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## Plan Overview

*A Data Management Plan created using DMPonline*

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**Funder:** Luxembourg National Research Fund (FNR)

**Template:** Luxembourg National Research Fund (FNR) Template

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### Project abstract:

*Mobility as we know it is about to change since different services have been rapidly introduced. How the interactions between the disruptive elements will be managed is still not clear. A main research objective of this project will be thus to analyse in detail the structure and the dynamics of the future multimodal transport and mobility services and in particular the different variants of the Mobility-as-a-Service (MaaS) business, organisational and operational strategies, tested in both Luxembourg and in Australia. Besides some similarities, clearly size and urban forms of the two countries are significantly different. This difference is reflected in the way transport services are organised and cooperate, with a more bottom-up approach in Australia, i.e. the pooling of services is created via direct agreement between stakeholders, whereas in Luxembourg the creation of the multimodal system is rather top-down, i.e. it is guided by governmental initiatives. Ultimately and in line with the general aims of the Inter Mobility programme, this project aims to create the foundations for future research collaborations in the domains of transport, mobility and logistics between the two countries.*

**ID:** 200382

**Start date:** 01-11-2022

**End date:** 31-12-2025

**Last modified:** 18-03-2026

**Grant number / URL:** INTER/MOBILITY/2022/MS/16991400/

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# LuxDownUnder

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## **DATA DESCRIPTION AND COLLECTION OR RE-USE OF EXISTING DATA**

### **How will new data be collected or produced and/or how will existing data be reused?**

No data was collected in this project. Existing data from other projects were used to test and validate models done in collaboration with partners from Australia (UNSW).

### **What data will be collected or produced?**

No data will be collected in this project.

## **DOCUMENTATION AND DATA QUALITY**

### **What metadata and documentation will accompany the data?**

Documentation is only in form of peer-reviewed conference and journal papers

### **What data quality control measures will be used?**

No quality control necessary.

## **STORAGE AND BACKUP DURING THE RESEARCH PROCESS**

### **How will data and metadata be stored and backed up during the research?**

All data (re)used is stored in the UniLu PCs and share points and is not shared.

### **How will data security and protection of sensitive data be taken care of during the research?**

Not applicable. All data used is synthetic.

## **LEGAL AND ETHICAL REQUIREMENTS, CODES OF CONDUCT**

### **If personal data are processed, how will compliance with legislation on personal data and security be ensured?**

All data used is synthetically generated.

**How will other legal issues, such as intellectual property rights and ownership, be managed? What legislation is applicable?**

UniLu has full ownership of the IP as the models were fully developed by the UniLu team and UNSW has only contributed to assess them.

**What ethical issues and codes of conduct are there, and how will they be considered?**

Not applicable.

**DATA SHARING AND LONG-TERM PRESERVATION**

**How and when will data be shared? Are there possible restrictions to data sharing or embargo reasons?**

Data is synthetic and there are no restrictions. They can be shared upon request.

**How will data for preservation be selected, and where data will be preserved longterm?**

Data is synthetically generated hence has no preservation constraints.

**What methods or software tools are needed to access and use data?**

Data is in form of text files.

**How will the application of a unique and persistent identifier (DOI) to each data set be ensured?**

Not applicable.

**DATA MANAGEMENT RESPONSIBILITIES AND RESOURCES**

**Who will be responsible for data management?**

Francesco VITI

**What resources will be dedicated to data management and ensuring that data will be FAIR?**

Being synthetic data, this should not be applicable.

## Planned Research Outputs

Conference paper - "AN ENTROPY-BASED APPROACH FOR ORIGIN AND DESTINATION ACTIVITY FLOW ESTIMATION USING CROWDSOURCED DATA"

Conference paper - "ESTIMATING STATION USER ACTIVITY AND ORIGIN-DESTINATION FLOWS USING CROWDSOURCED DATA"

Conference paper - "Robust population synthesis: a framework for reliability"

Journal article - "Discovering the optimal relationship hypothesis of car-following behaviors with neural network-based symbolic regression"

Journal article - "AN EVALUATION FRAMEWORK FOR RELIABLE POPULATION SYNTHESIS IN AGENT-BASED MOBILITY SIMULATIONS"

### Planned research output details

Title	DOI	Type	Release date	Access level	Repository(ies)	File size	License	Metadata standard(s)	May contain sensitive data?	May contain PII?
AN ENTROPY-BASED APPROACH FOR ORIGIN AND DESTINATION ...		Conference paper	Unspecified	Open	None specified		None specified	None specified	No	No
ESTIMATING STATION USER ACTIVITY AND ORIGIN-DESTINATION ...		Conference paper	Unspecified	Open	None specified		None specified	None specified	No	No
Robust population synthesis: a framework for reliability ...		Conference paper	Unspecified	Open	None specified		None specified	None specified	No	No
Discovering the optimal relationship hypothesis of car-following behaviors with neural network-based symbolic regression		Journal article	Unspecified	Open	None specified		Creative Commons Attribution 4.0 International	None specified	No	No
AN EVALUATION FRAMEWORK FOR RELIABLE POPULATION SYNTHESIS IN AGENT-BASED MOBILITY SIMULATIONS		Journal article	Unspecified	Restricted	None specified		None specified	None specified	No	No