Plan Overview

A Data Management Plan created using DeiC DMP

Title: CulturalRoad

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Project abstract:

The CulturalRoad project aims to integrate cultural and geographical diversity into the design and implementation of Connected, Cooperative, and Automated Mobility (CCAM) products and solutions. As part of this objective, the project is developing an innovative Five-Pointed Star Rating System designed to assess the mobility equity of CCAM solutions across different countries. This system will produce a diversity-based score that reflects cultural, geographical, and other exogenous factors influencing equitable access to mobility. Given the central role of data in achieving these aims, this document outlines the development of an Opportunistic Data Set, which consists of already available data sources selected to support the prototyping of the rating system. It also indicates the procedures that are used for handling the data and points out to the resources in terms of regulations. Finally, the project will also include the collection of Travel Survey Data. The information on this will be detailed in a separate section, to avoid confusion with the Opportunistic Data.

The Opportunistic Data Set includes more than 30 categories of data, ranging from geospatial information and mobility patterns to cultural activity data and environmental indicators, due to the presence of subcategories and variations with respect to the initial list.

From an ethical standpoint, CulturalRoad follows the guidelines established for Horizon Europe projects, as detailed in Deliverable 6.4 – Data and Ethics Management Plan (available on the Cultural Road Website, and regularly updated if changes occurr). A key achievement of this deliverable is the definition of access protocols based on data sensitivity, in alignment with General Data Protection Regulation (GDPR), the Data Governance Act (DGA), and national laws where applicable. Governance structures are clearly defined, with specific roles allocated to the Project Coordinator, the Research Ethics & Privacy Board, and data providers.

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CulturalRoad

1. Data Summary

Will you re-use any existing data and what will you re-use it for?

State the reasons if re-use of any existing data has been considered but discarded.

An Opportunistic Data Set, including more than 30 categories of data from 5 different countries, is used to develop the Five Pointed Star Rating System in Cultural Road. DTU is in charge of two pillars, namely Network Optimisation and Psychological Factors. The data may be used when prototyping Network Optimisation tools for Cultural Road.

What types and formats of data will the project generate or re-use?

The full list of data, formats is available in the Deliverable 2.1 - Opportunistic Data Set. The document is available on the CulturalRoad website: CulturalRoad: Cocreate, Embrace

What is the purpose of the data generation or re-use and its relation to the objectives of the project?

All the data used in this project is classified as SENSITIVE.

Opportunistic Data Set: The data is a combination of proprietary data and open data. Access is possible, but a Data Sharing Agreement must be signed Travel Survey Data: The data is sensitive and cannot be re-utilized.

What is the expected size of the data that you intend to generate or re-use?

A travel survey data with approximately 1000 responses will be generated as part of the project

What is the origin/provenance of the data, either generated or re-used?

Opportunistic Data: It includes all data that project partners in each country could gather. This includes both open and non open data. The full list of data and sources is under the inventory provided in Deliverable 2.1 - Opportunistic Data Set.

To whom might your data be useful ('data utility'), outside your project?

The dataset may be useful for individuals who aim to perform cross-country comparisons, with a focus on the countries that are part of the project, namely the United Kingdom, Israel, Germany, Slovenia, and Spain

2. FAIR data

2.1. Making data findable, including provisions for metadata:

Will data be identified by a persistent identifier?

A clear inventory of the data, as well as the information in it, and the way to access it, is provided in the Deliverable 2.1 - Opportunistic Data Set.

2.1. Making data findable, including provisions for metadata:

Will rich metadata be provided to allow discovery?

What metadata will be created?

What disciplinary or general standards will be followed?

In case metadata standards do not exist in your discipline, please outline what type of metadata will be created and how.

Currently, metadata for the dataset does not exist. Some will be created during the process, but whether they will be used to make the data more findable depends on the individual partners. Again, it is important to refer to the inventory of the data, as well as the information in it, and the way to access it, is provided in the Deliverable 2.1 - Opportunistic Data Set.

2.1. Making data findable, including provisions for metadata:

Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?

Currently, meta data for the dataset do not exist. Some will be created during the process, but whether they will be used to make the data more findable depends on the individual partners. A procedure to generate the metadata has been created. Again, it is important to refer to the inventory of the data, as well as the information in it, and the way to access it, is provided in the Deliverable 2.1 - Opportunistic Data Set.

2.1. Making data findable, including provisions for metadata:

Will metadata be offered in such a way that it can be harvested and indexed?

Currently, meta data for the dataset do not exist. Some will be created during the process, but whether they will be used to make the data more findable depends on the individual partners. Again, it is important to refer to the inventory of the data, as well as the information in it, and the way to access it, is provided in the Deliverable 2.1 - Opportunistic Data Set.

2.2. Making data accessible - Repository:

Will the data be deposited in a trusted repository?

The data is currently deposited in a private folder. Access is and will remain limited, due to certain data sets being sensitive and proprietary. Other open data are already shared in an open repository. Again, it is important to refer to the inventory of the data, as well as the information in it, and the way to access it, is provided in the Deliverable 2.1 - Opportunistic Data Set.

2.2. Making data accessible - Repository:

Have you explored appropriate arrangements with the identified repository where your data will be deposited?

The data is currently deposited in a private folder. Access is and will remain limited, due to certain data sets being sensitive and proprietary. Other open data are already shared in an open repository. Again, it is important to refer to the inventory of the data, as well as the information in it, and the way to access it, is provided in the Deliverable 2.1 - Opportunistic Data Set.

2.2. Making data accessible - Repository:

Does the repository ensure that the data is assigned an identifier? Will the repository resolve the identifier to a digital object?

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2.2. Making data accessible - Data:

Will all data be made openly available?

If certain datasets cannot be shared (or need to be shared under restricted access conditions), explain why, clearly separating legal and contractual reasons from intentional restrictions. Note that in multi-beneficiary projects it is also possible for specific beneficiaries to keep their data closed if opening their data goes against their legitimate interests or other constraints as per the Grant Agreement

Some data are propetary and/or sensitive. This includes survey data, population data, which cannot be shared under European Regulations. Again, details on the procedures and regulations are described in Deliverable 2.1 - Opportunistic Data Set.

2.2. Making data accessible - Data:

If an embargo is applied to give time to publish or seek protection of the intellectual property (e.g. patents), specify why and how long this will apply, bearing in mind that research data should be made available as soon as possible.

Some data are propetary and/or sensitive. This includes survey data, population data, which cannot be shared under European Regulations. Again, details on the procedures and regulations are described in Deliverable 2.1 - Opportunistic Data Set.

2.2. Making data accessible - Data:

Will the data be accessible through a free and standardized access protocol?

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2.2. Making data accessible - Data:

If there are restrictions on use, how will access be provided to the data, both during and after the end of the project?

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2.2. Making data accessible - Data:
How will the identity of the person accessing the data be ascertained?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

2.2. Making data accessible - Data:

Is there a need for a data access committee (e.g. to evaluate/approve access requests to personal/sensitive data)?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

2.2. Making data accessible - Metadata:

Will metadata be made openly available and licenced under a public domain dedication CC0, as per the Grant Agreement? If not, please clarify why.

Will metadata contain information to enable the user to access the data?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

2.2. Making data accessible - Metadata: How long will the data remain available and findable?

Will metadata be guaranteed to remain available after data is no longer available?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

2.2. Making data accessible - Metadata:

Will documentation or reference about any software be needed to access or read the data be included? Will it be possible to include the relevant software (e.g. in open source code)?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

2.3. Making data interoperable:

What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?

Will you follow community-endorsed interoperability best practices? Which ones?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

2.3. Making data interoperable:

In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

2.3. Making data interoperable:

Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?

A qualified reference is a cross-reference that explains its intent. For example, X is regulator of Y is a much more qualified reference than X is associated with Y, or X see also Y. The goal therefore is to create as many meaningful links as possible between (meta)data resources to enrich the contextual knowledge about the data. (Source: https://www.go-tair.org/fair-principles/i3-metadata-include-qualified-references-metadata/).

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

2.4. Increase data re-use:

How will you provide documentation needed to validate data analysis and facilitate data re-use (e.g. readme files with information on methodology, codebooks, data cleaning, analyses, variable definitions, units of measurement, etc.)?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

2.4. Increase data re-use:

Will your data be made freely available in the public domain to permit the widest re-use possible?

Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

2.4. Increase data re-use:

Will the data produced in the project be useable by third parties, in particular after the end of the project?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

2.4. Increase data re-use:

Will the provenance of the data be thoroughly documented using the appropriate standards?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

2.4. Increase data re-use:

Describe all relevant data quality assurance processes.

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

3. Other research outputs

In addition to the management of data, beneficiaries should also consider and plan for the management of other research outputs that may be generated or re-used throughout their projects. Such outputs can be either digital (e.g. software, workflows, protocols, models, etc.) or physical (e.g. new materials, antibodies, reagents, samples, etc.).

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

Beneficiaries should consider which of the questions pertaining to FAIR data above, can apply to the management of other research outputs, and should strive to provide sufficient detail on how their research outputs will be managed and shared, or made available for re-use, in line with the FAIR principles.

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set.

4. Allocation of resources

What will the costs be for making data or other research outputs FAIR in your project (e.g. direct and indirect costs related to storage, archiving, re-use, security, etc.)?

In most cases, the cost should be negotiated with individual partners. For some sensitive governmental data, this may not be possible.

How will these be covered?

Note that costs related to research data/output management are eligible as part of the Horizon Europe grant (if compliant with the Grant Agreement conditions).

Who will be responsible for data management in your project?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set for a clear indication of responsibilities.

How will long term preservation be ensured?

Discuss the necessary resources to accomplish this (costs and potential value, who decides and how, what data will be kept and for how long).

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set for a clear indication of responsibilities.

5. Data security

What provisions are or will be in place for data security (including data recovery as well as secure storage/archiving and transfer of sensitive data)?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set for a clear indication of responsibilities

Will the data be safely stored in trusted repositories for long term preservation and curation?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set for a clear indication of responsibilities.

6. Ethics

Are there, or could there be, any ethics or legal issues that can have an impact on data sharing?

These can also be discussed in the context of the ethics review. If relevant, include references to ethics deliverables and ethics chapter in the Description of the Action (DoA).

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set for a clear indication of responsibilities.

Will informed consent for data sharing and long term preservation be included in questionnaires dealing with personal data?

Please refer to the document: Deliverable 2.1 - Opportunistic Data Set for a clear indication of responsibilities.

7. Other issues

Do you, or will you, make use of other national/funder/sectorial/departmental procedures for data management? If yes, which ones (please list and briefly describe them)?