Project Number: [101056740]

Project Acronym: [NextETRUCK]

Project title: [Efficient and affordable Zero Emission logistics through NEXT generation Electric TRUCKs]

WP1: D1.1 DATA MANAGEMENT PLAN

Document information

		Confidential

Authors	TNO, Panion
Responsible person	R.Corbeij
Nature	Deliverable report
Status	Final

Change History

Version	Date	Description	Issued by
0.1	13.09.2022	Initial Version	R.Corbeij (TNO)
0.2	27.09.2022	Reviewed Version	Steven Wilkins, Robinson Medina (TNO)
0.3	17.11.2022	Updated version	Rafal Rudol (Panion)
1.0	06.12.2022	Final Version 2022	TNO
2.0	09.12.2023	Updated Version	TNO

Contents

1. Data Summary

As part of NextETRUCK's overall objective to play a pioneering role in the decarbonization of vehicle fleets, via demonstrating next generation e-mobility concepts; demonstrators in three different real-world cases are validated for a range of at least 200 km daily operation over a period of at least 6 months.

- The Istanbul use case with FORD will realize a case for goods distribution trucks deployed for goods traffic between large consumer goods production facilities and retailers, in a big metropolitan city context,
- The Barcelona case will focus on refuse trucks (as a demo in city) towards zero-urban zones via IRIZAR as OEM. The use case concerns a fleet of waste collection vehicles / vehicle park in Barcelona, Spain. One ZEV (pilot truck) will be fully operational on road in Barcelona (>6 months operation) integrated into a waste collection fleet operator's waste collection fleet,
- In the Netherlands a demonstrator will be deployed by TEVVA for a back to base logistics, where the innovations employed on the e-truck will be translated into flexible solutions to customers, particularly in the area of express transport, where efficient mission planning and last mile monitoring is crucial.

The data generated from these use cases will employed to assess the new vehicle concepts' feasibility and superiority to the existing MFH systems. Seen the lengths of the demonstrations it is expected that the generated data size will be considerable.

The project will start by defining the requirements for the various technology aspects, the requirements for the use cases as later realized in the project, the software, functional, and data infrastructure, as well as data-requirements for the tools of assessment. The vehicles and technology blocks will be selected as appropriate for the three use-cases and applied over the demonstration period. This period will be used to gather data, verify and validate the technical approaches. Key to this period is the data management, ensuring that data and models developed will be findable, accessible, interoperable, and reusable (in accordance with the FAIR guidelines). As a result of the data and insights, the assessment phase of the project will be completed. This final phase will ensure that the project results and tools are visible and accessible beyond the project, not only for consortium members, but also the wide European Community.

2. FAIR data

2.1. Making data findable, including provisions for metadata

The data produced in NextETRUCK will be gathered by the task leaders of the respective use cases and processed into Deliverable reports as defined in the project plan. The final versions of all relevant project documents shall be uploaded to the Cooperation Tool. The uploaded documents are assigned with a unique identification name as follows: [Project] – [Domain] – [Type] – [Owner] – [Number] – [Version]. Keywords will include the various use cases. Version numbering of results and reports will be standardised.

2.2. Making data openly accessible

The open access data will be shared using a suitable data repository and broadly accessible open data formats. Protection of personal data will be ensured. Further details will be developed in line with the final open access dataset.

Data used for and generated during the charge planning process will be available online within the PANION SaaS solution. The SaaS solution will be accessible to eligible customer team members and task leaders with access limited to the data from their respective field of interest. The SaaS solution provides a reporting capability including the option to extract the report data in electronic form.

2.3. Making data interoperable

In order to support the interoperability of the NextETRUCK project data a list of standard and metadata vocabularies need to be defined.

Access to this NextETRUCK's related metadata will be provided in an updated version of the DMP.

Regarding the charge planning process done with PANION software solution, data elements shared across different components of the NextETRUCK use cases will use common asset identifiers and metadata.

2.4. Increase data re-use (through clarifying licences)

The data produced and/or used in the project which is useable by third parties, in particular after the end of the project will be listed. If the re-use of some data is restricted, it will be explained why this is necessary. Data quality assurance processes and the length of time for which the data will remain re-usable will be defined.

3. Allocation of resources

The data management tasks will be implemented and monitored through the Executive Board of NextETRUCK, although all partners are involved in the compliance with the DMP. The partners deliver datasets and metadata produced or collected in NextETRUCK according to Annex 1. The NextETRUCK project partners have covered the costs for data FAIR in their budget estimations.

4. Data security

In NextETRUCK various types of experimental and numerical data will be generated. The raw data will be stored by each partner according to their own standard procedures minimum for ten years after the end of the project. For example, results of smaller simulation runs and experiments will be stored on network drives and local drives, that are backed-up on external hard drives. Furthermore, smaller data sets and postprocessed data can be stored on a cloud service (e.g. the "Cooperation Tool") in a secure manner.

Processed data will be made available to the community in various ways: available in the form of project reports and open access publications and as supplementary material to publications. This data can be further exploited in webinars, articles in professional journals, and by conference presentations. The research data used for communication, dissemination and

exploitation will be stored also on internal communication platform "Cooperation Tool" managed by the VUB. This internal platform is only accessible for the project partners.

5. Ethical aspects

The legal compliance related to copyright, intellectual property rights and exploitation has been agreed on in the NextETRUCK Consortium Agreement, which is also applicable to access to research data and has been signed by all partners. The project will be carried out in line with the highest ethical standards and the applicable EU as described in Annex 5 of the Grant Agreement, international and national law on ethical principles.

Other than that and as defined in the NextETRUCK Consortium Agreement, in case an additional agreement related to the processing of personal data is deemed necessary according to the Applicable Laws, or desirable by Parties, the Parties shall enter into good faith negotiations to reach such an agreement. In particular, the Parties shall, where necessary, conclude a separate data transfer, data processing, data sharing and/or joint controller agreement before any data processing or data sharing takes place.

6. Other issues

N.A.