



Open Call for Freight Data Provision

<https://moses-h2020.eu/>

Tender Conditions



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1. General Information

1.1 *Issuing Body*

The National Technical University (NTUA) is the oldest and most prestigious educational institution of Greece in the field of technology, and has contributed unceasingly to the country's scientific, technical and economic development since its foundation in 1837. The scientific staff in the Schools, together with post-graduate researchers, apart from their teaching and related educational activities, conduct research work assisted by post-graduate students and a considerable number of external collaborators; the amount and the high standards of this research are proved by the numerous publications in International Scientific Journals and Proceedings of International Conferences as well as by the prominent place of NTUA among all European Universities, due to the increasing number of research projects financed by the EU and other Greek and foreign organizations of the public and the private sector.

1.2 *Scope and Terms of the Open Call*

1.2.1 Aim and General Objectives

The project MOSES, funded by the European Union's Horizon 2020 Research and Innovation programme, organises an Open Call for the selection of one candidate able to provide the necessary dataset that will enable transferability of the MOSES Matchmaking Platform to a TEN-T corridor (other than the MED and Orient/East Med) that has an established yet underperforming SSS route. The chosen candidate shall be in the position to provide real logistics and transport network related data of their own enterprise and/or of collaborating organisations. The description of the MOSES

Logistics Matchmaking Platform along with the required dataset are described in Section 3 of this document.

1.2.2 Type of Procurement

The selected applicant will provide the required dataset **with a maximum remuneration of €30.000 (VAT included)**.

The requirements for the selected applicants will include:

1. The provision of the required dataset that will remain confidential and used only for the purposes of the MOSES project.
2. Deployment, data cleansing and required modifications of the MOSES Logistics Matchmaking Platform shall be made by MOSES project partners and will not be required by the applicant.
3. No financial reporting will be requested by the applicant, i.e., the contract will grant a lump sum corresponding to the total costs declared in the Application Form (Annex II) without the need to declare/justify the different cost items.
4. No additional cost claim (travel/subsistence/equipment/service) will be accepted, except for the participation to invited physical dissemination events organized by the project.

1.2.3 Eligibility Criteria

The call is open to applicants legally established in an eligible country according to Section 1.2.4.

The applicant must declare the willingness to provide the required dataset to be used for testing process of the MOSES Logistics Matchmaking Platform. The technical terms for the provision of the dataset shall be agreed with the MOSES Project Coordinator (NTUA) after the completion of the selection phase.

Selected applicants are bound to participate to project dissemination activities whenever invited, including virtual/physical events, which will be organized by the project management during the project. The possible participation to physical events will be covered by the MOSES project through the reimbursement of travel and subsistence costs.

The applicant must be completely independent from project partners, their affiliated entities and/or their controlled companies. Institutions, organizations or other kind of legal entities funded by or otherwise affiliated with a MOSES partner are not eligible.

MOSES retains the right to discard an application in case one (or more) of the conditions above are not satisfied.

1.2.4 Eligible Countries

Only applicants legally established and, operational, and working, in the case of the individuals, in any of the following countries will be eligible:

- The Member States of the European Union, including their outermost regions.
- The Overseas Countries and Territories linked to the Member States.
- H2020 Associated countries: according to the updated list published by the EC¹.
- The UK applicants are eligible under the conditions set by the EC for H2020 participation at the time of the deadline of the call.

1.2.5 Reference Documents

In addition to the present document, applicants may refer to the following public deliverable available on the MOSES Website:

Project Deliverable D6.1 - Business logic for the matchmaking platform².

1.2.6 Applicable law and tendering procedure

Applicants should submit their offers (see also Section 5) by 31/8/2023 and should consist of:

1. Their offer digitally signed by the legal representative in pdf format sent to mosesproject20@gmail.com. In case a hard copy is required, this will be stamped and signed by the legal representative of the applicant and sent to a postal address that will be communicated.
2. Proof of legal representation of the applicant (i.e. brief articles of incorporation, Business Register Extrait or similar).
3. The self-declaration statement (Annex I) digitally signed by the legal representative in pdf format sent to mosesproject20@gmail.com. In case a hard copy is required, this will be stamped and signed by the legal representative of the applicant and sent to a postal address that will be communicated.

¹ http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cp/h2020-hi-list-ac_en.pdf

² <https://moses-h2020.eu/wp-content/uploads/2022/07/6.1.pdf>

1.2.7 Other applicable dispositions

In particular, the provider shall:

- a) Allow checks, review, audits and investigations on carried out by the Commission/Agency, European Court of Auditors, European Prosecutor Office and OLAF (see Article 22 GA).
- b) Permit the evaluation of the impact of the action carried out by the Commission/Agency under the Article 23 GA.
- c) Avoid any conflicts of interest in the performance of the service (see Article 35 GA).
- d) Maintain the confidentiality in accordance with the Article 36 GA.
- e) Promote the action and shall give visibility to the EU funding (see Article 38 GA).
- f) According to the Article 46 GA, shall not consider the Commission/Agency as responsible of the any damages arising from the provision of the dataset and the relationship with the beneficiaries.

2. MOSES Project Overview

Ports play a decisive role in the EU's external and internal trade, as about 74% of imports and exports and 37% of exchanges go through ports. Although ports and especially Deep-Sea Shipping (DSS) ports are integral nodes within multimodal logistic flows, Short Sea Shipping (SSS) and inland waterways are not so well integrated.

The aim of MOSES project is to enhance the SSS component of the European supply chain by addressing the vulnerabilities and strains related to the operation of large containerships. A two-fold strategy will be followed, in order to reduce the total time to berth for TEN-T Hub Ports and to stimulate the use of SSS feeder services to small ports that have limited or no infrastructure.

The above-mentioned scope of the MOSES project will be reached through the implementation of the following innovations:

- For the SSS leg, an innovative, hybrid electric feeder vessel (MOSES Innovative Feeder) that will prevail from different vessel concepts and will be designed to match dominant SSS business cases, increasing the utilization rate of small ports. The MOSES feeder will be outfitted with a self-sufficient Robotic Container-Handling System (MOSES RCHS) that will simplify the (un)loading of containerized cargo at Hub Ports and improve the operational capacity of small ports.
- For DSS ports, the adoption of an autonomous vessel manoeuvring and docking scheme (MOSES AutoDock) that will provide operational independency from the availability of port services. This scheme will be based on the cooperation of (i) a coordinated swarm of autonomous tugboats with (ii) an automated docking system based on an existing product.
- A digital collaboration and matchmaking platform (MOSES Logistics Matchmaking Platform) that aims to maximize and sustain SSS services in the container supply chain by matching demand and supply of cargo volumes by logistics stakeholders using Machine Learning (ML) and data driven-based analytics.

MOSES is an ambitious project that bears significant innovation potential in the context of European SSS uptake. Its innovation potential covers both vessel design aspects as well as software tools and accompanying governance models to improve related logistics processes.

3. MOSES Logistics Matchmaking Platform

3.1 General description

The MOSES Logistics Matchmaking Platform aims to offer match-making services for freight transport to shippers, transport operators and other stakeholders. The purpose of this document is to present the development of the second iteration of the MOSES Platform and its components. An overview of the platform concept is presented in this section, highlighting the aim to maximize and sustain SSS services in the container supply chain by matching demand and supply of cargo volumes by logistics stakeholders. Two main categories of user groups have been identified:

- Logistics Service Providers
- Platform End Users

One of the main functionalities of the platform the identification of the route alternatives along with the best route possible route connecting two locations using a number of parameters such as shorter distance, fastest route, minimum emissions, minimum cost.

The application is built on Python's Django web framework and consists of three major components: (i) the API, which gives the ability to external systems to seamlessly interact with the MOSES Logistics Matchmaking Platform application; (ii) the algorithms that are used in order to find and display the relevant results to the client and are implemented in the logical layer of the application's architecture; (iii) the web-based Graphical User Interface. The User Interface is built on Vue.js Javascript framework and provides functionalities such as the User Dashboard, Notifications, Bookings, Search, Transports, and Profile.

3.2 MOSES Logistics Matchmaking Platform Front-End

The front-end module is where all necessary information is collected and includes the available user interfaces that are provided to the users based on their role. The following sections provide an overview of the front-end, the main inputs and outputs per user role, as well as the user interfaces that have been developed for each user role and their supported functionalities.

3.2.1 Overview

The MOSES platform is a web-based platform that has been designed and developed in order to support and maximise the provided services in the container supply chain by matching demand and supply of cargo volumes by different stakeholders using data analysis algorithms. Based on the user roles that have been identified, the platform usage is separated in two levels. The first one concerns the service providers, including different stakeholders like carriers, freight forwarders, shipping lines etc. which can

use the platform in order to upload their routing schedules, see different system reports, examine customer orders and see a complete list of notifications. The second usage level concerns the end users and potential customers such as shippers, who will benefit from the optimisation and collaboration/matchmaking analysis that is made behind the scene, providing an analytic list of best available routes, based on their preferences (search criteria). This matchmaking functionality is the heart of the system and aims to provide to the customers the best options available by combining the transport services and means offered by different service providers.

3.2.2 Input and Output Data

Based on the user role, the platform uses and produces different input and output data respectively. The following sections describe the main input and output data for service providers and end users.

Service providers

For the service providers, the input data contains the initial information upon which the Transport Network model is built. Vessel and rail operators are able to upload specific information, such as the following:

- Stops (e.g., ports of call for ships) for the forthcoming period;
- Arrival and departure times for each stop (date and time);
- Remaining vessel capacity for each container type and for each transition between two stops (in TEUs);
- Cost of transportation between any two consecutive stops.
- Any available information relating to the CO₂ emissions of the transport mean (e.g., CO₂ emissions per hour for a specific speed and level of fullness).

The platform also enables each vessel or rail operator or freight forwarder to update relevant information, such as the remaining vessel capacity, arrival/departure times for each stop, pertinent costs etc. It also allows the transport service provider to remove a schedule entirely or upload information concerning a new schedule.

Truck owners and road transport companies are assumed to operate between ports and specific inland destinations. Therefore, they are able to upload the location pairs, i.e., pairs of the form (port → inland location) or (inland location → port) on which they operate, plus any additional information regarding each such pair, i.e. cost of transportation, CO₂ emissions, required time to destination. Due to truck transportation services on-demand nature and lack of standard schedules, each possible connection between two inland locations considers only the required time to destination plus the estimated CO₂ emissions.

Service providers are also allowed to update the status of a booking (or a specific leg), providing relevant information, such as confirming a booking, setting the cargo in

transit, cancelling a booking in case of unexpected events or characterizing the booking as completed when the transportation of cargo is finished.

With regards to the output data, currently it is directed to the reporting needs of the end users. However, it is foreseen to integrate a functionality to the MOSES platform that will support the creation of aggregate periodic reports for transport operators and freight forwarders.

1.1.2. End-users

Regarding the input data of end-users, the platform allows them to upload information concerning the details of their transport requests. These include request specifications and request preferences. More specifically, request specifications include basic information of the request, such as origin and destination, volume of product to be transported in TEUs, as well as latest possible date of delivery to destination. Depending on the available information, the design may also consider the type of product to be transferred and the type of container needed (e.g., refrigerated, insulated etc.). The request specifications are used to parametrize the transport network search algorithms and filter out any resulting routes that do not meet them. In parallel, the request preferences consider the request's criteria of optimality, e.g., total cost, turnover time, earliest date of delivery, CO₂ emissions etc. Each end-user has the ability to change the specifics of the order, cancel the order, or declare the order as closed or fulfilled.

As for the output data, the platform applies parametrized search algorithms on the Transport Network model to calculate routes that meet the end user's request specifications. The routes resulting from this searching/filtering process are called feasible routes. Request preferences are subsequently used to sort the resulting feasible routes according to the preferred criteria of optimality. The platform sends a set of transport and matching suggestions (optimally) to each end user, satisfying the end user's request. The suggestions are of the following form:

(Headhaul shipping schedule, Backhaul shipping schedule, matching shippers)

The suggested shipping schedule fields (Headhaul or Backhaul) contain a timely ordered sequence containing the following for each one of the involved legs:

1. Identifier, type (i.e., ship, train or truck) and owner of the corresponding vessel;
2. Leg origin and destination;
3. Departure time from origin and arrival time to destination in case the corresponding vessel is a ship or train. In the case of trucks, the output simply provides the time required to reach the destination;
4. The total cost of the schedule for the end user;

5. Total CO₂ emissions of the schedule.

The matching shippers field contains a set of other end user, each one with orders “matching” the request of the end user under consideration. “Matching” is perceived in the following two-fold sense:

- Headhaul matching: i.e., matching end users may utilize the same shipping schedule, or the sea/rail parts of it, in the same direction to fulfil their requests (i.e. their requests have the same origin and destination and nearby shipment/delivery date and times).
- Backhaul matching: i.e., one end user may utilize the empty containers coming from another end user’s order once the second end user’s order has been delivered (in its simplest form, this means that the destination of the first end user is the origin of the second, and vice versa, plus the shipping date for the second end user is after and nearby the delivery date of the first end user).

In case the end-users match in the headhaul sense, the Headhaul shipping schedule contains details of a candidate shipping schedule fulfilling their requests (i.e., involved vessels, stops and arrival/departure datetimes, CO₂ emissions), while the Backhaul shipping schedule is blank. In case the end users match in the backhaul sense, the Headhaul shipping schedule contains details of a candidate shipping schedule fulfilling the first end user’s requests and the Backhaul shipping schedule details of a shipping schedule utilizing the empty containers for the second end user once the first end user’s order has been delivered.

The platform also supports the provision of relevant notifications, where each user is notified with the appropriate output in case a new request matching their input has been received or in case a request already matching their input gets closed/fulfilled or cancelled. In parallel, in case of reported unexpected events during an ongoing transport schedule, the involved end users are notified and enabled to post new requests for alternative routes completing the remaining unfulfilled legs of the initial schedule.

3.2.3 User Interfaces

The platform offers different capabilities to each user group in order to satisfy their needs. The front-end consists of several user interfaces (UI) that have been developed to support the provided functionalities. Some of them are general interfaces and concern both user groups, such as Dashboard, User Profile, Bookings and Notifications, while other are dedicated to specific functionalities provided to either the service providers or the end users. More specifically, the service providers have access to Trips and Transports UIs, while end users have access to Search interface. Analyzing each user interface, below is a short summary of the developed user interfaces that support the functionalities offered to satisfy the users’ objectives.

General Interfaces

Dashboard

This user interface concerns both user groups. When a user logs in to the platform, the Dashboard is the first window available (Figure 1). It provides different reporting data to the service provider, such as Total Shipments per month, the Daily Sales or the Completed Tasks per month. The service provider may also examine the current Tasks that are pending or the latest routes that are executing by own fleet vessels. This reporting information is available and the service provider can decide which reports are needed in the user account page. On the other hand, the Dashboard provides an overview of the activity to the end user, such as current or previous bookings etc.

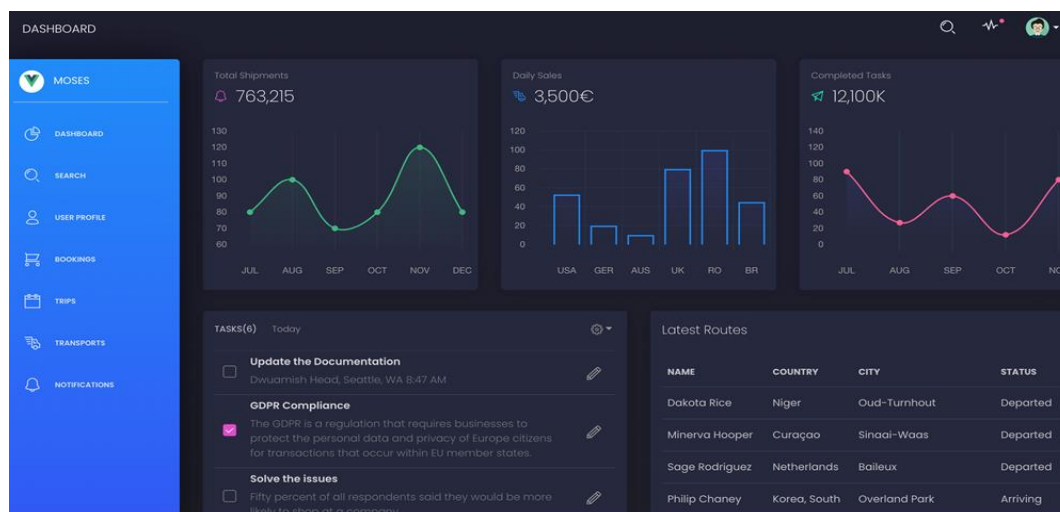


Figure 1. MOSES Platform Dashboard

User Profile

The User Profile interface is also available for both user groups. In this window (Figure 2), the user may edit and store account information. This information includes user's first and last name, company, username, city, country and postal code. The service provider is also able to configure which reports will be displayed on the Dashboard page.

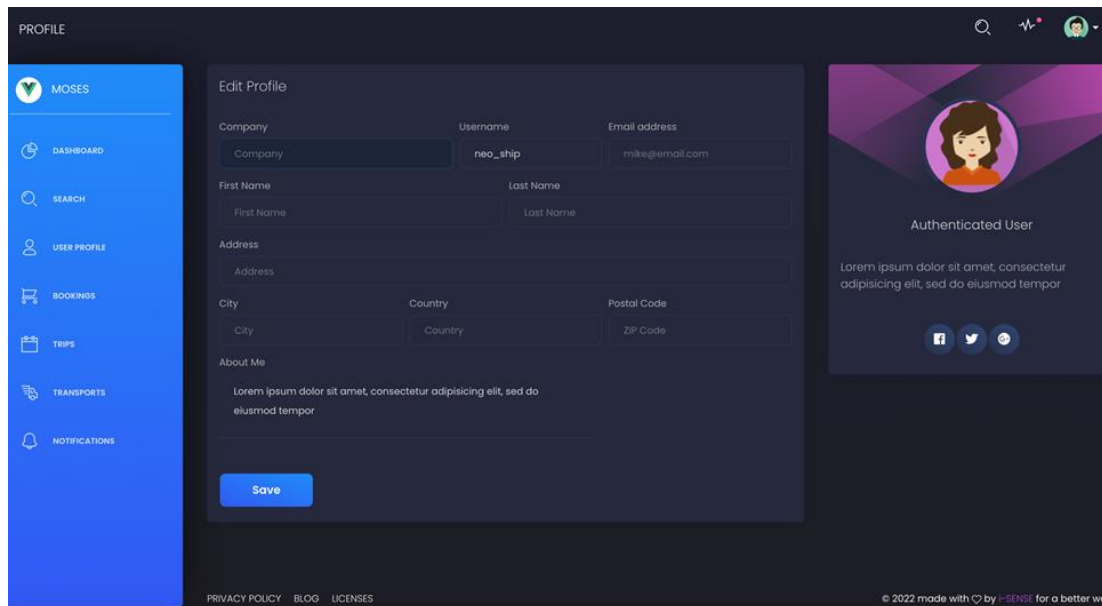


Figure 2. MOSES Platform User Profile

Bookings

The Bookings interface concerns both user groups as well. In this window (Figure 3), the service provider can see a list of all bookings made for the transports that possesses, while the end user can see the corresponding list of bookings for the orders that have been requested. The list contains information such created date of booking, schedule, status and name of transport. The service provider is also able to see more detailed information about a specific booking and edit its status (Figure 4). On the other hand, the end user can dynamically see the current status of the booking (or of a specific leg) and other parameters, such as the amount of cargo to be delivered.

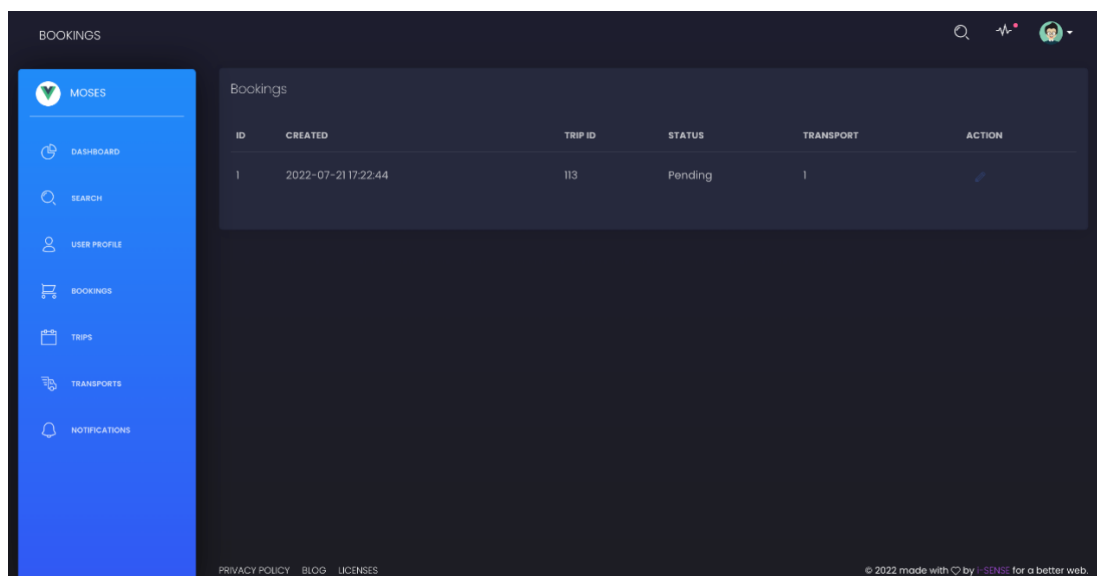


Figure 3. MOSES Platform Bookings

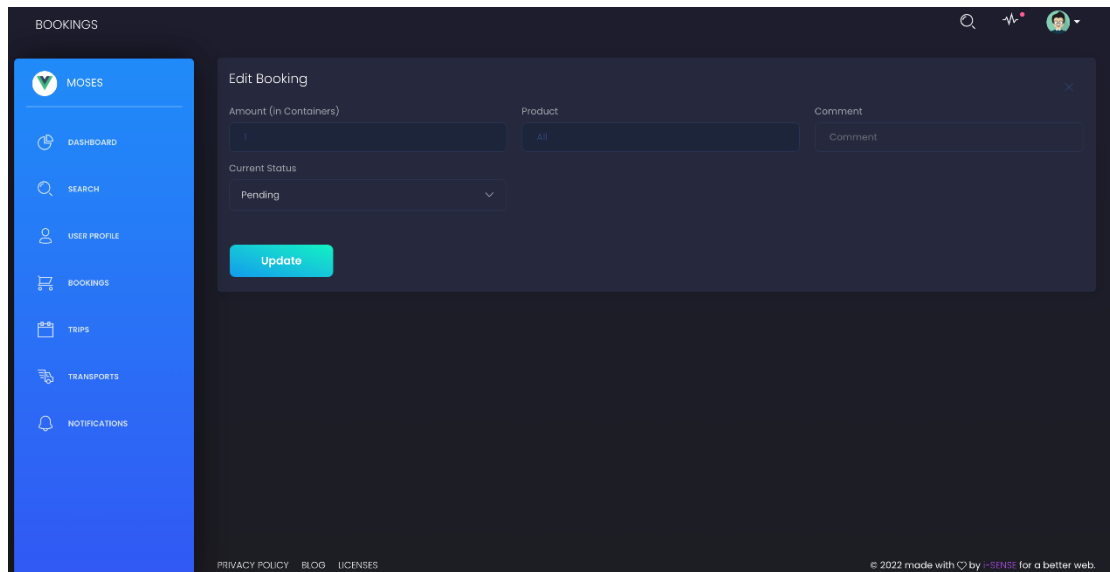


Figure 4. MOSES Platform - Booking Editing

Notifications

The Notifications interface concern both user groups. In the Notifications page (Figure 5), the user can see different notifications that the system provides concerning this user. The most common ones are notifications for new bookings that are made in the system, while other system-related notifications are also available.

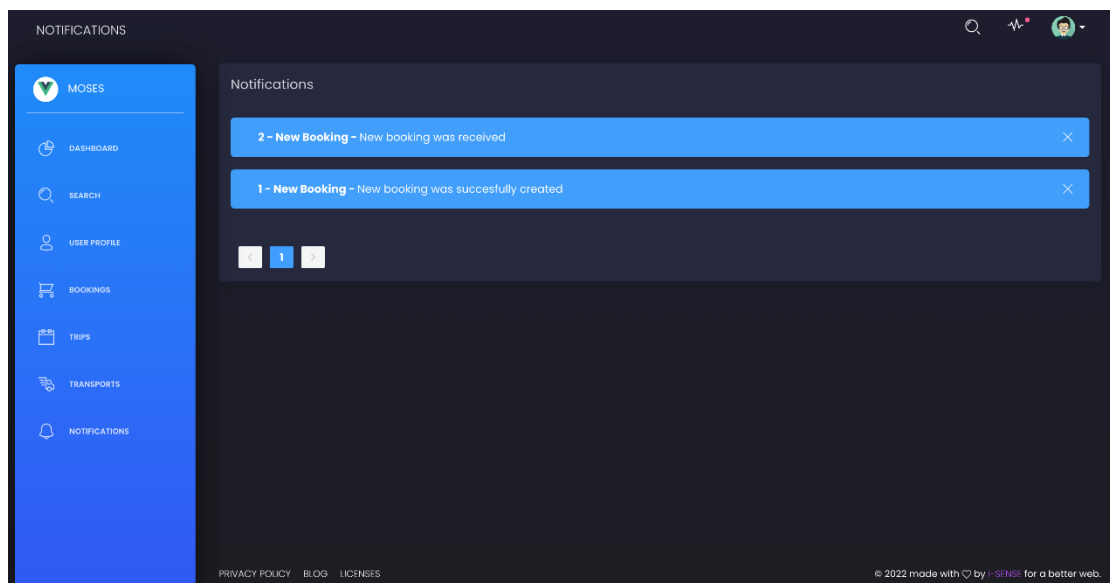


Figure 5. MOSES Platform Notifications

Interfaces only for Service Providers

Trips

The Trips interface is dedicated only to service providers. In this section (Figure 6), the service provider can see an analytical list of all scheduled itineraries executed by own fleet vessels. The service provider can also edit any itinerary and modify relevant information, such as name, current state, remaining capacity or journey status. The

system allows the service provider to either upload a list of itineraries through a formatted data file (Figure 7) or to add a single itinerary by inserting the necessary details in the correspondent form.

Uploading itineraries

a. Multiple itineraries from file

In Trips section, the user has the ability to upload a list of itineraries through a specified formatted data file. This file is a comma separated csv file and it contains 3 fields that are comma separated: Location, Arrival Date, Departure Date. The first field represents the location that a transport will visit. The next two fields give information about the arrival date and the departure date from the specified location. An example of such file is like the following:

```
Location,ArrivalDate,DepartureDate
Genoa,2022-01-0903:30:00+00:00,2022-01-0915:30:00+00:00
Livorno,2022-01-0923:30:00+00:00,2022-01-1011:30:00+00:00
Mersin,2022-01-1520:30:00+00:00,2022-01-1620:30:00+00:00
Izmir,2022-01-1904:30:00+00:00,2022-01-1912:30:00+00:00
```

In order for the user to be able to properly upload the list of itineraries from the file, the user should firstly head to the Transports window of the platform. The user must firstly create the vessel for which the itineraries to be uploaded concern. After the creation, the user will go to the Trips window as shown to Figure 8 and click the Upload Trips button. The first step is to select the Transport name from the dropdown list and then select the file. After clicking the Extract button, the user will be able to see and examine the list with the extracted itineraries from the file. The final step is to click on Upload Trips button. Upon successful creation, a notification will be displayed with a message of success and the list of the itineraries will be shown in the main window. Otherwise, an error message will be displayed.

b. Uploading a single itinerary

A service provider user is able to upload a single itinerary in the Trips section. By clicking on the Add Trip button, the relevant form will be visible. The form contains various fields that a Provider can fill, though only some of them are required. These fields are the Name of the itinerary, the Transport name (selected by a dropdown menu), the Departure and Arrival city and the Departure and Arrival date. The other fields that are present in the form are not required and if not filled, default values will be assigned to them by the system. These fields are the Total Distance, Enabled, Current State, Remaining Capacity and Journey Status. When the user finishes the

filling of the necessary information for the specific trip, clicks on the Save button to add the trip in the database.

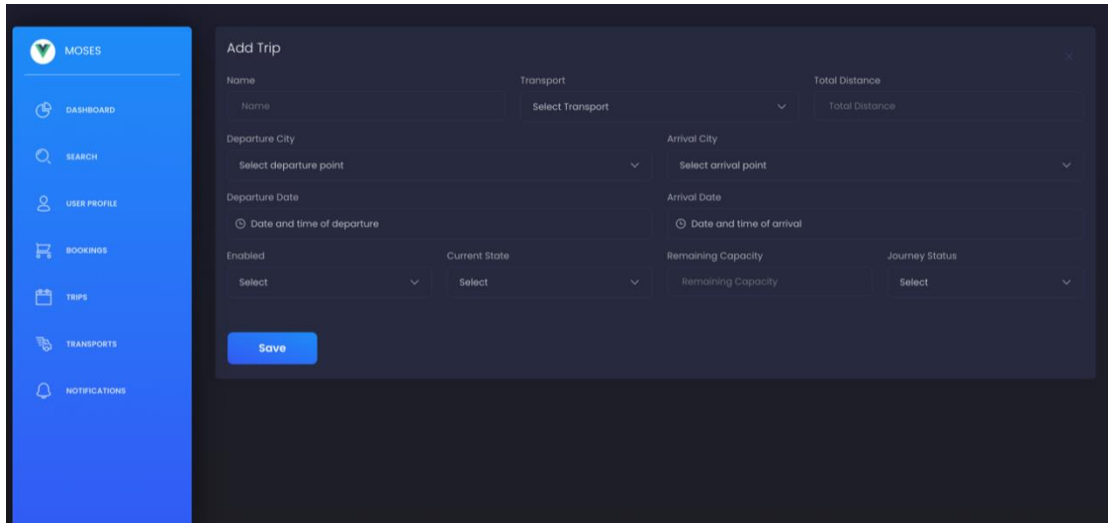


Figure 6. MOSES Platform Add Trip

ID	DEPARTURE CITY	ARRIVAL CITY	DEPARTURE DATE	ARRIVAL DATE	TRANSPORT	ACTION
1	Genoa	Livorno	2022-01-09 15:30:00	2022-01-09 23:30:00	Zim_117_2	
2	Livorno	Mersin	2022-01-10 11:30:00	2022-01-15 20:30:00	Zim_117_2	
3	Mersin	Izmir	2022-01-16 20:30:00	2022-01-19 04:30:00	Zim_117_2	
4	Izmir	Piraeus	2022-01-19 12:30:00	2022-01-20 06:30:00	Zim_117_2	
5	Piraeus	Genoa	2022-01-20 22:30:00	2022-01-24 18:30:00	Zim_117_2	
6	Genoa	Livorno	2022-01-25 06:30:00	2022-01-25 14:30:00	Zim_117_2	
7	Livorno	Mersin	2022-01-26 02:30:00	2022-01-31 11:30:00	Zim_117_2	
8	Mersin	Izmir	2022-02-01 11:30:00	2022-02-03 19:30:00	Zim_117_2	
9	Izmir	Piraeus	2022-02-04 03:30:00	2022-02-04 21:30:00	Zim_117_2	

Figure 7. MOSES Platform Trips

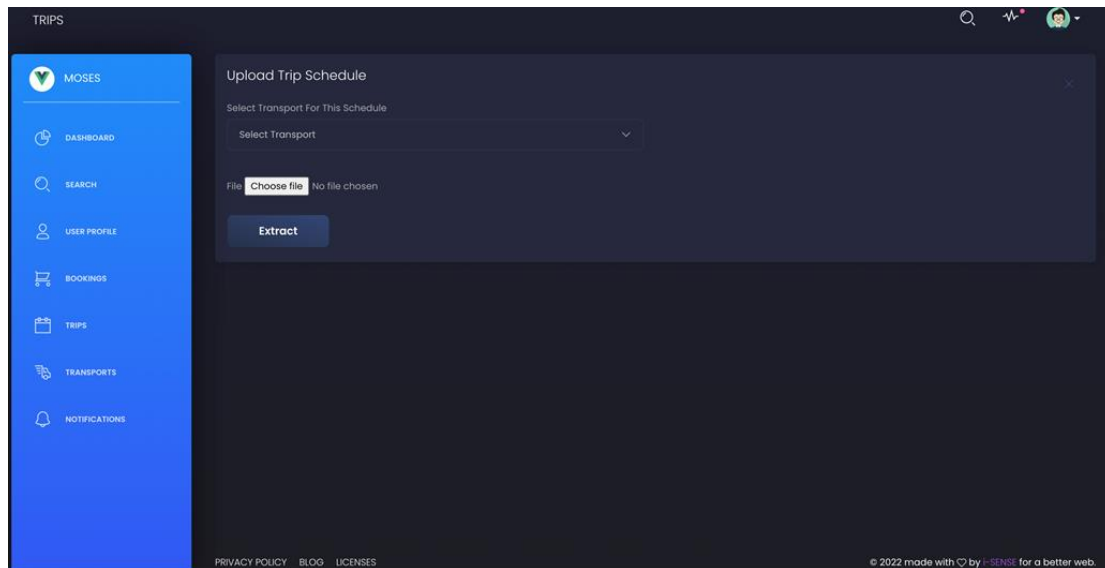


Figure 8. MOSES Platform Trip Uploading

Transports

The Transports interface is also dedicated only to service providers. In the Transports section (Figure 9), a list of all available vessels owned by the specific service provider is displayed. The service provider can update the information of a specific vessel by clicking the Action button and provide information such as the vessel's capacity, the type of carried products, the type of vessel (ship, train, truck) and its name and status. The service provider can also add new vessels and provide necessary details in the correspondent form.

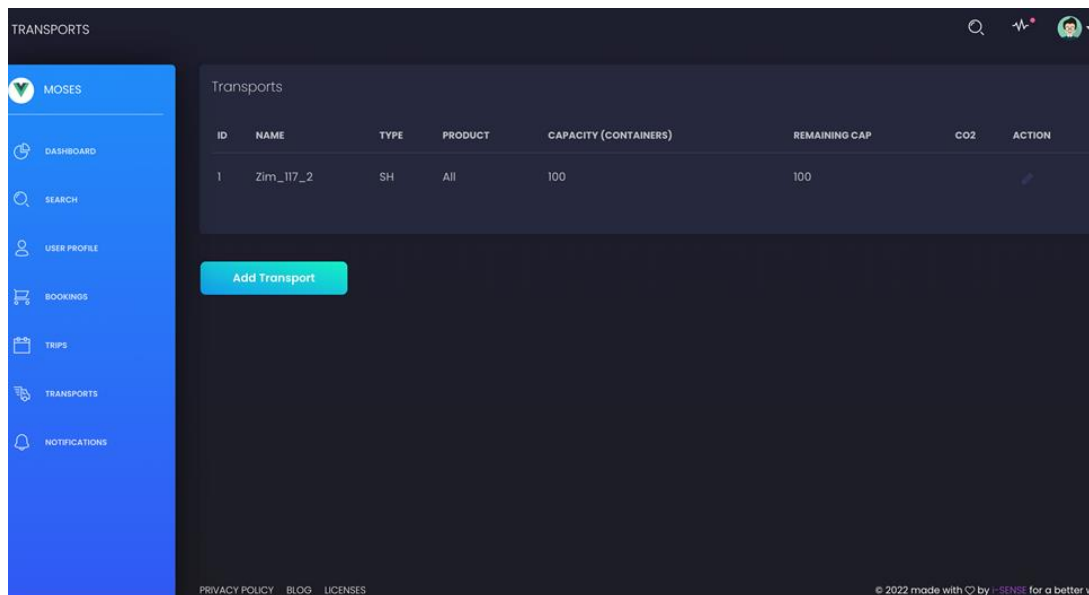
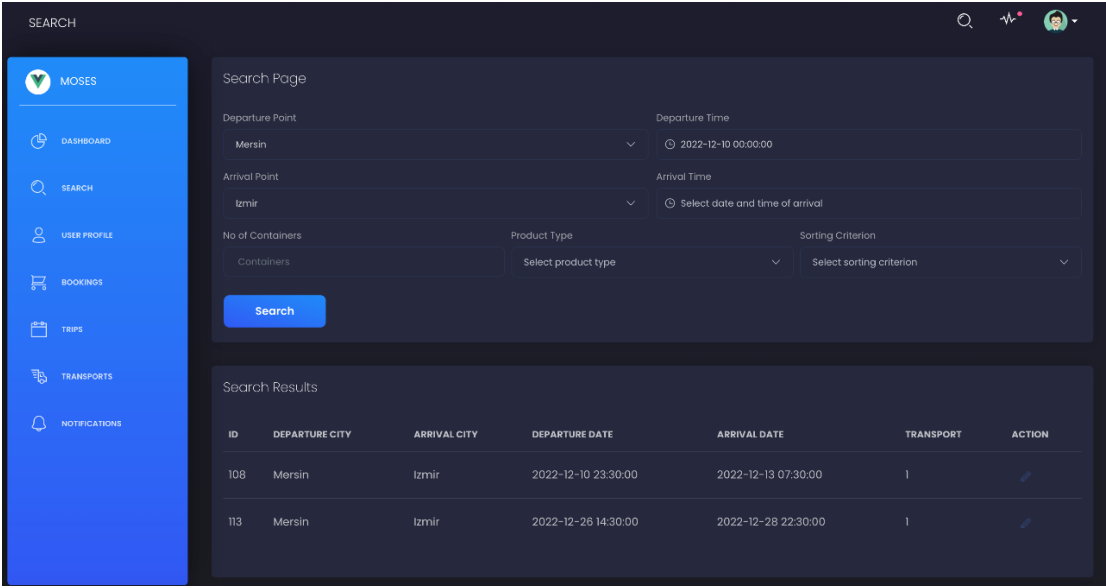


Figure 9. MOSES Platform Transports

Interfaces only for End Users

Search

As mentioned before, the second usage level of the MOSES platform concerns the functionalities provided to end users who are willing to consume the services provided by service providers. Some of the functionalities that are described before, such as Trips or Transports are not of end users' interest. However, they can benefit from the main functionality of the system, which is the matchmaking feature. This feature is supported through the Search interface (Figure 10). In this window, the platform displays a list of available routes found that fulfil the search criteria entered. End users can select the best route that suits their needs and make a booking for this route, filling in additional details such as the amount of cargo to be transferred (Figure 11). Additionally, the users, when inspecting the search results of the desired route, may click on Match Making button in order to inspect if any booking is made by another user for the routes that may be part of the total shown itineraries. The system provides this helpful information in order for the user to think that a potential cooperative loading and trip can be arranged.



The screenshot shows the MOSES Search interface. On the left is a navigation menu with options: MOSES, DASHBOARD, SEARCH, USER PROFILE, BOOKINGS, TRIPS, TRANSPORTS, and NOTIFICATIONS. The main area is titled 'Search Page' and contains the following fields:

- Departure Point: Mersin
- Departure Time: 2022-12-10 00:00:00
- Arrival Point: Izmir
- Arrival Time: Select date and time of arrival
- No of Containers: Containers
- Product Type: Select product type
- Sorting Criterion: Select sorting criterion

A 'Search' button is located below the filters. Below the filters is a 'Search Results' table with the following data:



ID	DEPARTURE CITY	ARRIVAL CITY	DEPARTURE DATE	ARRIVAL DATE	TRANSPORT	ACTION
108	Mersin	Izmir	2022-12-10 23:30:00	2022-12-13 07:30:00	1	
113	Mersin	Izmir	2022-12-26 14:30:00	2022-12-28 22:30:00	1	

Figure 10. MOSES Platform Search

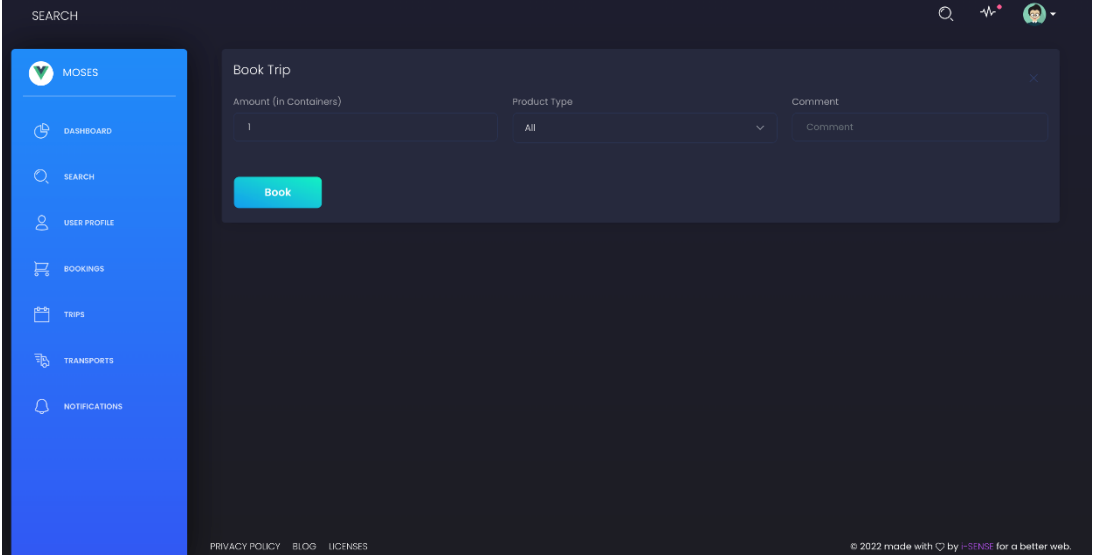


Figure 11. MOSES Platform – Booking based on search results

4. Required Datasets

The required dataset for the award of the of this Open Call should cover a period of at least six (6) months dating after 1/1/2022, or before 1/1/2020 depending on availability, and should at least contain the information in the following table:

Field category	Data fields
1. Service Provider (operator of transport mean i.e., vessel, rail, truck)	<ul style="list-style-type: none"> - Company Name - Name of representative - Address - Phone - Email
2. Transport mean	<ul style="list-style-type: none"> - Type code (vessel, rail, truck, barge) - Name - CO2 emissions - Total Capacity (Containers) - Current Remaining Capacity (in containers?) - Status (available / unavailable) - Type of product (a, b, c, all) - Owner name (foreign key from Service Providers)
3. Shipper (owner of cargo that places orders -> transport requests and receives notifications)	<ul style="list-style-type: none"> - Name - Address - Phone - Email
4. Order (transport request)	<ul style="list-style-type: none"> - Origin Location - Destination Location - Amount of product to be transferred (containers) - Latest possible delivery date - Type of product - Status - Shipper (foreign key) - Shipping trip (foreign key)
5. Location (port)	<ul style="list-style-type: none"> - Name - Country - Coordinates
6. Location of Call (locations that a vessel stops so as to load or discharge cargo)	<ul style="list-style-type: none"> - Arrival Date - Departure Date - Arrival City - Departure City - Available Remaining Capacity before departure - Status (Departed, Arriving, Arrived) - Journey Status (Start, Intermediate, End) - Journey Miles - Vessel (Foreign Key)
7. Suggested Shipping Schedule (suggestions for a transport order, used as cache table)	<ul style="list-style-type: none"> - Order id (foreign key of Order) - List of locations - Total cost - Total CO2 emissions

5. How to apply

Applicants should use the Application Form (Annex II) to submit their application.

The completed Application Form shall be converted to PDF format and digitally signed by the legal representative of the applicant, using any format having legal value (e.g., CAdES, PAdES). The signed document (P7M or PDF format, respectively) **must be attached to an e-mail sent to the application mailbox mosesproject20@gmail.com between 6-Jul-2023 and 31-Aug-2023 (05:00:00 PM CEST).**

All applications received after 31-Aug-2023 at 05:00:00 PM CEST will be automatically discarded. Applicants are strongly recommended to submit their applications with a reasonable advance over the deadline, in order to ensure they are successfully delivered in time, even in case of technical or connectivity problems.

MOSES will immediately send a confirmation receipt to the e-mail address submitting the application, notifying that it has been taken in charge by the system; such confirmation does not certify that the application is complete and suitable for evaluation, but simply that the e-mail was received in time.

6. Evaluation Process

The evaluation of eligible applications will be carried out by the MOSES Project Management Team (NTUA), including appointed representatives from selected project partners.

The evaluation process will be carried out with respect to principles of fairness and transparency, according to the criteria described in Section 7.

Please note that the Project Management Team could ask for integrations and additional information at any time of the evaluation process, to reach a fully informed and fair judgement.

Also note that the cost structure of the proposals should remain within a maximum budget of 30.000 (including VAT).

The following section describes the assessment criteria followed in the evaluation process in detail.

The decision by the project management is final and the tenderer will withhold any legal action against the decision taken.

7. Selection Criteria

The following selection criteria will be used to evaluate submitted offers:

- Compatibility of the offered dataset relative to the fields described in Section 4.
- Length of period covered expressed in number of months.
- How recent the dataset is.
- Geographical area covered.
- Volume of transported freight.
- Proximity to Short Sea Shipping routes.
- Total number of trips

Each of the above criteria will accord scores as per the following table.

Evaluation	Description	Score
Fail	The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.	0
Poor	The criterion is inadequately addressed, or there are serious inherent weaknesses.	1
Fair	The proposal broadly addresses the criterion, but there are significant weaknesses.	2
Good	The proposal addresses the criterion well, but a number of shortcomings are present.	3
Very Good	The proposal addresses the criterion very well, but a small number of shortcomings are present.	4
Excellent	The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.	5

Once all criteria are scored, applications will be filtered to ensure they are **above a minimum acceptability threshold** defined by the following rule:

- Each criterion reaches the minimum score of 3, **and**
- The total technical score of the application should be at least 18.

ANNEX I

DECLARATION CONCERNING GROUNDS FOR EXCLUSION FROM PUBLIC PROCUREMENT TENDERS

The undersigned: **{INSERT COMPANY REPRESENTATIVE}**

Trading name of company or organization: **{INSERT COMPANY NAME}**

Official address in full: **{INSERT FULL ADDRESS}**

Official legal form: **{INSERT LEGAL FORM}**

Statutory registration number: **{INSERT REGISTRATION NUMBER}**

VAT number: **{INSERT VAT NUMBER}**

To whom it may concern:

In accordance to EU Directives 2014/24/EU and 2014/25/EU and the subsequent documents and certificates related to public procurement tenders within the EU, I certify and self-declare that as official representative of **{INSERT COMPANY NAME}** that:

1) The company and its representative have not been convicted for (a) participation in a criminal organization as defined in Article 2 of Council Framework Decision 2008/841 / JHA of 24 October 2008 on combating organized crime (OJ L 300, 11.11.2008, p. 42), and crimes under Article 187 of the Penal Code (criminal organization), (b) active corruption, as defined in Article 3 of the Anti-Bribery Convention involving officials of the European Communities or of the Member States of the Union (OJ C 195, 25.6.1997, p. 1); 2 of Council Framework Decision 2003/568 / JHA of 22 July 2003 on combating corruption in the private sector (OJ L 192, 31.7.2003, p. 54) and, as defined in the national law of the company, (c) fraud against the financial interests of the Union within the meaning of Articles 3 and 4 of Directive (EU) 2017/1371 of the European Parliament and of the Council of 5 July 2017 on combating, through criminal law, fraud in burden of the Union's financial interests (L 198 / 28.07.2017), 4) (d) terrorist offenses or crimes related to terrorist activities as defined in Articles 3-4 and 5-12 respectively of Directive (EU) 2017/541 of the European Parliament and of the Council of 15 March 2017 on combating terrorism and of Council Framework Decision 2002/475 / JHA and amending Council Decision 2005/671 / JHA (OJ L 88 / 31.03.2017), (e) money laundering or terrorist financing, as defined in Article 1 of Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for money laundering revenue from terrorist activities or for the financing of terrorism, amending Regulation (EU) No 648/2012 of the European Parliament and of the Council, and repealing Directive 2005/60 / EC of the European Parliament and of the Council and of

Directive 2006 / 70 / EC of the Commission (OJ L 141 / 05.06.2015) and crimes, and (f) child labor and other forms of trafficking in human beings, as defined in Article 2 of Directive 2011/36 / EU of the European Parliament and of the Council of 5 April 2011 on preventing and combating trafficking in human beings and the protection of victims; replacing Council Framework Decision 2002/629 / JHA (OJ L 101, 15.4.2011, p. 1).

2) The company is not in breach of obligations relating to the payment of social security contributions in accordance with the legal provisions of the country in which it is established and the country of the contracting authority.

3) The company is not in breach of obligations relating to the payment of taxes in accordance with the legal provisions of the country in which it is established and the country of the contracting authority.

4) That the Company and its Representative have not been convicted for violation in fields of environmental law in accordance with the legal provisions of the country in which it is established and the country of the contracting authority.

In accordance with existing legislation and the stated requirements of the European Commission e-certis online mapping certificate tool this self-declaration meets the requirement of EU Directives 2014/24/EU and 2041/25/EU for participating in public procurement tenders within the EU.

Signed on:

Signed by:

Official company stamp

Official notary public stamp/ information

ANNEX II

MOSES OPEN Call APPLICATION FORM

Application title	
Application acronym	
Submitter	<i>Name, email address</i>
Summary (for publication if the application is approved)	<i>Word limit: between 100 and 500 words</i>

The Application must include the following sections:

1. Description of offered dataset
2. Area of coverage and size of historical dataset
3. Delivery time plan
4. Intellectual Property Considerations
5. Pricing information

1. INNOVATION POTENTIAL (RECOMMENDED 1 PAGE description + tables of data fields)

This section will be used to describe the offered dataset. The minimum information required is the description of the offered dataset including at least the data fields, data type and size

2. AREA OF COVERAGE AND SIZE OF HISTORICAL DATASET

This section will be used to describe the geographical area that the offered dataset covers and the proximity to Short Sea Shipping routes. The size of the historical dataset should be described in terms of time period coverage, number of transactions and total volume of cargo transported (i.e., containers, pallet, tons)

3. DELIVERY TIMEPLAN

Upon award of the open call to the applicant, which will be the time period required to deliver the dataset

4. INTELLECTUAL PROPERTY RIGHTS CONSIDERATIONS

The offered dataset will be solely used for the purposes of the MOSES project. Please identify whether Intellectual Property Rights (IPR) must be considered for the delivery of the dataset.

5. PRICING INFORMATION

A single price for the dataset should be included covering the provision of the dataset and the delivery to MOSES via digital means. The price should be expressed in EURO and indicate separately VAT