



AI Standardisation in mobility: the experience of the MobiSpaces project

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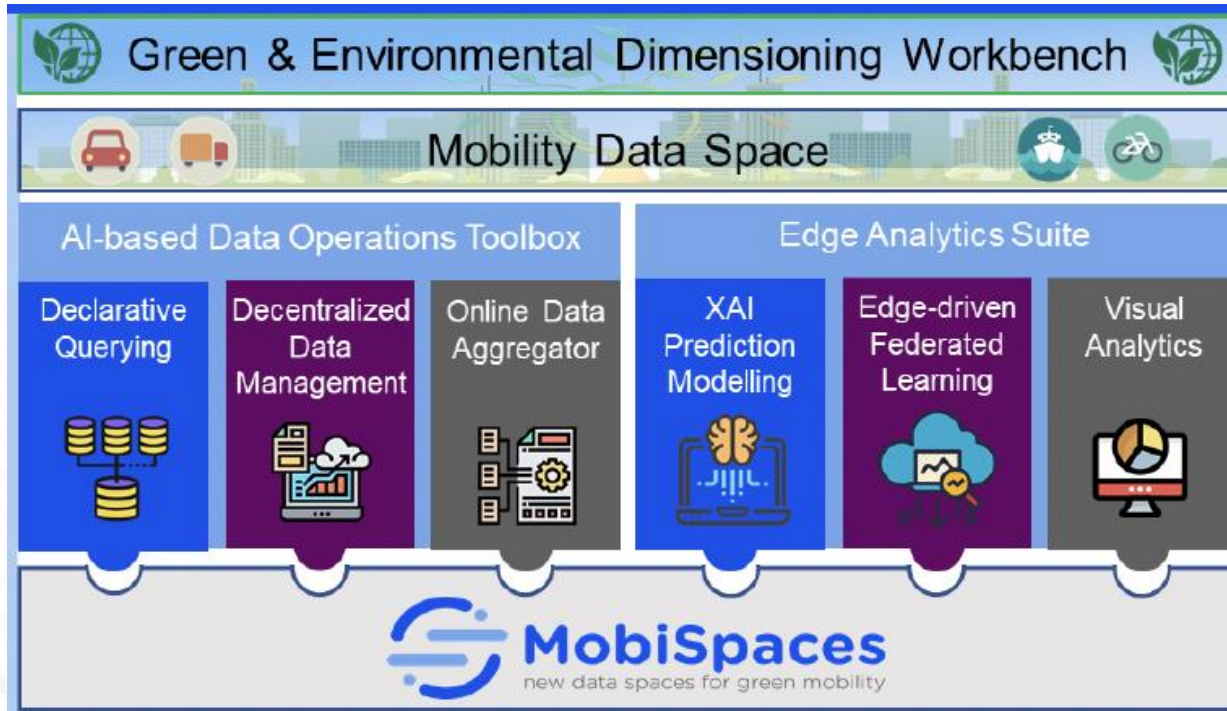
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MobiSpaces delivers an end-to-end **mobility-aware** and **mobility optimised-data governance platform** that will utilise the outcomes of **AI-based mobility analytics** to optimise the complete “Data Path”



By extracting data from ubiquitous mobile sensor data and IoT devices, it will capitalize on mobility patterns to build **efficient, decentralized, secure, trustworthy, and privacy-preserving pipelines, enabling interoperability, data sharing** and avoiding excessive data transfer and redundant storage.

- **Duration:** 36 months, from September 1st, 2022 to August 25th, 2025
- **25 Partners:**

Acronym	Participant logo	Participant organization name	Country	Acronym	Participant logo	Participant organization name	Country
GFT		GFT Italy Srl	IT	LXS		LEANXCALE SL	ES
ATOS		Atos Spain SAE	ES	UNP		Unparallel Innovation, Lda	PT
BOSCH		Robert Bosch GmbH	DE	TRUS		Trust-IT Srl	IT
SIEM		Siemens SRL	RO	COMM		COMMpla Srl (Affiliated Entity)	IT
INTRA		Intrasoft International AS	LU	GST		Danish Geodata Agency	DK
FUJ		Fujitsu Technology Solutions GmbH	DE	DS4		Digital Systems 4.0	BU
ENG		Engineering Ingegneria Informatica S.p.A.	IT	NETU		NetU Consultants Ltd	CY
FRQ		Frequentis AG	AT	UPRC		University of Piraeus Research Center	EL
AMT		Azienda Mobilità e Trasporti SpA	IT	ULB		Université libre de Bruxelles	BE
MT		Marintrafik Opereisons Anonymi Etaireia Pliroforikis	EL	AIT		Austrian Institute of Technology GmbH	AT
OKYS		OKYS Ltd	BU	AAU		Aalborg Universitet	DK
EMIS		Anonimi Etairia Perivallontikon Kai Energiakon Meleton Kai Anaptixis Logismikou	EL	WLC		White Label Consultancy ApS	DK
UBI		UBITECH LIMITED	CY				

The MobiSpaces use cases



The project's use cases cover urban and maritime domains and exploit the MobiSpaces mobility-aware data governance framework.

Standardisation Strategy & Objectives

Contribute towards generating or contributing to representative standards and proposing and promoting them to the appropriate standardisation bodies

Identify appropriate sections of the research that are brought into the standardisation process or taken upstream to open-source communities

Ensure that the project work adopts relevant global standards

Identify and engage with the relevant standardisation bodies and projects and open-source communities

Thanks to the efforts in this task, MobiSpaces aims to get in touch with at least 5 standardisation and legal bodies that can better shape the development of its use cases

From the beginning of the project, the team has performed mapping analysis to identify standards that could be used to build the MobiSpaces use cases, summarised in 3 lists:

- **Mapping analysis on the WGs and TCs** in the AI, edge computing, transportation fields
- **Mapping analysis on the SDOs and NSBs at European level**
- **Mapping analysis performed in cooperation with HSBooster**

WG name	SDO	WG / TC / Study Group / other	Role
ISO/TC 268/SC 2 Sustainable cities and communities - Sustainable mobility and transportation	ISO	TC	ISO Technical Programme Manager Committee Manager
ISO/TC 204 Intelligent transport systems	ISO	TC	Committee Manager ISO Technical Programme Manager
CEN/TC 278 - Intelligent transport systems	Cen Cenelec	TC	
ETSI TC INTELLIGENT TRANSPORT SYSTEMS (ITS)	ETSI	TC	
SG20: IoT and smart cities and communities (SC&C)	ITU	Study Group	Counsellor
ISO/TC 8 Ships and marine technology	ISO	TC	ISO Technical Programme Manager
ISG EUROPEAN COMMON INFORMATION SHARING ENVIRONMENT SERVICE AND DATA MODEL (CDM)	ETSI	ISG Industry Specification Group	Vice Chair Technical Officer
CEN/TC 15 - Inland navigation vessels	Cen Cenelec	TC	contact person
ITS Intelligent Transportation Systems	IETF	WG	Chairs
ISO/IEC JTC 1/SC 41 Internet of Things and Digital Twin	ISO/IEC	JTC	Chair
IEC TC 80 Maritime navigation and radiocommunication equipment and systems	IEC	TC	Chair Secretary
OGC APL for Moving Features	OGC	Standards Working Group	SWG cochair

These activities will help identify relevant WGs and SDOs standards that could improve the interoperability level of data used to build the MobiSpaces use cases

Standards Orientation Tool (SOT)



Advice Report

Project Information

Grant Agreement Number:	101070279
Project Acronym:	MobiSpaces
Full Project Name:	MobiSpaces - new data spaces for green mobility
Project Website:	https://mobispaces.eu/
TRL of the project:	TRL 4-5 (Applied Research)

Consultancy

- Information about the EU data policy
- Standards, Data Models and related organisations in the mobility domain
- General regulation and standardization framework
- Specific standards in the mobility sector
- Data models in the mobility sector
- Examples of deliverables with best practices in the railway domain

In this report, a focus was given also to the standards and TCs related to AI

Use Case	Standards	WGs
iRoute	ISO 37120 - Sustainable cities and communities ISO/IEC 38500 - Information technology Governance of IT for the organization ISO/IEC 20547-4:2020 - Big data reference architecture	ISO TC 268 - Sustainable development in communities ISO JTC 40 - IT governance and IT service management ISO JTC 1, such as SC 42 on Artificial intelligence, SC 27 on IT Security techniques
SmartSense	ISO 37120 - Sustainable cities and communities ISO 37122 - Smart community infrastructures ETSI TS 103 301: Intelligent Transport Systems (ITS)	ISO TC 268 - Sustainable development in communities ISO TC 204 - ITS communications architecture and data processing ETSI TC INTELLIGENT TRANSPORT SYSTEMS (ITS)
MarineTraffic Tracker	ISO 19115 - Geographic information – Metadata ETSI TS 103 301: Intelligent Transport Systems (ITS) IEC 61162: Maritime navigation and radiocommunication equipment and systems - Digital interfaces	ISO TC 211 - Geographic information/Geomatics ETSI TC INTELLIGENT TRANSPORT SYSTEMS (ITS) IEC TC 80 - Maritime navigation and radiocommunication equipment and systems
VesselEdge	ISO/IEC 27001 - Information security management ISO/IEC 27002 - Code of practice for information security controls ISO 21219 - Big data architecture framework	ISO/IEC JTC 1 - Information technology ISO/IEC JTC 1, SC 27 - IT Security techniques
CrowdSeaMapping	ISO 19115 - Geographic information – Metadata ETSI TS 103 301: Intelligent Transport Systems (ITS) IEC 61162: Maritime navigation and radiocommunication equipment and systems - Digital interfaces	ISO TC 211 - Geographic information/Geomatics ETSI TC INTELLIGENT TRANSPORT SYSTEMS (ITS) IEC TC 80 - Maritime navigation and radiocommunication equipment and systems

The mapping analysis have helped to identify relevant standards and WGs to engage to bring further the technical development of the use cases

Next steps

Reach out to Working Groups and Technical Committees related to AI

Continue to perform Landscape analysis to identify standards, ontologies and semantic rules that can be applied by the MobiSpaces use cases

Connect with projects of the AI community and HSbooster

Thank you for your attention!

Any questions?