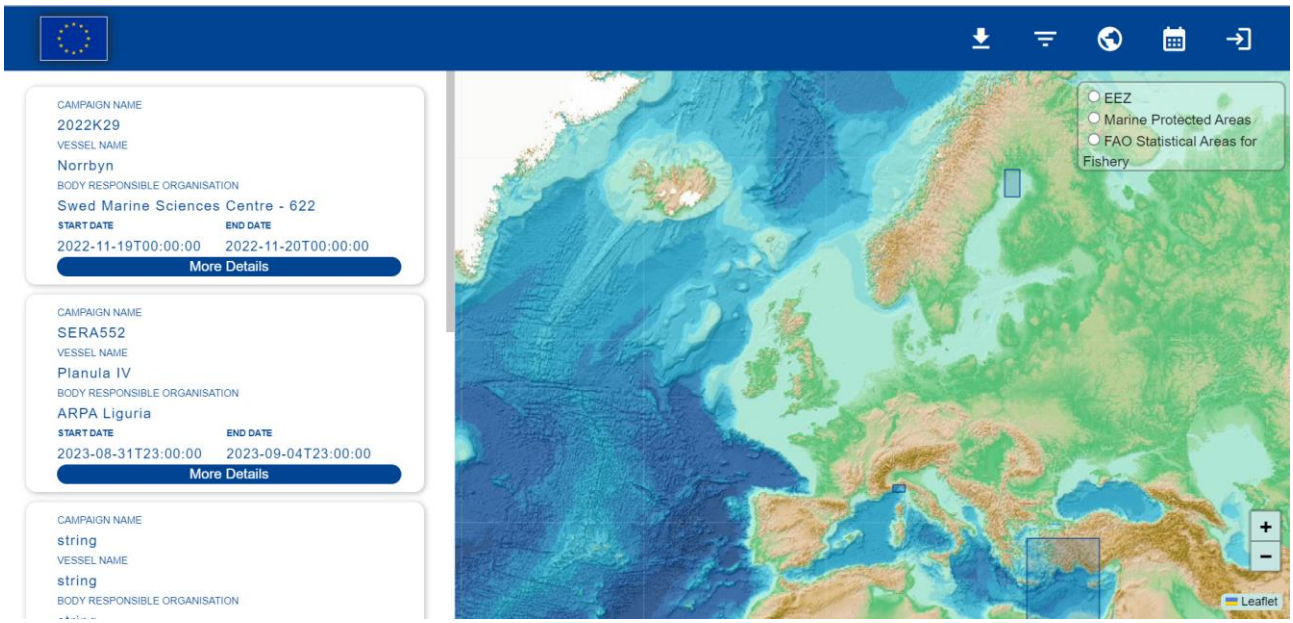

Figure 2: Landing page of the portal

1. The map that shows the area of interest of each campaign. The user can adjust the view by clicking and dragging the map to the preferred area.
2. The filter section, which contains a series of text-boxes and drop-down menus to filter the search of campaigns. To access the filters section, window the user must click on the “Filter” button positioned at the top of the page. Here the user can select to filter the results based on the following parameters:

    - "Date range": query the database on a defined period of time (calendar function)
    - "Areas (Bounding Box)": defines the area of the Bounding Box within which to search for missions. This section will require the user to define 4 parameters: 'Min Longitude', 'Min Latitude', ‘Max Longitude' and 'Max Latitude'.

- "Parameter": a drop-down menu list to filter the search based on the parameters that characterize the vocabulary defined by SDN for the P02 library.

3. The list of campaigns based on the filters applied for the query, by default (no filters applied) the portal will display all of the public campaigns existing in the portal starting from the most recent ones (left side of the page).

4. Download function that allows to download filtered missions' details in csv

4. Viewing the details of a campaign

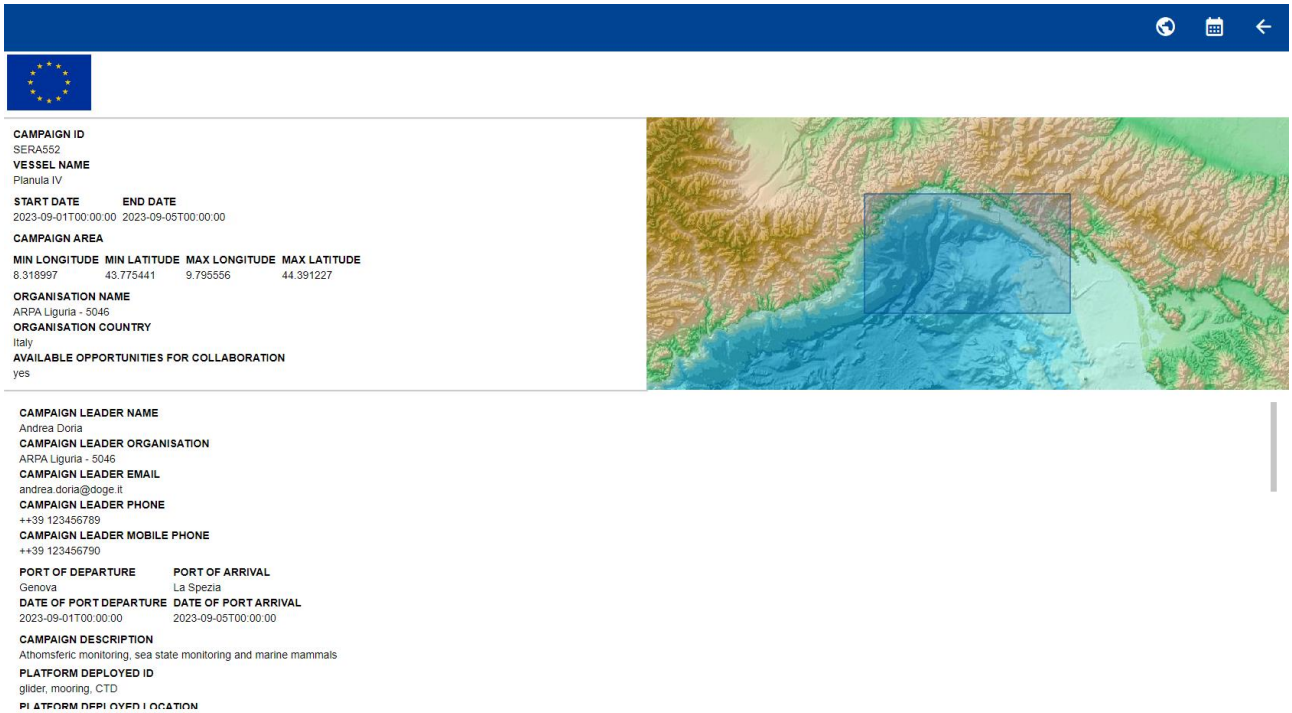

Figure 3: Details of a campaign

When clicking on "More details" of a specific campaign a page with details regarding that campaign as well as a map visualization of the area in which it is taking place will appear. As shown above (Figure 3) the information is organized in two separate sections: while the first contains more general information, the section below provides a long and detailed list containing additional relevant information related to the campaign.
Among the many entries included in this section the one named "available opportunities for add" describes if the organization of the campaign is available for collaborations and campaign access.
The second section contains a variety of self-explanatory additional information.

5. Visualizing data – Gantt chart

It is possible to display the data related to one or more campaigns as a schedule chart by clicking on the “Planner” icon placed in the top right corner of the screen.

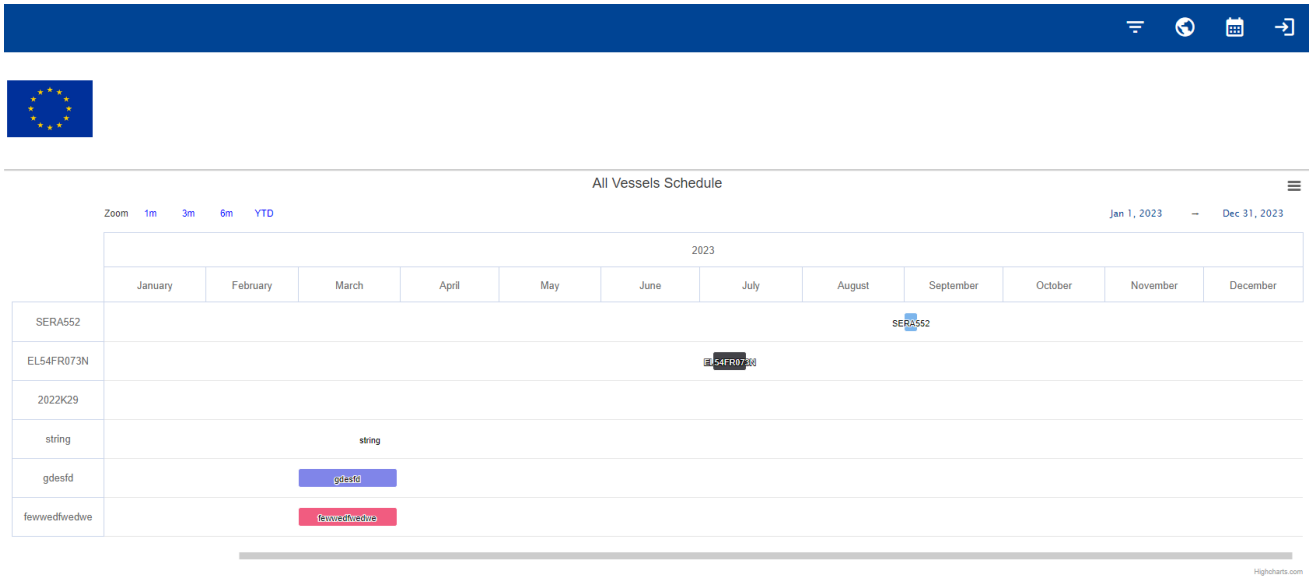

Figure 4: Planner page

The chart displays on the y-axis the identifier code of each campaign recorded in the database. The x-axis displays a time variable which can be regulated to display the data of most recent campaigns, from the last month up to a year (top left corner of the chart) but also offers the user the possibility to manually filter the data through a specific time period (top right corner of the chart).
In addition to this, above this section the user can click on the small drop-down menu to view in full screen, print or download the chart in a wide variety of formats based on the users’ necessities.

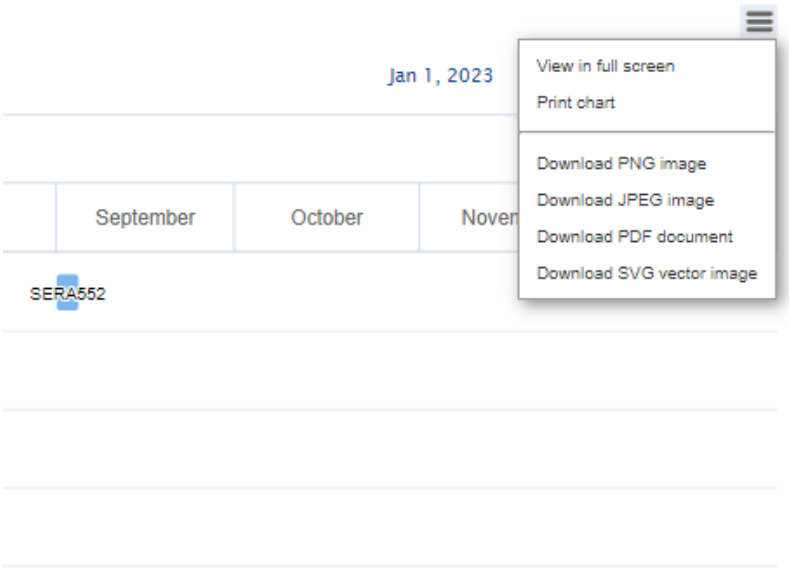

Figure 5: Chart context menu – download section

6. Personal Area

By clicking the log-in icon positioned on top right corner of the landing page, the user can log-in. Once logged in, the portal allows to upload a form to post information relevant to a specific campaign within the platform. As shown below, once logged in, the user will be redirected to a page where he can either: (a) “Access to form”, which will redirect the user to a page where the user must fill up all of the requested information related to the campaign to proceed, (b) modify drafts forms or (c) “Drag and drop an XLS/XLSX file” (Figure 6).

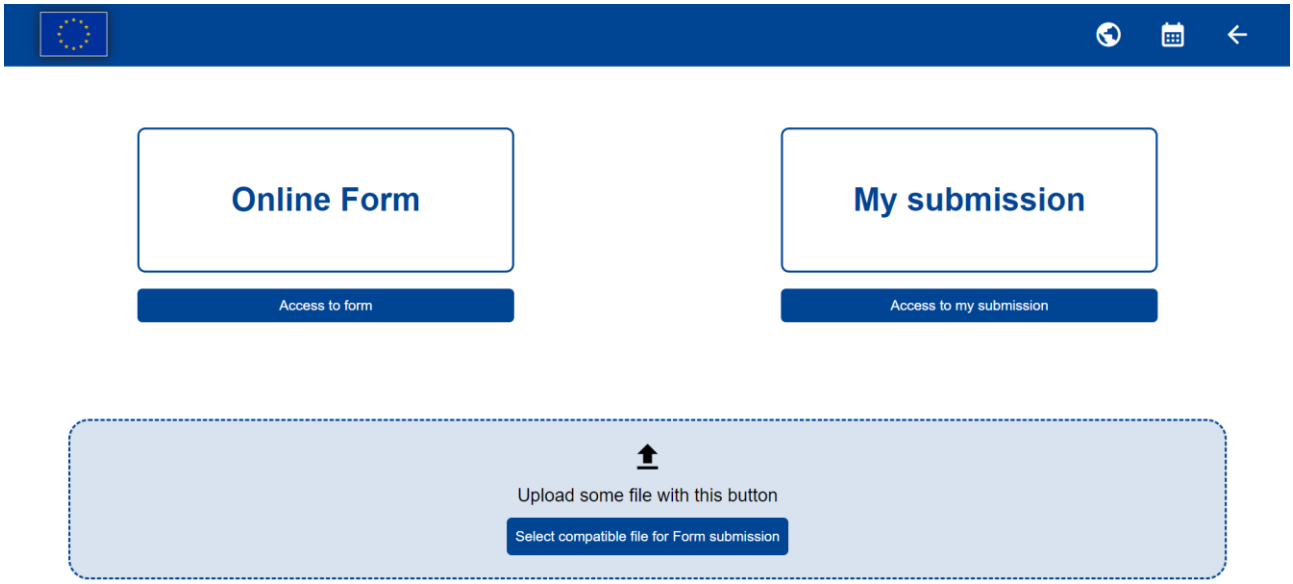

Figure 6: Page to create/upload a form

7. Submitting a form

By clicking on “access to form” the user will be redirected to a page which displays a series of sections as shown below (Figure 7).

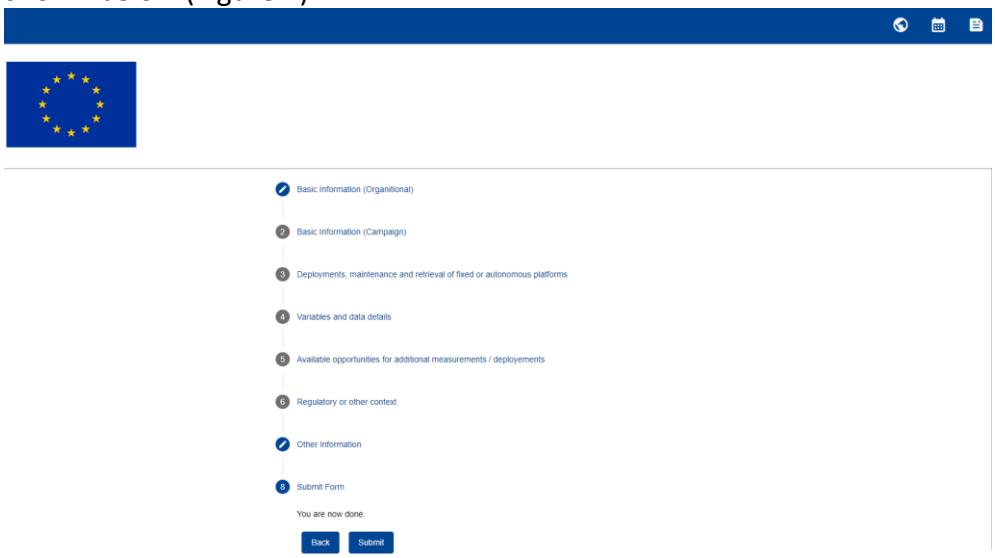

Figure 7: Page for creating a form

While most of the sections are self-explanatory, the user must notice that:

a) In the textbox “Insert Organization” under “Basic Information (Organizational)” the user can either enter the name or the EDMO code, a list of corresponding entries is displayed allowing to auto fill in all other fields. Organizations information are harvested automatically from SeadataNet EDMO database.
b) In the text box “Vessel Name” under “Basic Information (Campaign)” the user have to enter the name of the vessel, while typing a list of possible entries is displayed, the user can select a vessel and activate the auto fill in for the other information, or continue typing and fill in all the entries by hand. Vessel information are harvested directly from international databases
c) In the Ports section the user inserts the port name and a list of ports is shown, the user can ether select one of the entries or fill in by hand. Port information are harvested from United Nation ports data base.
d) The section “Coordinates Of Transit From Campaign Area To Port” the coordinates must be inserted, in decimal degrees format, in the following order: Latitude 1; Longitude 1; Latitude 2; Longitude 2. To help the user a preview map is integrated in the form (Figure 8).

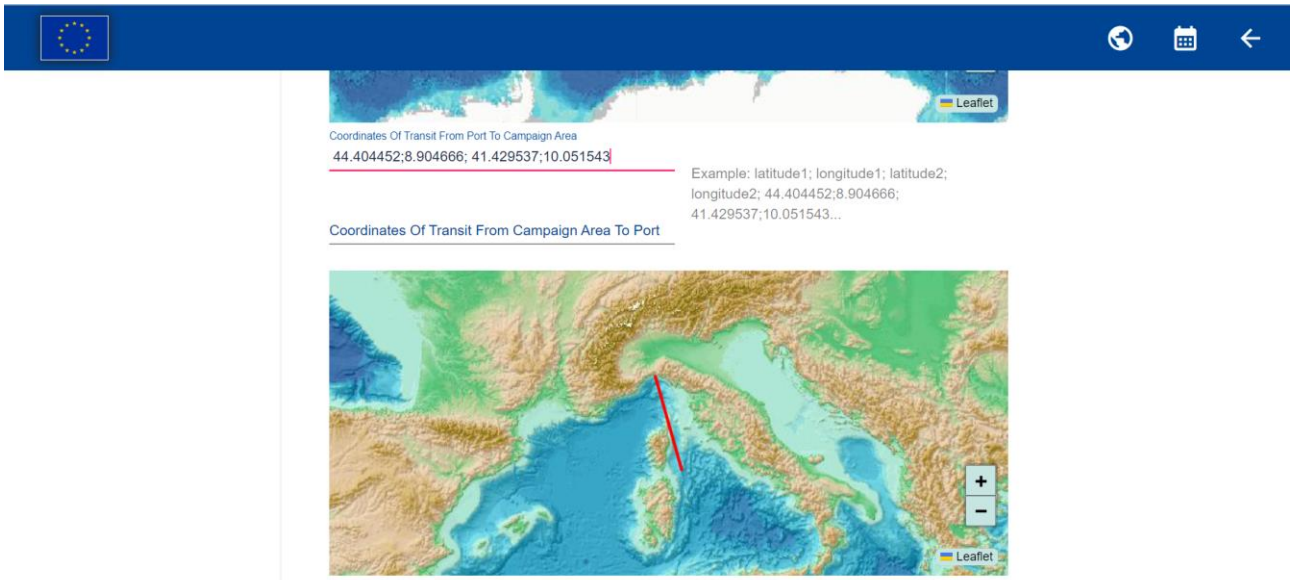

Figure 8: Form map preview

Once completed all of the required fields, click on “Submit” to proceed and submit the form.

8. Updating a draft mission

Clicking on “Access to My Submissions” a new page is opened showing all the missions submitted by the user. Missions are divided in Draft Missions and Already Submitted Mission (Figure 9).

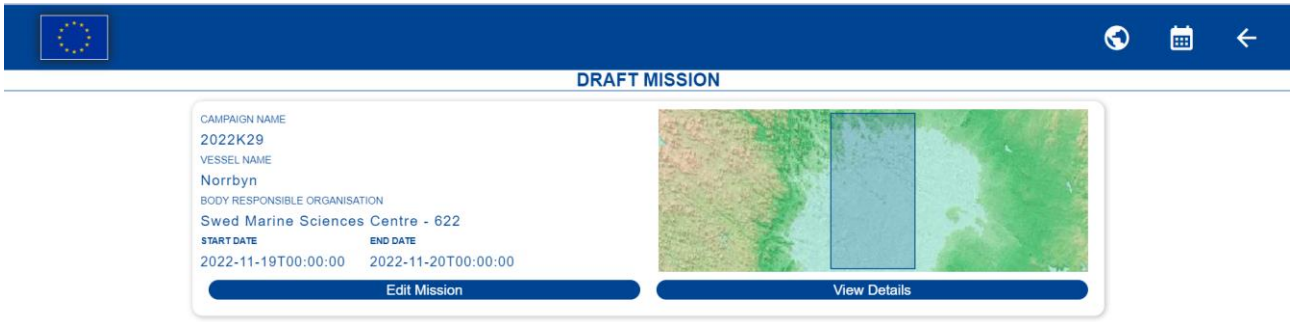

Figure 9: My Submission page

Draft missions can be edited by clicking on edit mission and the user is redirected to the Form page already filled in. To change a mission status, remember to select Final in the specific box (Figure 10).

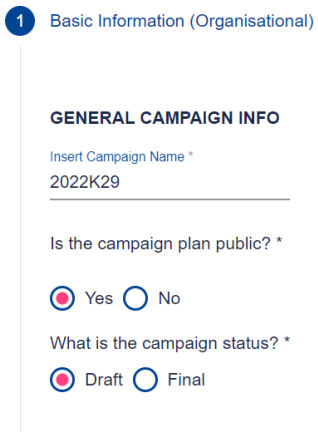

Figure 10: Campaign status