DMP title

Project Name My plan (KU Leuven DMP)

Grant Title 3E220632

Principal Investigator / Researcher Willem Leterme

Description The CELSA project will create models and controls for simulating power system restoration after a black-out. The main outcomes of the project are the software models and controls, rather than data gathering.

Institution KU Leuven

1. Data Description

What data will you collect or create? Fill out the table below and/or describe.

Type of data	Format	Volume	How created?
Software model	.py, .pscx	< 100 MB	Programming
Simulation data	.csv	< 1 GB	Computer software model simulation

Do you intend to reuse existing data?

No.

Do you use personal data (i.e. all data possibly identifying an individual)?

- No

2. Documentation and Metadata

Describe the documentation that will be created for the data. This section deals with the way in which you will document how the dataset was created and subsequently processed.

1. The software model will be documented internally (in the software code) and a manual will be created.

2. The input data that is used to generate the software model output will be stored in an accompanying configuration file (e.g. .toml), such that the simulation can be re-run to generate the same output.

Describe the metadata for the data. This section deals with metadata: information contained in your dataset about the research data.

Metadata will consist of (i) simulator parameters (time-step, time-range), (ii) simulation model parameters.

3. Ethical, Legal and Privacy Issues

Are there any ethical issues concerning the creation and/or use of the data?

No.

Did you consider all issues about copyrights and IPR?

There are no IP concerns with the data.

Are the collected data considered to be â€œdata containing personal informationâ€ and are all the requirements about the collection of these data met?

The data are not considered to be "data containing personal information".

4. Data storage and Backup during Research

How and where will the data be stored during research?

- Centrally on storage facilities of the research unit

ESAT digital data storage devices and servers are located in the ESAT computer room, which is physically secured with limited access for IT personnel only.

The digital data are stored on a SAN (Hitachi G350). Two physical servers access the SAN and make the data available to client computers on the ESAT network via:

- SMB2 (or higher) from specific IP ranges
- NFSv4 from specific (IT managed) systems

Which back-up procedures are in place?

The data is backed up daily, on tapes.

The data is also replicated to an off-site storage system - SAN (Hitachi G350) - housed in the ICTS data center.

For more on backup retrieval see https://wiki.esat.kuleuven.be/it/BackupAndRecovery

Describe the data security procedures and who has access to the data.

The ESAT IT system group operates in accordance with the ICT security standards of the KU Leuven ('KU Leuven ICT Informatieveiligheidsstandaarden').

If required for the project and agreed by the ESAT IT system group, specific access control can deployed, e.g.:

data is stored on a file server where access is regulated using an access control list (ACL) that grants:

- read-write access to the project owner
- read-only access to specific users

The ACL is managed by the project owner.

5. Data selection and Preservation after Research

What is the long-term preservation plan for these dataset(s)?

The dataset in itself is of limited value. The models and controllers will be stored on the research facilities' central servers.

Data Selection: Which data will have long time value for the research and will be preserved?

The dataset in itself is of limited value and might not be stored for the long-term. The models and controllers will be stored on the research facilities' central servers.

6. Data Sharing

Are there any restrictions for sharing the data?

No.

If there are no restrictions, which mechanisms will be in place to assure that the data are discoverable, accessible and intelligible?

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How will you share the data?

- Repository
- Website

Models and controllers can be shared via Github. This will depend on the follow-up of the CELSA project, e.g., if there will be a follow-up in a European project or not.

With whom will the data be shared?

- On request with peers only

The models and controllers will be shared within the current CELSA consortium (University of Ljubljana, Budapest University of Technology and Economics) and may be shared with future project partners within a broader European collaboration.

7. Responsabilities and Resources

Who is responsible for Data Management during the project? This will be the person who might receive questions on the data management aspects of the research project.

The PI bears the end responsibility of updating & implementing this DMP.

Which additional resources are needed for the execution of the Data Management Plan?

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Did you read the KU Leuven Data Management Policy? (find the link to the policy in the guidance).

- Yes