



AutoMated Vessels and Supply Chain Optimisation for Sustainable Short SEa Shipping

D.6.2: Matchmaking Platform development

Document Identification			
Status	Final	Due Date	30 June 2022
Version	1.0	Submission Date	09/09/2022
Related WP	WP6	Document Reference	D.6.2
Related Deliverable(s)	D6.1	Dissemination Level	CO
Lead Participant	NTUA	Document Type:	Other
Contributors	DANAOS, VPF, PCT, SEAB, CIRCLE	Lead Author	Margarita Kostovasili (NTUA)
		Reviewers	VPF CORE



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 861678. The content of this document reflects only the authors' view and the Agency is not responsible for any use that may be made of the information it contains.

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Document History			
Version	Date	Change editors	Changes
0.1	06/06/2022	Margarita Kostovasilis (NTUA)	ToC
0.2	01/07/2022	Evangelos Tsougiannis (NTUA), Markos Antonopoulos (NTUA)	Updated concept and architecture and components' description
0.3	25/07/2022	Margarita Kostovasilis (NTUA), Giannis Kanellopoulos (NTUA)	Final draft
0.4	02/08/2022	Mercedes De Juan Muñoyerro (VPF), Nikos Monios (CORE)	Peer review
1.0	05/08/2022	Margarita Kostovasilis (NTUA)	Quality review and submission to CO

Quality Control		
Role	Who (Partner short name)	Approval Date
Deliverable leader	NTUA	05/08/2022
Quality manager	NTUA	09/09/2022
Project Coordinator	NTUA	09/09/2022

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List of Acronyms

Abbreviation / acronym	Description
API	Application Programming Interface
EC	European Commission
EDIFACT	Electronic Data Interchange for Administration, Commerce and Transport
EEA	European Economic Area
CSS	Cascading Style Sheets
D1.1	Deliverable number 1 belonging to WP 1
GDPR	General Data Protection Regulation
GHG	Greenhouse Gas
GUI	Graphical User Interface
ID	Identifier
LSP	Logistics Service Provider
MLP	Matchmaking Logistics Platform
ORM	Object Relational Mapping
SSS	Short Sea Shipping
TEU	Twenty-foot Equivalent Unit
URI	Uniform Resource Identifier
VAT	Value Added Tax
WP	Work Package
XML	Extensible Markup Language

Executive Summary

The MOSES matchmaking platform, which is one of the innovations in the MOSES project, aims to offer match-making services 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. Based on the outcomes extracted by the testing of the alpha version of the platform, the updated version is presented, along with the provided functionalities. An overview of the platform's concept is presented, 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. In parallel, two main user roles have been identified as the ones that cover all potential stakeholders, namely the service provider group that represents the supply and the end users that represent the demand. In parallel, an indicative use case scenario has been defined to describe a typical work flow.

Moreover, the document provides a detailed description of the platform's architecture, in terms of architectural design and entity relationship. The different modules consisting the platform are the back-end, the database and the front-end, while their interactions have been defined. Additionally, the relationship among the available entities within the system has been demonstrated in the entity relationship diagram. The back-end has been analysed, with a detailed description of the transport network model and the matching engine, as well as the security approach followed for the protection and privacy of the collected data and the data subjects.

With regards to the front-end of the platform, the document lays out an analytical presentation of the approach followed for its development. The main input and output data that is collected and produced respectively for each user group has been described. Furthermore, the dedicated user interfaces that have been developed in order to support the provided functionalities to the users (either service providers or end users) are presented. Finally, the adoption of the continuous development and upgrade approach followed in MOSES project into the platform's development is described with potential areas of improvement. The updated version of the MOSES matchmaking platform is accessible through the following link: <http://moses.iccs.gr/>