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INNO-MOB

Unlocking the potential of Mobility Innovation Ecosystems and Networks

D1.2 Data Management Plan

(Version 0.1)

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D1.2 Data Management Plan

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0.2	23/07/2023	Eleni Anoyrkati	Final

Contents

Abbreviations

EC	European Commission
HE	Horizon Europe EU Research and Innovation Program
WP	Work Package
DMP	Data Management Plan
SME	Small and medium size enterpise

Executive Summary

DMPs are a key element of good data management. A DMP describes the data management life cycle for the data to be collected, processed and/or generated by a Horizon Europe project. As part of making research data findable, accessible, interoperable and re-usable (FAIR), a DMP should include information on:

- the handling of research data during and after the end of the project,
- what data will be collected, processed and/or generated,
- which methodology and standards will be applied,
- whether data will be shared/made open access and,
- how data will be curated and preserved (including after the end of the project).

Inno-Mob Data Management Plan will thus help to:

- sensitize project partners for data management,
- agree on common data management rules,
- assure continuity in data usage if project staff leave and new staff join,
- easily find project data when partners need to use it,
- avoid unnecessary duplication e.g. re-collecting or re-working data,
- update data,
- make project results more visible.

This first version of the DMP will serve as a basis to define the level of expertise of each partner in data management and to assess the corrective actions which need to be implemented to secure research data.

To this aim, a DMP questionnaire was sent to all project partners (even the ones which are not research partners) in order to sensitize all partners for data management and to get information about their individual data management strategy. The present DMP draft version summarizes the partners' answers to the DMP questionnaire per Work Package.

Introduction

The overall objective of INNO-MOB is to reduce the innovation divide between strong and moderate innovators in European territories by increasing the inclusiveness of the existing networks and initiatives. INNO-MOB will base its operating principles on four main blocks of activities: i) exploring the needs of the key innovation stakeholders ii) design, development and implementation of new schemes and collaborations iii) Connect & learn iv) sustain

SENSITISATION PHASE

Receive mutual insights
- Explore needs
- Idenfity gaps
- Disclose potential

Perceive common strategic goals
- Co-create strategies
- Design tools
- Define Good Practices

Accept challenge for collaboration
- Break barriers
- Collaborate
- Connect
- Create MIN

Sustain Mobility Innovation Networks
- Sustain MIN
- Enlarge participation
- Create synergies

EMPOWERMENT PHASE

KER1: Gaps vignette

KER2: INNO-MOB INNO-MOB opening up strategy programme

KER3: Mobility Innovation Networks Domain

KER4: Inclusive mobility innovation networks ecosystem

During that process , INNO-MOB will collect and collate various datasets to enable us design business support schemes that respond to the needs of the transport and mobility SMEs in Europe

This deliverable consistitues a plan on managing the INNO-MOB data. Data Management Plans are a key element of good data management. A DMP describes the data management life cycle for the data to be collected, processed and/or generated by a Horizon Europe project. As part of making research data findable, accessible, interoperable and re-usable (FAIR), a DMP should include information on:
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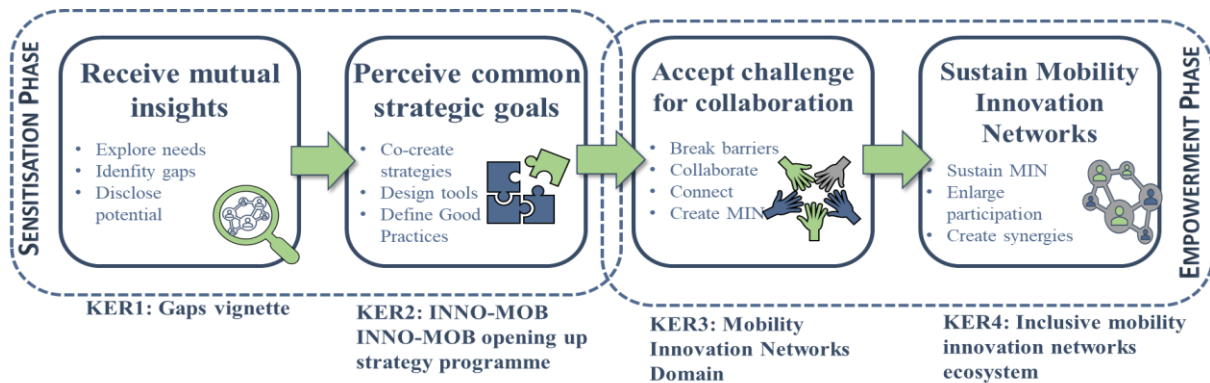INNO-MOB Data Management Plan will thus help to:
- sensitize project partners for data management,
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1   INNO-MOB DMP main principles

The main principles of the INNO-MOB DMP are:

- **Identification of data types and research outputs**: Early in the project lifetime the consortium will identify the data items/sets and their respective characteristics (e.g., nature, origin, scale, update frequency, permitted access level) that will be handled for the successful realisation of the INNO-MOB objectives

- **Findability**: INNO-MOB will endeavour to offer open access to its scientific data and to data generated throughout the project lifetime. Personal data will be protected by technical and procedural means and will not be shared under any circumstances or stored beyond the project's lifetime. Data collected through project interviews will be stored and transmitted in forms without personal identifiers (e.g., aggregated data) through public deliverables and communication materials.

- **Accessibility and reusability:** All data generated during the course of the project will be made available on the INNO-MOB Platform, as well as in various publications and seminars, without charging intellectual property rights.

- **Interoperability:** Due to the versatility of the Mobility Innovation Networks formulation, a number of standards will be used to ensure interoperability and proper communication, protection, and reusability of the generated data.

- **Curation and storage/preservation costs**: Data will be curated and preserved in dedicated repositories, depending on the type of data and the specific requirements. In addition, as a risk mitigation measure, data will be deposited in open digital repositories such as OpenAIRE's Zenodo repository to ensure discoverability, accessibility, and intelligibility.

2 Data Summary

The following section elaborates on the overall aspects of purpose of data collection, the types and formats of data generated and collected throughout the project, the re-use of existing data and data origin, the expected size of data and data utility on WP level. A detailed list of all data and their respective format to be made accessible by an open access repository. The following section concentrates on Work Packages 2 to 5.

2.1 Purpose of data collection

INNO-MOB collects and generates data for internal use and further processing by the INNO-MOB project partners such as analyses, reports, plans, questionnaires, interviews and workshop documentations, as well as data that will be made accessible for external users such as the project deliverables as well as communication and dissemination material.

Being a Coordination and Support Action, INNO-MOB does not generate typical research data. Analyses generated during project runtime are made accessible on a voluntary basis.

2.1.1 Data collection in WP2

The data generated in Work Package 2 builds the basis for the development of the INNO-MOB services.

Purpose of data collection
Within WP2 data is collected through surveys and interviews for the purpose of performing a gap analysis to: • Investigate the gaps in the services provided by the networks/initiatives • Identify the specific needs of key innovation stakeholders, including Tier 2 SMEs, as well as the participating countries and/or regions • Perform a gap analysis: missing elements and features for customization of the provided services by the network/initiative
Types and formats

Two separate datasets will be collected:
• Responses from the survey for SMEs in the mobility sector to get insights on their needs and experience with support services: the data collected through EUSurvey (https://ec.europa.eu/eusurvey), the tool allows storing, publishing a sub-set of all submitted answers on the internal pages of the application , and exporting of data in xls, pdf, odt and xml format. The technical infrastructure meets the security requirements and data protection and also enables the anonymised processing of personal data in surveys. The data provides information on the specific field of activity of respondents from mobility sector of SMEs and some bigger companies, their size, their experience and plans on strategic activities, perception of external challenges, interest and experience of external support.
• Responses from an in-depth interview (IDI) to research stakeholders of the support ecosystem. The interview results have been collected in word formats and basic information in xls format. It is difficult to assess now what kind of data will be produced in the analysis phase. Most probably some data set on the ecosystem can be reduced in xls.
Survey results also consists personal data:
    – Participant name, surname, contact email, organization name, organization country
    – Participant contact e-mail
which need to be protected and cannot be made available

Re-use of existing data
As for the data set no re-use is foreseen. As for personal data:

- Participant name, surname, contact email, organization name, organization country
- Participant contact e-mail

Will be used to invite stakeholders to register at pan-European mobility innovation platform of INNO-MOB

Data origin
Primary data (interviews, online survey)

Expected size
348 survey answers from SMEs
97 IDI responses from ecosystem stakeholders.

Data utility
To INNO-MOB project partners
To any researchers and organisations analysing innovation and business support needs of companies

2.1.2   Data collection in WP3

WP3 will design a Collective Innovation Deployment Development Support Model that will (i) expedite new (and/or improved) supporting services, (ii) support the inclusiveness of the existing mobility networks & initiatives, (iii) facilitate the opening up strategy

Purpose of data collection
The purpose of data collection in WP3, is to develop a framework for collective innovation. The data collected will be used to establish the fundamentals of this model and deploy the framework. The data collection is directly related to the objectives of WP3 as it aids in the development and implementation of the Collective Innovation Deployment Development Support Model.

Types and formats
Information will be collected through workshops (online or physical) on the stakeholders opinion with regards to the development of the service. The information will be collected anonymously and will be recorded on a template.
The participants will be invited to also attend trainings , seminars etc but their details will not be kept beyond the conduction of the sessions.

Re-use of existing data
Data collected in other Work Packages (WPs) can be highly beneficial for WP3:
Understanding Stakeholder Needs: Data collected from WP2, which likely involves identifying and understanding the needs of stakeholders, can be used in WP3 to tailor the CIDDSM to meet these needs. This could involve adjusting the services offered, the way they are delivered, or the support provided to different types of stakeholders.
Leveraging Network and Initiative Data: WP4 might involve the collection of data about different mobility networks and initiatives. This data could be used in WP3 to identify potential partners, understand the landscape of existing services, and find gaps that the CIDDSM could fill.

Data origin
Other WPs and workshops.

Expected size
7 workshops / templates completed.

Data utility
The data collected in Work Package 3 (WP3) of the INNO-MOB project can be useful to a variety of stakeholders, including: 1. **Participating SMEs and Start-ups**: The data can provide insights into the effectiveness of the support services, potential areas of improvement, and opportunities for growth. It can also help them understand the landscape of the mobility innovation ecosystem. 2. **Investors and Financiers**: The data can provide them with insights into the performance of the mobility sector, helping them make informed investment decisions. 3. **Mobility Networks and Initiatives**: The data can help these entities understand their role in the ecosystem, identify gaps in their services, and find opportunities for collaboration or improvement. 4. **Policy Makers and Regulators**: The data can provide them with insights into the state of the mobility innovation ecosystem, helping them develop or adjust policies and regulations to support its growth. 5. **Academic Researchers**: Researchers interested in innovation ecosystems, mobility, or related fields can use the data for their studies. 6. **General Public**: results and impacts of the project, shared with the public to increase awareness and understanding of the mobility innovation ecosystem.

2.1.3   Data collection in WP4

WP4 will focus on developing a Pan -European stakeholder chain map and encourage collaboration and interaction through an online mobility super cluster network

Purpose of data collection
The purpose of data collection/generation is to set a base for scaling up the innovation mobility networks in Europe. In that way SMEs (and other stakeholders) will have an opportunity to enlarge their visibility to other key players, which could lead to result on new forms of cooperation in mobility sector. A knowledge base repository will be created online based on information provided by stakeholders (their registrations) or desk based research by the partners.

Types and formats
Data that will be collected/generated will be collected in form of text and numerical data.

Re-use of existing data
Parts of existing data will be reused. As an example, a data related to stakeholders (e.g. company name, official email address, street address, etc.) will be re-used in forms like Map of Excellence.

Data origin
The origin of the significant part of collected data will be stockholders themselves, their websites and the websites related to them, in accordance with corresponding legislation.

Expected size

500 entries/ registrations of stakeholders. The estimation refers to several dozes/hundreds of megabytes
Data utility
This could be useful to all SMEs (and other stakeholders), which are involved (or could be involved) in the innovation chain

2.1.4 Data collection in WP5

Work Package 5 delivers the formal structure and processes to enable an effective communication and dissemination of project results. It thereby produces a wide range of data in the form of online and printed communication material such as the website, newsletters, social media contributions, press releases, flyers and posters. Dissemination activities are moreover documented in the Dissemination and Communication Plan and monitored in the Dissemination Activity Report.

Purpose of data collection
The data will be used for the completion of the deliverables: • D5.1 Communication and Dissemination Plan • D5.2 INNO-MOB promotional activities • D5.3 Exploitation Plan
Types and formats
▪ Project flyer, poster, newsletters, press releases, other publications (PDF) ▪ Project website (HTML) ▪ Name and contact data of stakeholders in INNO-MOB community database (format: XLSX) ▪ Reports (format: DOCX and PDF) ▪ Presentations (format: PPTX and PDF)
Re-use of existing data
The newsletters and press releases will be circulated by all partners through reach a wider audience. The PowerPoint presentation template will be utilized by all partners for presentations of the status of the WPs during project meetings and dissemination activities. The INNO-MOB community database serves as a basis for the INNO-MOB stakeholders' database developed under WP4.
Data origin
Information produced mainly in WP4
Expected size
The complete project information will represent several Gigabytes of data at the end of project.
Data utility
The data generated will be useful for the project partners.

3   FAIR Data

3.1   Making data findable, including provisions for metadata

INNO-MOB data produced or used are not discoverable with metadata. Metadata might be created after the project's end for specific deliverables that will be considered as "worthy" to be identified. Descriptive and administrative metadata will be created, cataloguing the project data after the end of the project.

Where applicable, data produced are identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers) and search keywords for re-use are provided.

INNO-MOB data will be named according to the following convention and will provide clear version numbers:

Project name + item name + version number:

a)   Example for deliverables:
   INNO-MOB_Dx.x_shorttitle_vx.x.docx (or .pptx/.xlsx/.pdf …)
b)   Example for documents at task level:
   INNO-MOB_Taskx.x_shorttitle_vx.x.docx
c)   Example for documents not being assignable to a specific task or deliverable:
   INNO-MOB_WPx_shorttitle_vx.x.docx

3.2   Making data openly accessible

3.3   Deposition in open access repository

Data referring to public accessible deliverables are made accessible using INNO-MOB project website. In addition, the following data will be made openly accessible by deposition in the open   access   repository   Zenodo:

Table 1: Data openly accessible via repository

Dataset	Dissemina-tion level	Format	Repository	Comments
Work Package 1				
D1.1Quality Assurance Plan and Risk Management Plan	Confidential	PDF	Stored in INNO-MOB ownCloud	For internal assurance and risk management..
D1.2 Data Management Plan	Confidential	PDF	Stored in INNO-MOB ownCloud	For internal project data management
Work Package 2				

D2.1 Service Gap Analysis data collection	Public	PDF	Shared via INNO-MOB website and Zenodo	
D2.2 Gaps Vignette report	Public	PDF	Shared via INNO-MOB website and Zenodo	
Work Package 3				
D3.1 CIDDSM fundamentals	Public	PDF	Shared via INNO-MOB website and Zenodo	
D3.2 Deploy the CIDDSM framework	Public	PDF	Shared via INNO-MOB website and Zenodo	
Work Package 4				
D4.1 Stakeholder Chain Map Intelligent Platform (SCMIP) specifications	Public	PDF	Shared via INNO-MOB website and Zenodo	
D4.2 Mobility Innovation Network report	Public	PDF	Shared via INNO-MOB website and Zenodo	Privacy related issues apply. Datasets will be used only for dissemination purposes.
Work Package 5				
Communication and Dissemination Plan	Public	PDF	Shared via INNO-MOB website and Zenodo	
INNO-MOB promotional activities	Public	PDF	Shared via INNO-MOB website and Zenodo	
Exploitation Plan	Public	PDF	Shared via INNO-MOB website and Zenodo	

Data containing private information about INNO-MOB stakeholders is considered confidential and cannot be shared. This refers in particular to:

▪ The reporting on stakeholder interviews (in order to guarantee that some conclusions cannot be linked to a specific individual).
▪ Individual results of the online SME survey (as it was guaranteed that the survey was completely anonymously and that the results will be only used for the INNO-MOB project).
▪ The contents of the workshops In case the dataset cannot be shared, the reasons for this will be mentioned (e.g. ethical, rules of personal data, intellectual property, commercial, privacy-related, security-related). In principle, data sharing and re-use policies will comply with privacy and ethics guidelines of the INNO-MOB project. A consensus will be

requested from all external participants to allow data to be shared and reused. All data will be anonymised before sharing.

3.3.1   Methods or software tools needed to access the data

Common software such as Microsoft Word, Excel and Adobe Acrobat Reader or an alternative Open Office software are sufficient to access INNO-MOB data.

Publically a web browser will be used by exernals to access the data. Internally (by members of consortia during project lifetime) – Web browser, MySQL clients like MySQL Workbench.

3.3.2   Restrictions on use

Zenodo offers the possibility to house closed and restricted content, so that documents can be stored safely whilst the research or patent application is ongoing, such that nothing is missing when they are openly shared later in the research workflow.

Additionally, to help publishing, research materials for the review process can be safely uploaded to Zenodo in restricted records and then protected links can be shared with the reviewers. Content can also be embargoed and automatically opened when the associated paper is published.

3.3.3   Ascertainment of the identity of the person accessing the data

There is no way of ascertaining the identity of the person accessing the data in neither the project website nor the Zenodo repository.

For the INNO-MOB Mobility Innovation Network platform each member will have a unique login name. Each user will be identified by the unique login name. All the personal data related to each user will comply with EU and national Personal Protection Data Laws.

The project website and the platform will be monitored using Google Analytics. Google analytics data cannot be related to identifiable unique persons but will provide us very helpful data for the analysis of what visitors do and like in the project website and the platform

3.4   Making data interoperable

3.4.1   Interoperability

Data produced in the INNO-MOB project is interoperable. Interoperable means allowing data exchange and re-use between researchers, institutions, organisations, countries, etc. INNO-MOB data classified as public is adhering to standards for formats, as much as possible compliant with available (open) software applications, and in particular facilitating re-combinations with different datasets from different origins.

INNO-MOB data can be shared and re-used with the exception of personal data (which will be treated according the protection of personal data within the documents) and business critical data.

3.4.2 Standards and methodologies

INNO-MOB doesn't follow any specific data standards or methodologies to make data interoperable. Data is stored in open software applications and explained in the INNO-MOB deliverables. Mainstream software is used to generate the data. The language used is English. Metadata assorting the datasets will be defined in later stage of the project life cycle.

3.4.3 Standard vocabularies

Vocabularies will be defined by well-known services standards. In example, some Maps of excellence graphical interface will be based on Openstreet Map services, thus general stakeholder data (address, contact info, etc) wil be stored in xml format that supports their service

3.4.4 Mappings to more commonly used ontologies

In case it is unavoidable that INNO-MOB uses uncommon or generate project specific ontologies or vocabularies, mappings to more commonly used ontologies will be provided. By the end of the project, an ontology will be designed to present all the datasets used and will be made public available.

3.5 Increasing data re-use through clarifying licences

3.5.1 Data licences

Part of the data that will be considered to be re-used publically. It will be considered to be licensed in the same manner defined by the license at the original source, or at Creative Commons (CC) Level, depending on the particular case.

3.5.2 Date of data availability

INNO-MOB deliverables are published on the project website and thus be made available for use by third parties once they have been approved by the European Commission.

Any other data will be made available for re-use immediately after the end of the project, after careful evaluation will lead to a final decision on what should be kept confidential due to privacy concerns and what will be shared openly. The datasets foreseen to be produced in WP2-3-4 will be examined mainly to comply with personal data protection laws and business IPR protection laws.

No embargo to give time to publish or seek patents is foreseen.

3.5.3 Usability by third parties after project end

Apart from the data that hast to be kept confidential due to privacy concerns or that has a commercial relevance for the partners, INNO-MOB data produced and used in the project are useable by third parties, in particular after the end of the project. Hence, third parties will be free to repeat and re-use the research data.

3.5.4 Duration of data re-usability

INNO-MOB project partners are obliged to preserve the data format and files for five years after the project end

However, making data available and re-usable indefinitely will be considered during project runtime.

4 Allocation of resources, data security and ethical aspects

4.1 Costs for making INNO-MOB data FAIR

INNO-MOB has selected the Zenodo repository which is free of charge. No costs for open access publications are foreseen in the project budget

If costs occur for publications within specific Work Packages, the project consortium will decide on budget re-allocation possibilities.

Resources for long term preservation have not been discussed.

4.2 Responsibility for data management

Each project partner is responsible for a reliable data management regarding his work within the INNO-MOB project.

OKTHESS, responsible for Work Package Management –is responsible for the overall data management at project level.

4.3 Data security

At first level, each project partner is responsible for the security and preservation of his data

The project partners' servers are regularly and continuously backed-up.

INNO-MOB project data are saved in an online platform (ownCloud). In order to keep the data secure, access will be controlled by encryption of long term cloud-based backup. We will ensure that collaborators can access our data securely by providing Web access to them via password control.

Access to the Zenodo data repository will be controlled by passwords. We will ensure that collaborators can access our data securely by providing web access to them via password control.

In the event of an incident, the data will be recovered according to the necessary procedures of the data repository owner.

4.4 Ethical aspects

Personal data (names, contact data, private data) of stakeholders will be kept anonymous using the necessary encryption methods. To do that, named entities (such as proper nouns or organisations) will be detected and encrypted. Access to personal data will be allowed only to members of the consortium and according to the existing Consortium Agreement.

For the questionnaires and other material that will be filled in by external stakeholders an explicit statement on data sharing and long term preservation is applied and displayed.