Document elaborated with the support of the BOOSTLOG project funded by *the European Union's Horizon 2020 research and innovation programme* under grant agreement No 101006902

BOOSTLOG PROJECT

DELIVERABLE REPORT

Document identifier:	**BOOSTLOG – D5.2**
Due Date of Delivery to EC	**M 6 – 31.06.2021**
Actual Date of Delivery to EC	
Title:	**Data Management Plan**
Dissemination level:	PU
Work package:	**WP5**
Lead Beneficiary:	**ALICE**
Other Beneficiaries:	
Document status:	**Final**
Document link:	

The BOOSTLOG project consortium consists of:

Part. No	Participant organisation name (short name)	Country
1 (Coordinator)	Alliance for Logistics Innovation through Collaboration in Europe, ALICE AISBL (ALICE)	BE
2	STICHTING SMART FREIGHT CENTRE (SFC)	NL
3	FUNDACION ZARAGOZA LOGISTICS CENTER (ZLC)	ES
4	STICHTING TKI LOGISTIEK (TKI Dinalog)	NL
5	HACON INGENIEURGESELLSCHAFT MBH (HACON)	BE
6	INSTITUTE OF COMMUNICATION AND COMPUTER SYSTEMS (ICCS)	GR
7	Vlaams Instituut voor de Logistiek VZW (VIL)	BE
8	FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V. (Fraunhofer)	GE
9	FIT Consulting SRL (FIT)	IT
10	FUNDACION DE LA COMUNIDAD VALENCIANA PARA LA INVESTIGACION, PROMOCION Y ESTUDIOS COMERCIALES DE VALENCIAPORT (VPF)	ES
11	TECHNISCHE UNIVERSITEIT DELFT (TU Delft)	NL
12	EUROPEAN ROAD TRANSPORT TELEMATICSIMPLEMENTATION COORDINATION ORGANISATION - INTELLIGENT TRANSPORT SYSTEMS & SERVICES EUROPE (ERTICO ITS EUR)	BE
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Document History:

Version	Date	Modification reason	Author(s)
1.0	28.05.2021	First draft	Yanying Li, ALICE
1.1	17.06.2021	Internal review	Ilves Indrek, ALICE
1.2	24/06/2021	Update with collecting implementation cases and innovation marketplace	Yanying Li, ALICE
1.3	25/06/2021	Internal review	John Kanellopoulos, ICCS
Final	25/06/2021	Final version	Yanying Li, ALICE

Contents

EXECUTIVE SUMMARY

The Data Management Plan follows the HORIZON2020 Guidelines on FAIR Data Management[1] and uses the template of Data Management Plan provided by the Guideline. This plan defines

i.) Type of datasets used, collected and generated from the project;

ii.) Approach of making data Findable, Accessible, Interoperable and Reusable (FAIR);

iii.) Allocation of resources related to the data collection and management;

iv.) Data security aspects.

This document is a living document and will evolve throughout the BOOSTLOG project. Next version will become available in M18 or in case of significant updates in EU policies or other changes to the plan.

1 Summary of data

Data used, collected and generated by the BOOSTLOG project are related to the objectives of the project, i.e. to boost impact generation from research and innovation on integrated freight transport and logistics system and specifically for:

- Enhancing the current freight transport & logistics R&I ecosystem at regional, national and European level
- Advancing the technological and organisational innovation uptake (e.g. EU R&I funded projects results) for a more efficient, integrated, harmonized and sustainable freight transportation and logistics system
- Further enhancing impacts of R&I projects in support of EU policy objectives towards decarbonization, emissions and congestion reduction, ensuring the free and seamless movement of goods and the sector digitalization.

Data collected and used by the projects mainly include:

- Data about public funded research and innovation (R&I) projects
    - Project data, i.e. information of projects (objectives, funding scheme, budget, duration, consortium, tasks, key deliverables…)
    - Expert data, i.e. information of experts who have worked on projects
- Outcomes of R&I projects (e.g. innovative solutions) and their implementations if applicable

[1] H2020 Programme Guidelines on FAIR Data Management in Horizon 2020, available at: https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf

- Innovative solutions developed by R&I projects and their implementations cases after end of the project period;
- Organisations who developed and implemented the solutions
- Impact assessment of the implemented solutions

- Opinions on gaps in R&I in the logistics sector and identified future needs and priorities for R&I funding

1.1 Data of public funded research and innovation (R&I) projects

Project data

Existing data about projects, project consortium members and deliverables that have been collected by ALICE through its Liaison Program, Knowledge Platform, and Thematic Groups are the base for the project. The data will be filtered and stored in the Knowledge Platform (KP)[2], available to all users of the platform. The purpose of the collection of the data is to map out activities of previous R&I projects, thus developing a comprehensive understanding of R&I policies and funding. The data will be used to identify implementation cases of project outcomes, develop the logistics cloud report, and assess impacts of the projects. The BOOSTLOG consortium uses all possible data sources to gather such data. Origins of the data of previous R&I projects include CORDIS and TRIMIS, H2020 Results Platform, project deliverables, project consortium members' dissemination materials (including websites), and interviews with consortium members of R&I projects. There are around 160 EU funded projects and some regional/national funded projects to be mapped out. All the projects mapped by the BOOSTLOG project will be included in "D2.1 Detailed Mapping of EU Funding Research Project", and available for all stakeholders in the field of logistics innovation through the KP.

Expert data

An expert who has worked on R&I projects can register him/her as a user on the Knowledge Platform and connect with projects and innovation solutions. The Knowledge Platform has the functionality to allow users of the platform to contact project partners whose information is available on the knowledge platform to facilitate knowledge sharing and cooperation. Expert registration will follow the standard registration procedure of the Knowledge Platform that allows them to indicate projects and innovation solutions they associate with. The expert data will be available to the platform users only and managed according to BOOSTLOG POPD Requirement (D6.2).

1.2 Outcomes of R&I projects (e.g. innovative solutions) and their implementations if applicable

Innovation solutions and their implementations cases

[2] ALICE Knowledge Platform: https://knowledgeplatform.etp-logistics.eu/, a tool developed by ALICE through the SNESE project and free of charge to all users.

The project will carry out desk research and surveys (e.g. interviews to key stakeholders) to gather R&I projects' outcomes including innovative solutions. The project will also identify implementation cases that were developed from project outcomes and have improved efficiency, decarbonisation of the section, and addressed other challenges the logistics sector face. Identified implementation cases will be described in the eight Logistics Cloud Reports (D2.2, D2.4 – D2.8, D2.10 – D2.11).

The project will publish calls for submission of implementation cases to all stakeholders through various communication channels. The first two calls for submission of implementation cases focus on:

- Logistics Coordination and Collaboration
- Urban Logistics

The two Calls for submission of implementations in shown in Annex A and B respectively. A simple template is used for the submission (shown in Annex C). A practitioner can fill in the template to present his/her implementation case. If the implementation case submitted meet all criteria for BOOSTLOG, an interview will be carried out to gather more detailed information.

Organisations who developed and implemented the solutions

In addition to the eight Logistics Cloud Reports by WP2, outcomes of R&I projects will be made available on the Innovation Marketplace (Task 3.2 of WP3). The Innovation Marketplace will also be open to all innovation owners who can create user accounts, register their organisations and describe their innovations and present use cases if applicable. Innovation seekers and investors can also use the Innovation Marketplace to find innovative solutions and access to owners of the solutions.

Impact assessment of the implemented solutions

The BOOSTLOG consortium will carry out desk research and interviews to assess impacts of various R&I projects. The environmental, social and economic impacts, including impacts on competitiveness will be assessed. Who have been affected and benefited from the R&I projects will also be taken into consideration. Results will be summarised in the Logistics Cloud Reports.

1.3 Opinions on gaps in R&I in the logistics sector, future needs and priorities

The project will carry out surveys, e.g. questionnaire, to collect opinions on gaps in current R&I policy and future needs, thus identifying priorities for future R&I funding at regional, national and EU level. Questionnaires will be distributed through various methods, e.g. survey during the BOOSTLOG launch event via SLIDO, an interaction app with audience[3] and online questionnaire survey. Outcomes of the surveys will be used to form deliverables of WP4, e.g. D4.1 and D4.4 Definition of high relevance topics for freight transport and logistics (version 1 and version 2), and D4.2 and D4.5 Gap analysis for R&I Logistics Clouds (version 1 and version 2).

[3] https://www.sli.do/

2 FAIR data principle

2.1 Making data findable

The data collected and generated in the BOOSTLOG project will be made publicly findable on the internet by uploading the deliverables to the ALICE KP and on the HORIZON Result Platform[4]. BOOSTLOG will also publish high quality scientific papers through open access conferences and journals as well open science platforms.

The ALICE KP is accessible via the ALICE webpage. The platform was built by the SENSE project and the ALICE members, aiming to valorise the findings and information collected and analysed by the SENSE project and ALICE Liaison Program, covering logistics innovation companies, R&I projects and funding programs.

The platform is publicly available to the entire logistics community. The platform serves as an one-stop-shop of information on logistics innovation by showcasing outcome of R&I projects in the logistics sector. The platform is a key instrument of ALICE, particularly for the ALICE Liaison Program. It is also a social network for logistics innovators to facilitate knowledge sharing and cooperation.

To enhance search functions of the KP, a tagging mechanism has been developed. This includes pre-defined tags as well as custom tags which can be identified at the moment of data entry. Tags will be grouped and follow three themes: ALICE Thematic Groups/Roadmaps, tags identified for the Logistics Cloud Reports, and relevant topics for freight transport and logistics identified by WP4.

Tags to be identified for ALICE Thematic Groups/Roadmaps are:

- Sustainable, Safe and Secure Supply Chains (focussed on the Roadmap towards Zero Emission Logistics in 2050)
- Corridors, Hubs and Synchromodality
- Information Systems for Interconnected Logistics
- Global Supply Network Coordination and Collaboration
- Urban Logistics

Tags to be identified for the Logistics Cloud reports:

- Freight and logistics data sharing
- Coordination and collaboration
- Urban logistics
- Logistics notes
- Multimodal freight, coordinator and transport networks
- Modularisation and transhipment
- 2 more clouds (to be confirmed)

[4] https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/horizon-results-platform

Identified topics and concepts (preliminary list):

Data sharing architecture/technology	Zero emission vehicles / cargo bikes	Autonomous Transport
Shared transport / pooling	Autonomous operations	Corridors and hubs
End-2-end international booking systems	Goods consolidation & bundling	Crowd-shipping
Supply Chain resilience	Multimodal freight transport	Dynamic supply and demand planning
Fostering cooperation and collaboration among the logistics chain	Emissions measurement & reporting schemes	E-commerce delivery concepts
Shared warehousing	Flow synchronisation	Influencing consumer behaviour
Interconnected logistics networks	Hyperconnected Hubs	Logistics Nodes
Synchromodality	Public transport for logistics	Modular loading units (PI container)
System of logistics Networks: The Physical Internet	Sustainability assessment tools	Shared networks
Sustainable fleets & assets	Agility: Plan/forecast/adapt to disruption	Supply Chain visibility

This is a preliminary set of pre-defined tags that will be available in the KP. A more detailed set will follow based on the outcome of the work in WP4.

Moreover, implementation cases will be tagged as best practices in the KP to increase the visibility of these implementation cases to external stakeholders.

2.2 Making data openly accessible

A limited amount of new data will be produced by the BOOSTLOG project. Existing data will be collected from public sources and will be made openly available to everyone.

All deliverables published in the KP will be open and downloadable during and after the end of the project. Additional data published in the KP will require registration by an interested person. After the registration, information of a project, companies involved and description of innovative solutions will become visible to the registered user. To register as a user of the KP, basic information will be required, i.e. e-mail, first name, last name and country. After the submission of the registration form, the user will confirm the account over the link sent via e-mail and can start using the KP right after that. If a registered user wants to enhance their

profile, they will need to fill in the detailed profile information to become more visible for the other platform users. This will be in their benefit in case they are looking for business collaboration opportunities for example.

The KP has been built using the Open Source software Moodle[5] and enhanced to accommodate social networking between community members, and user management functionality. The source code and website databases will be stored in a public server (i.e. Amazon Web Services or similar). The KP currently has more than 800 registered users and information of more than 45 EU and national R&I projects.

The BOOSTLOG consortium will also have scientific publications that will only be published in open-access conferences or journals to ensure that the publications will be available to a wide range of researchers. All publications of BOOSTLOG will be also available on the KP.

2.3 Making data interoperable

Data collected and published within the BOOSTLOG project will be using standard vocabulary in the field of logistics research and thus it will make the data easily findable for all stakeholders. Moreover, all data to be published in the KP is following the standard structure of the ALICE Working Groups, logistics clouds and priorities identified (using tags). This will ensure that data will be easily found by the logistics community.

Data related to R&I projects and implementation cases are presented in spreadsheets that can be downloaded either from the project webpage or from KP. Spreadsheet tables will follow structures which allow easy processing of the collected data (filtering, sorting, etc.).

2.4 Increase data re-use

All data collected and published in the BOOSTLOG project is originating from open access information and thus will be free of charge and openly accessible after republishing within the BOOSTLOG project.

Data become immediately available upon submission of each deliverable to the EC by uploading the deliverable to the project space of the KP.

3 Allocation of resources

All costs linked to data collection in the BOOSTLOG project are defined in the Description of the Action (DoA) of the project. ALICE, as the leader of WP5, will be responsible for the data management task, including ensuring data availability at the KP.

After the end of the BOOSTLOG project, data collection and entry to the KP (including the innovation marketplace) will continue by ALICE as part of the services to ALICE members and the logistics innovation community. Thus, all direct and indirect costs linked to the data collection and entry after the BOOSTLOG project will be covered by ALICE members.

[5] https://moodle.org/

4 Data security

The security of data published in the KP will be the responsibility of the host of the website server and ALICE who is for maintaining the KP. The host of the website server is responsible for the physical and cyber security. ALICE, the maintaining the KP and has the contract with the host of website server will take responsibility to ensure that all security measures will be implemented.

SSL certificates will be used for the secure connection to the website. To avoid user registration in the Physical Internet KP by robots, a registration process must be completed by the user over the link sent by e-mail. This will help minimizing the risk of fake user accounts and will ensure the quality of the user database and data entries. All users' data will be managed according to the BOOSTLOG POPD Requirement (D6.2).

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Annex A Call for Submission of Implementation Cases: Coordination & Collaboration

Annex B Call for Submission of Implementation Cases: Urban logistics

Annex C Template for Submission of Implementation Cases (by June 2021)

Call for ALICE Innovation Award – Implementation Cases from public funded R&I projects

Name of organization:

Contact person (for further interview if applicable:

The submission is for (please select one option):

☐ Logistics coordination and collaboration

☐ Urban logistics

Main R&I projects which have developed results/outcomes based on which you developed this implementation case (please fill in the following table and copy the table if more projects were concerned)

Project name	
Funding body	
Duration	
Total Budget & funding received	
Project objectives	
Other info/reference if applicable	

Main Implementation Case/product or Solution

(please provide a short description)

Overview and key pain point addressed/Market addressed/Users/How the implementation case impacts on EU policies (*e.g. The European Green Deal; Economy that Works for People; Promoting our European way of life; A Europe fit for the digital age****)***

- Pain point:
- Market:
- User:
- Impact:

How Public funded supported the Implementation Case development and in which stages?

(please provide a short description)

How you Covered the Gap between the project Results & reaching the market?

(please provide a short description)

Which have been the main hurdles to overcome:

- Financing for further development
- Finding right partners
- Value proposition towards customers
- Business models
- Other

Which have been the key success factors to move from R&I results to an actual implementation?

(please provide a short description)