Ref. Ares(2025)10951754 - 10/12/2025

DATA SPACE 4 MOBILITY MODELS INTEGRATION

Project Acronym:	**23-ES-TG-DS4MOBMODELS**
Project ID:	**101176007**

Deliverable number:	**D1.5**
Deliverable name:	**Identification and analysis of regulation report**
Work Package number:	**1.PROJECT MANAGEMENT AND COORDINATION**
Due date:	**31/03/2025**
Delivery date:	**10/12/2025**

Lead Beneficiary:	**EYSA**
Main author:	**David Murias**

Co-funded by the European Union

DS4MOB MODELS

Document fiche	
Authors:	David Murias [EYSA]
Internal reviewers:	Antonio Pellicer [AIMSUN] Saioa Etxebarria [INGARTEK] María del Carmen Moreu [NTTDATA]
Work Package:	WP1
Task:	T1.2
Nature:	R
Dissemination:	PU

Document History			
Version	**Date**	**Contributor(s)**	**Description**
V 0.0	25/11/2025	EYSA	draft
V 0.1	28/11/2025	AIMSUN	revision
V 0.2	01/12/2025	NTTDATA & INGARTEK	revision
V 1.0	09/12/2025	EYSA	Final version

Keywords:	Mobility Data Space; Mobility models; Regulatory framework; EU regulation; Spanish regulation; Data governance; Data protection; GDPR; Interoperability; Sustainable and Smart Mobility Strategy; TEN-T; Digital mobility; Data sharing
Abstract (few lines):	Deliverable D1.5 “Identification and analysis of regulation report” provides a structured overview of the European and Spanish regulatory and strategic framework relevant to the DS4MOBMODELS project. It analyses key EU data and mobility initiatives (including the European strategy for data, Data Act, Data Governance Act, GDPR, Interoperable Europe Act, TEN-T and Sustainable and Smart Mobility Strategy), together with national frameworks on digitalisation, mobility, data protection, cybersecurity and spatial data infrastructures in Spain. The report compiles the main legal, organisational and interoperability requirements that must be considered for the design and deployment of the DS4MOBMODELS Mobility Data Space and associated mobility models. It is conceived as a living document and a reference for project partners and stakeholders, to be updated as new regulations, standards and procedures emerge during the project lifetime.

Table of Contents

DEFINITIONS, ACRONYMS AND ABBREVIATIONS **5**
EXECUTIVE SUMMARY **6**
1 IDENTIFICATION AND ANALYSIS OF REGULATION **7**
2 MAIN FINDINGS AND CONCLUSIONS **11**

Table of Tables

Table 1: Analysis of National & EU regulations 7

Definitions, Acronyms and Abbreviations

Acronym	Title
CINEA	European Climate, Infrastructure and Environment Executive Agency
EU	European Union
EC	European Commission
EIDAS	Electronic identification
EEMS	Sustainable Mobility Strategy
GDPR	General Data Protection Regulation
NIS	European Directive on Security of Network and Information Systems
DCAT	Data Catalogue vocabulary

Executive Summary

The DS4MOBMODELS project aims to define and create an advanced Mobility Data Space that integrates transport, traffic, and travel data across various regions, including the Spanish state, the Nouvelle-Aquitaine-Euskadi-Navarre Euroregion, and the Central Portugal region.

The primary goal is to enhance the availability, quality, and interoperability of mobility data to address key national, cross-border, regional, and local use cases related to sustainable urban mobility, traffic management, and real-time operations within the Trans-European Transport Network (TEN-T).

The project will develop a data platform that will support the integration of various mobility models and data science tools to facilitate efficient, safe, and sustainable mobility management. The initiative will also establish robust data governance in line with European and national regulations, ensuring secure and interoperable access to the data for all the stakeholders in a non-discriminatory way.

The DS4MOBMODELS project aligns with the broader objectives of the European Data Strategy, the Digital Europe Programme, and national digital and mobility strategies in Spain, France and Portugal, contributing to the creation of a more integrated and resilient European mobility infrastructure.

This document is the deliverable D1.5 “Identification and analysis of regulation report of the DS4MOBMODELS project (Grant Agreement nº 101176007).

The purpose of this deliverable is to identify, to collect and to analyse the current European and National regulatory framework that is most applicable to the areas covered by the DS4MOBMODELS project.

This deliverable is intended to be used as reference material for all DS4MOBMODELS entities (beneficiaries, affiliated parties and associated partners), international and national authorities, as well as other projects funded under the same or related topics.

As the project progresses, this document will be updated and upgraded on a regular basis.

1 Identification and analysis of regulation

This section outlines the key regulations, reference documents and mandates that govern Data Space and Mobility Models within the DS4MOBMODELS project.

Table 1: Analysis of National & EU regulations

Reference	Purpose
European strategy for data	The **European strategy for data** aims to create a single market for data that will ensure Europe's global competitiveness and data sovereignty. This leads to the creation of **Common European Data Spaces** which will ensure that more data becomes available for use in the economy and society, while keeping the companies and individuals who generate the data in control. The European strategy for data intends to: • adopt legislative measures on data governance, access and reuse. • make data more widely available by opening up high value publicly held datasets across the EU and allowing their reuse for free. • invest EU funds to develop data processing infrastructures, data sharing tools, architectures and governance mechanisms for thriving data sharing and to federate energy-efficient and trustworthy cloud infrastructures and related services. • enable access to secure, fair and competitive cloud services by facilitating the set-up of a procurement marketplace for data processing services and creating clarity about the applicable regulatory framework on cloud framework of rules on cloud.
Regulation (EU) 2024/903 of the European Parliament and of the Council of 13 March 2024 laying down measures for a high level of public sector interoperability across the Union (Interoperable Europe Act).	This regulation, known as the **Interoperable Europe Act**, aims to provide the right conditions to **facilitate cross-border interoperability**, which requires an advanced approach to the establishment and management of legal, organisational, semantic and technical requirements. In particular, **trans-European digital public services**, i.e., those requiring interaction across Member States' borders through their network and information systems.
Regulation (EU) 2023/2854 of the European Parliament and of the Council of 13 December 2023 on harmonised rules on fair access to and use of data.	The **Data Act** is a pillar of the European strategy for data. The Data Act is a comprehensive initiative to address the challenges and unleash the opportunities presented by data in the EU, emphasising fair access and user rights, while ensuring the protection of personal data. The Data Act **makes more data available for the benefit of companies, citizens and public administrations** through a set of measures such as: • Increasing Legal certainty. The Data Act is a cross-sectoral piece of legislation (i.e. it lays out principles and guidelines that apply to all sectors). • Rules-enabling public sector bodies to access and use data held by the private sector for specific public interest purposes. For instance, public sector bodies will be able to request data necessary to help them respond quickly and securely to a public emergency, with minimal burden on businesses. • Switching between providers. New rules setting the framework for customers to effectively switch between different providers of data-

	processing services to unlock the EU cloud market. This will also contribute to an overall framework for efficient data interoperability.
Regulation (EU) 2022/868 of the European Parliament and of the Council of 30 May 2022 on European data governance.	The European Data Governance Act (DGA) is a key pillar of the European strategy for data, the Data Governance Act seeks to increase trust in data sharing, strengthen mechanisms to increase data availability and overcome technical obstacles to the reuse of data. The DGA covers both personal and non-personal data, with the General Data Protection Regulation (GDPR). The inclusion of built-in safeguards, in addition to GDPR, is intended to enhance trust in the sharing and reuse of data. This trust-building is crucial for increasing the availability of data in the market.
Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data.	This regulation aims to give individuals greater control over their personal data and to modernize and unify data protection laws across all EU Member States, reducing complexity for businesses. The **General Data Protection Regulation (GDPR) outlines requirements for organizations handling personal data based on seven core principles.** These principles cover areas such as processing data lawfully and transparently, limiting data collection to specified purposes, minimizing the amount of data collected, ensuring data accuracy, limiting storage duration, maintaining data security, and requiring accountability from data controllers.
Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market.	This regulation lays down the conditions under which Member States recognise EIDAS means of natural and legal persons falling under a notified electronic identification scheme of another Member State; It also lays down rules for trust services, in particular for electronic transactions and establishes a **legal framework for electronic signatures, electronic seals, electronic time stamps, electronic documents, electronic registered delivery services and certificate services for website authentication.**
EU Mobility Strategy and Action Plan	The EU's mobility strategy, the Sustainable and Smart Mobility Strategy (SSMS), is the **roadmap to transforming the EU's transport system**. One of the three main pillars of the SSMS is **reinforcing the single market by completing the Trans-European Transport Network (TEN-T),** ensuring fair and accessible mobility for all regions and passengers (including those with reduced mobility), and enhancing safety and security.
Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE).	The INSPIRE Directive sets the **minimum conditions for interoperable sharing and exchange of spatial data across Europe**. The INSPIRE Directive aims to create an EU Spatial Data Infrastructure (SDI) for the purposes of EU environmental policies and policies or activities which may have an impact on the environment. This European Spatial Data Infrastructure will enable the sharing of environmental spatial information among public sector organisations, facilitate public access to spatial information across Europe and assist in policymaking across boundaries. INSPIRE is based on the infrastructures for spatial information established and operated by the Member States of the EU. The Directive addresses 34 spatial data themes needed for environmental applications.
Regulation (EU) 2021/1153 of the European Parliament and of the Council of 7	The Connecting Europe Facility (CEF) 2021-2027 is a key EU funding instrument in delivering the European Green Deal and an important enabler towards the Union's decarbonisation objectives for 2030 and 2050. It supports the development of high performing, sustainable and efficiently

July 2021 establishing the Connecting Europe Facility.	**interconnected trans-European networks in the fields of transport, energy and digital services**. The **Connecting Europe Facility for Transport** is the **funding instrument to realise European transport infrastructure policy**. It aims at supporting investments in building new transport infrastructure in Europe or rehabilitating and upgrading the existing one. CEF Transport focuses on cross-border projects and projects aiming at removing bottlenecks or bridging missing links in various sections of the Core Network and on the Comprehensive Network, as well as for horizontal priorities such as traffic management systems. CEF Transport also supports innovation in the transport system in order to improve the use of infrastructure, reduce the environmental impact of transport, enhance energy efficiency and increase safety.
Regulation (EU) 2024/1679 of the European Parliament and of the Council of 13 June 2024 on Union guidelines for the development of the trans-European transport network.	The regulation aims to ensure a coherent, efficient and sustainable transport infrastructure throughout the EU. The primary goal of this regulation is to create a reliable, seamless and high-quality multimodal transport network across the EU. Among other purposes, the regulation purpose is setting specific technical and operational requirements to ensure harmonised quality and safety standards across different transport modes.
EUROPEAN STANDARDS	
Core Vocabularies (SEMIC)	The Core Location Vocabulary is a **simplified, reusable and extensible data model** that captures the fundamental characteristics of a location, represented as an address, a geographic name, or geometry. The Core Location Vocabulary is widely used in the semantic harmonisation of data in digital public projects and services.
Data Catalogue Vocabulary - Application Profile (DCAT-AP).	The DCAT-AP is a specification based on W3C's DCAT for **describing public sector datasets in Europe**. Its basic use case is to enable a cross-data portal search for data sets and make public sector data better searchable across borders and sectors. This can be achieved by the exchange of descriptions of data sets among data portals. Adopted by national portals and the European data portal (data.europa.eu), **it facilitates the semantic federation of catalogues and their interoperability.**
DATEX II	DATEX II is the **electronic language used in Europe for the exchange of traffic information and traffic data**. It supports the digitalisation and exchange of road traffic and travel information and focused on the domains of urban mobility, electromobility charging infrastructure, logistics, electronic traffic regulations and cooperative, connected and automated mobility.
SPANISH REGULATION	
Spain Digital 2025	On February 15, 2013, the Spanish Council of Ministers approved the Digital Agenda for Spain as the Government's strategy for developing the digital economy and society in Spain. This strategy served as the umbrella for all Government actions related to Telecommunications and the Information Society. **Spain Digital 2025 brings together a set of measures, reforms and investments, organised into ten strategic areas, aligned with the digital policies set out by the EC**. Among other strategic areas, **Spain Digital 2025 covers a sustainable and digital mobility**. This mobility includes

	technological coordination through information management and the integration of new technologies, as well as multisectoral collaboration (ecosystem of the automotive, transport, energy, communications, tourism, logistics sectors, etc.) to integrate new scalable business models.
Spanish Sustainable Mobility Strategy.	On April 30th, the Spanish Council of Ministers approved the Spanish EEMS. This strategy serves as a national framework that integrates the principles and coordination tools to guide and ensure the coherence of sectoral policies. The EEMS's objectives and guidelines are implemented through 48 measures structured into five areas: **territory, transport planning and infrastructure**; climate change and reducing energy dependence; air quality and noise; safety and health; and demand management.
Spanish Organic Law 3/2018 of December 5, on Personal Data Protection and Guarantee of Digital Rights.	The Spanish Organic Law 3/2018 of December 5, on Personal Data Protection and Guarantee of Digital Rights, adapts Spanish law to the EU's GDPR and establishes rules for data protection and digital rights. **Key aspects include adapting to the GDPR, setting out new obligations for the public sector, and guaranteeing a series of digital rights.**
Royal Decree 43/2021, of January 26, which develops Royal Decree-Law 12/2018, of September 7, on the security of networks and information systems.	This regulation adapts the NIS. It governs the **security of networks and information systems used for the provision of essential services and digital services, establishing mechanisms that enable improved protection against threats affecting networks and information systems**, and setting out an institutional framework for cooperation that facilitates the coordination of actions taken in this area both nationally and with neighbouring countries, particularly within the EU.
Law 14/2010, of July 5, on the infrastructures and services of geographic information in Spain.	This law adapts the European Directive about Infrastructure for Spatial Information in the European Community (INSPIRE). It regulates the organisation of geographic information services in Spain and establishes the basis for the creation of Geographic Information Infrastructures. This law is fundamental for the **interoperability and accessibility of geospatial data in Spain, promoting its free and open use for various legitimate purposes.**

2 Main findings and conclusions

The purpose of the deliverable D1.5 is to provide an overview and analysis of the European and Spanish regulatory framework that are applicable to the DS4MOBMODELS project in terms of Data Space and Mobility Models. The starting point for producing this deliverable was to consider the international EU and Spanish Data and Mobility Strategies and the plans in which all the analysed legislation and EU standards are based on. In addition, the latest EU and Spanish Data Protection Regulation have also been analysed.

As provided in the previous section, the analysis of the regulatory framework shows the complexity of the pertinent regulation which is composed of a set of different legislative areas (such as, data protection and security, interoperability of data, the European transport networks, etc.). All these legislative areas must be taken into consideration and for this reason have been compiled and analysed in this deliverable.

The work reflected in this document serves to provide consortium members and other potential users with a compilation of the regulatory framework that apply to the DS4MOBMODELS project and it purposes.

Finally, it should be noted that this deliverable is a living document that needs to be updated as new applicable regulations, procedures, and standards are approved during the project lifetime.