Plan Overview

A Data Management Plan created using DMPonline.be

Title: C3 APL-SuppOr

Creator: Tom Janssen

Principal Investigator: n.n.

Data Manager: Tom Janssen

Project Administrator: Tom Janssen

Affiliation: University Colleges Leuven-Limburg

Funder: KU Leuven (KUL)

Template: KU Leuven BOF-IOF

Principal Investigator: n.n. n.n.

Data Manager: Tom Janssen

Project abstract:

De Europese fruitteeltsector heeft te lijden onder onder zijn arbeidsintensieve aard, de toenemende concurrentie van buiten de EU, het Russische fruitembargo en het tekort aan gemotiveerde werknemers. Om het werk van fruitproducenten te verlichten heeft UCLL een geautomatiseerd palox transportsysteem ontwikkeld dat veilig door een boomgaard kan navigeren om palox kratten te herkennen, op te pakken en te transporteren. Het huidige project heeft als doel de navigatie en functionele veiligheidskenmerken verder te optimaliseren en de transport- en hefmogelijkheden van dit platform uit te breiden naar een multifunctioneel systeem dat in staat is autonoom boomgaardtaken uit te voeren zoals palox herkenning, lift & transport, laden & lossen, distributie & collectie. Verder zullen er inspanningen worden gedaan om interoperabiliteit te garanderen voor integratie van de technologie in zowel huidige als toekomstige autonome landbouwvoertuigen. De functionaliteiten en interoperabiliteit zullen worden gevalideerd door middel van veldproeven om de valorisatie van de ontwikkelde technologie verder te ondersteunen richting licenties en/of partnerschappen met fabrikanten.

ID: 212950

Start date: 01-10-2024

End date: 30-09-2027

Last modified: 12-03-2025

C3 APL-SuppOr

Research Data Summary

List and describe all datasets or research materials that you plan to generate/collect or reuse during your research project. For each dataset or data type (observational, experimental etc.), provide a short name & description (sufficient for yourself to know what data it is about), indicate whether the data are newly generated/collected or reused, digital or physical, also indicate the type of the data (the kind of content), its technical format (file extension), and an estimate of the upper limit of the volume of the data.

Dataset name / ID	Description	New or reuse	Digital or Physical data	Data Type	File format	Data volume	Physical volume
		Indicate: ***N****(ew data) or* ***E****(xisting data)*	Indicate: **D**(igital) or **P**(hysical)	Indicate: **A**udiovisual **I**mages **S**ound **N**umerical **T**extual **M**odel **SO**ftware Other (specify)		Indicate: <1GB <100GB <1TB <5TB >5TB NA	>5 m3
Gepland Fruit - P	existing data from project Gepland Fruit	E	P	M, SO, I			
Gepland Fruit - D	existing data from project Gepland Fruit	E	D	SO, I, T, A		<100GB	
Hardware	model additions and improvements - electronic components	N	P	M, SO			
Software	Developed software and model improvements	N	D	SO			
Mapping datasets	Raw and analysed datasets from GPS, LIDAR etc.	N	D	N		<5TB	
Simulation data	computer generated data	N	D	N			
Notes	Notebooks, images and text, video's, experimatal and observational data, measurement data	N	D	A, T, N, S, I		<5TB	
Lab trial data	raw and analysed data from lab trials	N	D	N, A, T			
Field trial data	observational data from field trials	N	D	A, I, N, M			
Stakeholder management data	Information obtained from relevant stakeholders during the project	N	D				

If you reuse existing data, please specify the source, preferably by using a persistent identifier (e.g. DOI, Handle, URL etc.) per dataset or data type:

Existing data gathered during the execution of the PWO project Gepland Fruit.

Are there any ethical issues concerning the creation and/or use of the data (e.g. experiments on humans or animals, dual use)? If so, refer to specific datasets or data types when appropriate and provide the relevant ethical approval number.

- No

Will you process personal data? If so, please refer to specific datasets or data types when appropriate and provide the KU Leuven or UZ Leuven privacy register number (G or S number).

- No

Does your work have potential for commercial valorization (e.g. tech transfer, for example spin-offs, commercial exploitation, …)? If so, please comment per dataset or data type where appropriate.

- Yes

- Hardware, Software, Field Trial & Mapping datasets can be of interest for commercial valorization (licensing, spin-offs, etc.) towards specific relevant stakeholders.

Do existing 3rd party agreements restrict exploitation or dissemination of the data you (re)use (e.g. Material or Data transfer agreements, Research collaboration agreements)? If so, please explain in the comment section to what data they relate and what restrictions are in place.

- No

Are there any other legal issues, such as intellectual property rights and ownership, to be managed related to the data you (re)use? If so, please explain in the comment section to what data they relate and which restrictions will be asserted.

- Yes

IP rights on Hardware, Software, Field Trial & Mapping datasets of interest for commercial valorization will be protected, where warrented, through patents or other. A collaboration agreement, including aspects concerning IP distribution rights, was set up between the partners.

Documentation and Metadata

Clearly describe what approach will be followed to capture the accompanying information necessary to keep data understandable and usable, for yourself and others, now and in the future (e.g. in terms of documentation levels and types required, procedures used, Electronic Lab Notebooks, README.txt files, codebook.tsv etc. where this information is recorded).

Depending on the datasets, specific file formats will be used with attention to using standard, exchangeable or open file formats, where possible, as described in the RDR guidelines of KU Leuven. These will be grouped in clearly labeled folders corresponding to the specific task and work packages described in the project plan.

Will a metadata standard be used to make it easier to find and reuse the data?
If so, please specify which metadata standard will be used.

If not, please specify which metadata will be created to make the data easier to find and reuse.

- No

Data Storage & Back-up during the Research Project

Where will the data be stored?

- Personal network drive (I-drive)
- Sharepoint online

The research data is stored on KU Leuven and UCLL secured network environments (sharepoint). It is also stored and shared with project partners through a secured and access restricted Teams environment, specifically set up for this project. Both KULeuven and UCLL will have access to all folders within this teams environment. pcfruit will have limited access, only to common folders without IP sensitive data.

How will the data be backed up?

- Standard back-up provided by KU Leuven ICTS for my storage solution

Is there currently sufficient storage & backup capacity during the project?

If no or insufficient storage or backup capacities are available, explain how this will be taken care of.

- Yes

How will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?

The research data is stored on KU Leuven and UCLL secured network environments and shared with project partners through a secured and access restricted Teams environment, specifically set up for this project.

Physical access to media containing personal data: laptops/desktops are secured with login and password. Other measures: annual change of password is enforced and automatic screen locking of desktops and laptops after inactivity.

The Teams environment is only accessible via multifactor authentication. For logical access control to the data, accesses are managed by the 'owners' of the Teams site. Both KULeuven and UCLL will have access, as owners, to all folders within this teams environment. pcfruit will have limited access, only to common folders without IP sensitive data.

What are the expected costs for data storage and backup during the research project? How will these costs be covered?

No costs associated

Data Preservation after the end of the Research Project

Which data will be retained for 10 years (or longer, in agreement with other retention policies that are applicable) after the end of the project?

In case some data cannot be preserved, clearly state the reasons for this (e.g. legal or contractual restrictions, storage/budget issues, institutional policies...).

- All data will be preserved for 10 years according to KU Leuven RDM policy

Where will these data be archived (stored and curated for the long-term)?

- KU Leuven RDR
- Shared network drive (J-drive)

What are the expected costs for data preservation during the expected retention period? How will these costs be covered?

No costs associated

Data Sharing and Reuse

Will the data (or part of the data) be made available for reuse after/during the project?
Please explain per dataset or data type which data will be made available.

- Yes, as restricted data (upon approval, or institutional access only)

Hardware, Software, Field Trial & Mapping datasets can be of interest for commercial valorization (licensing, spin-offs, etc.) towards specific relevant stakeholders or of interest to follow-up projects.
Certain datasets, like mapping data, could be made available as part of publications, if not restricted by IP rights.

If access is restricted, please specify who will be able to access the data and under what conditions.

The data will be restricted to the project owners (KU Leuven and UCLL) as outlined in the collaboration agreement. It can only be shared with external parties upon approval of the owners. Reuse in follow-up projects is possible by the owners only, as described in the collaboration agreement.

Are there any factors that restrict or prevent the sharing of (some of) the data (e.g. as defined in an agreement with a 3rd party, legal restrictions)?

Please explain per dataset or data type where appropriate.

- Yes, intellectual property rights

Hardware, Software, Field Trial & Mapping datasets can be of interest for commercial valorization (licensing, spin-offs, etc.) towards specific relevant stakeholders.

Where will the data be made available?

If already known, please provide a repository per dataset or data type.

- Other (specify below)

not known yet

When will the data be made available?

- Upon publication of research results

In case of publication, the data will be made available upon publication.

Which data usage licenses are you going to provide?

If none, please explain why.

- Data Transfer Agreement (restricted data)

Do you intend to add a persistent identifier (PID) to your dataset(s), e.g. a DOI or accession number? If already available, please provide it here.

- No

What are the expected costs for data sharing? How will these costs be covered?

Any publication costs will be covered as part of the project budget.

Responsibilities

Who will manage data documentation and metadata during the research project?

Eric Demeester (promotor KU Leuven)
Tom Janssen (co-promotor UCLL)
Roel Conings (researcher UCLL)
Anton Melnikov (researcher KU Leuven)

Who will manage data storage and backup during the research project?

Eric Demeester (promotor KU Leuven)
Tom Janssen (co-promotor UCLL)
Roel Conings (researcher UCLL)
Anton Melnikov (researcher KU Leuven)

Who will manage data preservation and sharing?

Eric Demeester (promotor KU Leuven)
Tom Janssen (co-promotor UCLL)

Who will update and implement this DMP?

Eric Demeester (promotor KU Leuven)
Tom Janssen (co-promotor UCLL)