



BATTERIES EUROPE SECRETARIAT

D1.2 - Data Management Plan

Work Package 1 – Coordination and Project Management

Task 1.1 – Project Coordination

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ABBREVIATIONS AND ACRONYMS

COO	Chief Operating Officer
COOO	Commons of Our Own
CSA	Coordination and Support Action
DoA	Description of Action
DMP	Data Management Plan
EC	European Commission
EU	European Union
GDPR	General Data Protection Regulation
HEU	Horizon Europe
IPR	Intellectual Property Right
JRC	Joint Research Centre
NRCG	National and Regional Coordination Group
SB	Steering Board
SRIA	Strategic Research and Innovation Agenda
TF	Task Force
WG	Working Group

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EXECUTIVE SUMMARY

The Data Management Plan (DMP) describes the collection, generation, access, management and preservation of data during BEST project, taking into account the articles referred to Data contained in the Grant Agreement n° 101069676 and in the BEST Consortium Agreement.

This document establishes the rules regarding the management of data generated by BEST Consortium, including the datasets produced by all the partners within each WP and the data that will be included and shared in the official website of the project and in the official repository.

The application of this document is responsibility of all BEST project partners. This DMP is a unique document that will have to be considered as unique reference during **all** project life.

In the document specific dataset for the WPs have been identified and described and for each dataset the following information have been provided:

- general information describing the data (Data Description);
- how the data will be handled both during the project (During the project - Storage, access and security) and after the project (At the end of the project Data sharing, diffuse and reuse);
- security measures (Protection of sensitive data: Data security, privacy, confidentiality).

INTRODUCTION

The Data Management Plan (DMP) describes the collection, generation, management and preservation of data during BEST project, in compliance with Article 13, 14 and 15 of the Grant Agreement Number 101069676 which states the confidentiality and security of the data, the ethics and values of the data and the data protection.

The Data Management Plan (DMP) details the types of data that will be both generated and gathered during the project, the standards that will be used, the ways in which data will be exploited and shared (including sharing and reuse), and in which way data will be preserved. This document offers detailed definition of data flows and datasets generated by project.

Being BEST a CSA, it is expected that the primary data generated during the project will be limited. Nevertheless, the Data Management Plan (DMP) ensures proper management of the data and associated metadata, ensuring IPRs protection.

The DMP aims at making Research data findable, accessible, interoperable and reusable (FAIR) and includes:

- The handling of research data during and after the project;
- The type of data collected, processed and generated by the project;
- The methodology and standards applied;
- Whether data will be shared/made open and how;
- How data will be curated and preserved;
- Setting up a platform of the common research area to ensure the accessibility to the non-sensitive data.

All the aspects above ensure that the data will be reusable and open.

The application of this document is the responsibility of all BEST project partners.

The DMP is being developed by ZABALA and its application involves all project partners who will publish BEST's results. It also includes a chapter dedicated to the Open access Data collected during the project.

The DMP follows the below structure:

- DATA SUMMARY
- FAIR DATA
- INTEROPERABILITY
- ALLOCATION OF RESOURCES
- DATA SECURITY
- ETHICS

1 DATA SUMMARY

1.1 Purpose of data collection/generation

The main objective of BEST project aims to enrich, strengthen and extend the key role of Batteries Europe by gathering academia, industry and research expertise to consolidate the Battery R&I community and assist the existing platform in the achievement of their ambitious goals. BEST consortium will engage in its experts working groups industry stakeholders, academia, policy makers, researchers and citizens from all the value chain, especially broadening involvement on underrepresented domains and countries.

In this perspective, BEST will generate technical and collect technical and personal data in compliance with all national and EU ethics and legal requirements.

BEST consortium will re-use some existing data generated by the partners involved in the previous Secretariat (INNOENERGY, EERA, ZABALA, CLERENS, EASE as partners and SINTEF as subcontractor) that supported BATTERIES EUROPE from 2019-2021. The list of the existing data is reported in Subchapter 1.3.3.

The consortium set up different and dedicated platforms to store data and the access to the platforms is properly coordinated by INNOENERGY and ZABALA (with support of the WP Leaders) as showed in the Subchapter 2.2 and Table 4.

1.2 Data Management Approach

1.2.1 Data management compliance

BEST will comply with the EC' legislation, in particular the one concerning data management. For this reason, the BEST consortium has elaborated a Data Management Plan, in order to make sure that the consortium members act according to EU and national regulations, with particular focus on the Regulation (EU) 2016/679 on GDPR, as well as the national regulations into force in Norway about data protection by SINTEF partners.

1.2.2 Data management approach, roles and responsibilities

In order to guarantee an appropriate coverage of all data-related aspects and activities, a structured approach has been followed in order to map the data generated and collected along the project implementation and to define the most appropriate way to manage them, proportionally to their sensitiveness.

The approach implemented has been structured in 3 main steps:

STEP 1 - LISTING BEST DATA SETS: under this step, all WP leaders have been requested to fill a summary table detailing all the different datasets that are expected to be generated or collected per each WP/task and deliverable.

In this phase, WP Leaders are responsible to collect from task responsible specific detail per each task and orchestrate this mapping exercise at WP-level.

This activity allows the consortium to have a first overview of all datasets to be collected/generated, with preliminary indications on their nature and format, level of sensitiveness (e.g. personal data) and dissemination level (as expected per the DoA).

STEP 2 - CLASSIFICATION TREE OF DATA SETS: Under this step, Zabala and INNOENERGY simplify the data set and propose a tree structure for the classification of the data sets relevant for the project purposes, based on the inputs collected under; this approach allows to codify a relevant set of data categories and better investigate their level of sensitiveness and to define the most appropriate measures to be taken.

For this purpose, Zabala and INNOENERGY also created a template for data set description to be filled by each competent partner in order to have all the information needed to appropriately manage such datasets.

STEP 3 - DATA SET MANAGEMENT: Under this step, all dataset owners provide detailed information on the datasets to be managed and the intended approach; this information are subsequently reviewed by Zabala and INNOENERGY in order to identify relevant gaps or points of improvement, as well as to harmonize the approach followed by each dataset owner according to the category of data and level of sensitiveness.

This classification and codification of progressive data protection levels will allow to avoid any over or underestimation of the data protection measures to be put in place in each case.

The above described process will not only allow to standardize appropriate procedures to deal with data management, but also to define ownerships and responsibilities of all the partners involved in data management.

Within the project, dataset owners (as identified in the procedure above) can be considered as **data controllers** according to the definition of the GDPR, which refers to data controllers as *“the natural or legal person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of personal data”*. Consequently, the dataset owners (i.e. data controllers) will be in charge of:

- implement appropriate technical and organisational measures to ensure and to be able to demonstrate that processing is performed in accordance with GDPR;
- reviewed and updated such measures where necessary;
- supervise the appropriate implementation of such measures.

Moreover, other partners involved in the activities mapped above by each dataset owner, will be considered as **data processors**, according to the GDPR definition, namely *“a natural or legal person, public authority, agency or other body which processes personal data on behalf of the controller”*. The data processors will have to comply with the approaches and measures defined by the data controller.

Zabala (deliverable owner) and INNOENERGY (project coordinator) will be in charge to supervise and monitor the whole data management process, including risk assessment and definition of related mitigation strategies.

DMP Responsible entities		ZABALA and INNOENERGY
		Data controllers and data processors
Process	Data Controller	Data Processor
T1.1 and T1.2 Project Coordination, Consortium Management and Administrative and Financial Management	INNOENERGY	ZABALA
T2.1. Organisational support of the Batteries Europe Governance Bodies Meetings	ZABALA	INNOENERGY, EERA, CLERENS
T3.1, T3.2, T3.3 Coordination of the development of SRIA and Technology RoadMap.	SIN-E	SIN-I, IE, EASE, ENEA, CICE, INSTM, VDI/VDE
T3.4. Benchmarking on KPI assessment to measure the impact of R&D activities on batteries.	CICE	SIN-E, SIN-I, INSTM, VDI/VDE, ENEA
T4.1, T4.2, T4.3, T4.4, T4.5, T4.6 Support and coordination of cross cutting task forces.	IE, VDI/VDE, INSTM, CICE, EERA, SIN-E	ENEA, IE, SIN-I, EASE
T5.1, T5.2, T5.3 Coordination with other EU initiatives on Batteries.	IE, EERA	EASE, EERA, SIN-E, VDI/VDE, ENEA, CL
Task 5.4. Global overview of Battery R&D&I Funding and International Benchmark on Key Performance Indicators.	EASE, EERA, SIN-E, VDI/VDE, ENEA;	CICE, IE, ENEA;
Task 6.1. Website creation	CL	ALL PARTNERS
Task 6.2. Dissemination & Exploitation activities	CL	ALL PARTNERS
Task 6.3. Stakeholders engagement	CL	ALL PARTNERS

Table 1 – Data controllers and Data processors identification

1.3 Data Description

1.3.1 Type of data

The main data generated by the project are presented below:

- Data collected from the Roadmap and the SRIA preparation and drafting
- Data collected for assessing the KPIs
- Data collected from contact lists of Governing Board (GB) members, Working Groups (WGs) , Task Forces (TFs), Steering Board (SB)
- Data collected from the BEST Network;
- Other data collected from BEST website (e.g. cookies);

- Data exchanged among partners: emails or certificate emails depending on the type of data
- Peer reviewed publications.

1.3.2 *Formats*

The formats of the data will include:

- Data and metadata
- MS Word (.doc, .docx) and Excel (.xls, .xlsx) compatible files
- PDF (.pdf)
- JPEG
- Video (.MP4)

1.3.3 *Re-use of existing data*

The re-use of existing data available from research projects and from other European projects/contracts is encouraged.

BEST consortium will re-use some existing data generated by the partners involved in the previous Secretariat (INNOENERGY, EERA, ZABALA, CLERENS, EASE as main partners and SINTEF as subcontractor) that supported BATTERIES EUROPE from 2019-2021.

Batteries Europe has already delivered a number of results (accessible on the website www.batterieseurope.eu) and generated data that will be re-used for the execution of BEST Projects. Such data can be summarized as follows:

- Batteries Europe Suggested R&I Topics Spring 2020
- Strategic Research Agenda for batteries 2020
- Road Map on New Emerging Technologies
- Road Map on Raw Materials and Recycling
- Road Map on Advanced Material
- Road Map on Cell Design and Manufacturing
- Road Map on Application and Integration: Mobile
- Road Map on Application and integration: Stationary
- Position Paper on Education and Skills
- Position Paper on Sustainability
- Position Paper on Safety
- Position Paper on Digitalization
- Development of Reporting Methodologies
- Contact List of all Batteries Europe Stakeholders
- Batteries Europe database on EU R&I Projects

1.3.4 *Data Utility*

The data produced during BEST will be beneficial and used within and outside the project, in interaction with the following stakeholders:

- BEST consortium
- Stakeholders involved In the field of battery (manufacturers, remanufacturers, retailers, researchers, technology providers)
- Scientific community
- European Commission services and European Agencies
- EU national bodies
- Policy Makers.
- General audience
- Research Centers and Academia

2 FAIR DATA

2.1 *Making data findable and interoperable*

The consortium will ensure that dedicated platforms to store data are set up and that access to the platforms is properly coordinated. Project-relevant documents will be collected and managed and, if not in conflict with confidentiality, will be **published on the official project website**. Any personal data will be treated following the General Data Protection Regulation (GDPR). **GDPR policies will be strictly followed**, and appropriate access permissions and security measures will be put in place.

Interoperability will be compiled during the project as datasets and will include information on:

- Use of open software applications
- Use of standard vocabularies and methodologies

Project-relevant documents will be collected and managed and if not in conflict with confidentiality, will be published on the official project website.

The personal data will not be anonymised/ pseudonymised because the data (such as country, type of the companies, contact details) will be used for statistics, surveys, measure KPIs and for strengthen also some position and views taken in the SRIA.

The data collected will be shared with the experts from SINTEF ENERGI and SINTEF AS from Norway as leader of the WP3 dealing with the drafting with the Roadmaps and SRIA.

They will be used in fully compliance with the Chapter V of the General Data Protection Regulation 2016/679. GDPR policies will be strictly followed, and appropriate access permissions and security measures will be put in place.

For the data collected by the stakeholders who will part of activities (e.g. surveys) performed to reach the objectives of BEST projects, specific procedures will be adopted to ensure that privacy of the related stakeholders' group.

The procedures will include:

- Definition of appropriate informed consent request and management procedures,
- Appropriate data collection, storage and access control measures,
- the surveys that will be eventually administered during the project implementation will be mostly anonymous and the participation voluntary,
- any data used during the project realisation will be protected under GDPR and national law of the involved countries, and will be used accordingly,
- national/local and European rules and regulations will be taken into consideration before sharing and harmonizing aggregated data,
- each party which is expected to provide collected real users' data to other parties will warrant that distribution and use of these kind data and any related data will not contain any personal information,

- access to private information will be carefully controlled with restriction policies where appropriate, anonymization techniques – when not in contrast with the scope and objectives of the planned and agreed activities – will be applied to protect data confidentiality, once data has been used for its intended purposes within the project it will be deleted
- to avoid accidental risk of future disclosure or upon express request of the owner access to the data by third parties will be dealt with on a case by case basis and in cooperation with the Project officer,
- in any publication, no results will be reported that can be related in any way to individuals.

5.1.1 STANDARDS AND METADATA

The DMP (Data Management Plan) will ensure proper management of the data and associated metadata, ensuring the IPRs protection and following the FAIR principles. The data will be classified in a way that ensures the findability by appropriately tagging them through metadata that follows the standards in the diverse fields and ensures the interoperability of the different research outcomes.

The Metadata that will be used and applied to the collected data are the following:

General metadata	Publications	Posts on the web	Emails
<ul style="list-style-type: none"> • Title and description, • Tags and categories, • Who created and when, • Who last modified and when, • Who can access or update. 	<ul style="list-style-type: none"> • a title, • author name, • publisher and copyright details, • description on a back, • table of contents, • index, • page numbers. 	<ul style="list-style-type: none"> • title, • author, • published time, • category, • tags. 	<ul style="list-style-type: none"> • subject, • from, • to, • date and time sent, • sending and receiving server names and IPs, • format (plain text of HTML), • anti-spam software details.
Word docs	Spreadsheet	Computer files	Webpages
<ul style="list-style-type: none"> • title, • subject, • author, • company, • status, • creation date and time, • last modification date and time, • number of pages. 	<ul style="list-style-type: none"> • tab names, • table names, • column names, • user comments. 	<ul style="list-style-type: none"> • file name, • type, • size, • creation date and time, • last modification date and time. 	<ul style="list-style-type: none"> • page title, • page description, • icon.

Table 2 - METADATA

5.1.1.1 DATASETS

In order to catalogue data in the repository as well as to facilitate their search and re-use, metadata (as listed above for categories) will be filled in when uploading datasets in an adequate repository.

Firstly, a list of DATASET categories have been compiled:

Dataset	Name	WP/ task	Responsible(s)	Priority
DB1	Data Base			
DB1.1	BEST Partners	WP1	Maria Laura Trifiletti (ZAB)	High
DB1.2	Social media followers	WP6	Adeola Adeoti(CLERE NS)	Medium
DB1.3	Contact Lists of WGs, TFs, SB	WP2	Gabriele Gaffuri (ZAB)	High
	Feedback and basic personal data: persons completing the survey	WP4	Ivan Matejak	High
DB1.4	Contact list subscription to Batteries Europe newsletter (via website)	WP6	Adeola Adeoti (CLERENS)	Medium
DC4	DOCUMENTS (aggregated, analysed data)			
DC4.1	Consent forms			
DC4.1.1	BEST partners	WP1	Alessandro Romanello (INNOENERGY)	Medium
DC4.1.2	Stakeholders	WP5	Adeola Adeoti(CLERE NS)	Medium
DC4.1.3	Others (event participations,)	WP5	Adeola Adeoti(CLERE NS)	Low
DC4.1.4	Proceedings of WGs, TFs, SB, NRCG meetings	WP2	Gabriele Gaffuri (ZAB)	Medium
DC4.2	Communication material	WP6	CL	
DC4.2.1	Website	WP6	Adeola Adeoti(CLERE NS)	High
DC4.2.2	Images (trade fair, logos), videos (webinars) and sounds (webinar,)	WP6	Adeola Adeoti(CLERE NS)	Medium
DC4.2.3	Press release, etc...	WP6	Adeola Adeoti (CLERENS)	Low
DC4.3	Stakeholders surveys			
DC4.3.1	Questionnaires and surveys	WP4	Ivan Matejak (EERA)	Medium

	Transcript or verbatim of interviews and focus groups			
DC4.4	Implementation & Reporting			
DC4.4.1	BEST (towards HEU)	WP1	Maria Laura Trifiletti (ZAB) Alessandro Romanello (INNOENERGY)	High
DM4.5	Methodology			
DM4.5.1	BEST management			
DM4.5.1.1	Internal procedures & minutes	WP1	Alessandro Romanello (INNOENERGY)	High
DM4.5.1.2	Management of the Governance bodies, meeting organization	WP2	Gabriele Gaffuri (ZAB)	High
DM4.5.2	Global conclusions			
DM4.5.2.1	KPI list and collection procedure	WP4	Monika Curto Fuentes (VDI-VDT)	Medium
DM4.5.2.2	KPI definition and value list	WP3	Montserrat Casas Cabanas (CIC energigUNE)	Medium
DM4.5.2.3	International Contacts International R&D&I Priorities International KPIs	WP5 T5.4	Monika Curto Fuentes	High
DM4.5	Technical and scientific results			
DM4.5.1	Technical contributions for Roadmap and SRIA and White Papers	WP3	Roberto Scipioni (SINTEF)	Medium

Table 3 – Dataset Categories

Each dataset includes information on:

- general information describing the data (Data Description);
- how the data will be handled both during the project (During the project - Storage, access and security) and after the project (At the end of the project Data sharing, diffuse and reuse);
- security measures (Protection of sensitive data: Data security, privacy, confidentiality).

Each WP Leader have been asked to fill in the DATASET table below:

Data Description	
Dataset ID	DB1.1 – DC4.1.1 – DC4.4.1
Description	BEST PARTNERS Contact Lists - Excel files including contacts of the BEST Secretariat members Consent forms for participating to events Reporting data from the partners during the implementation of the project
Dataset responsible	Maria Laura Trifiletti (ZAB) - Alessandro Romanello (INNOENERGY)
Data nature	Personal data (name, surname, company, email)
Sensitive data	Name, surname, company, email
Method of production of data	Gathered during the proposal phase and during project implementation
WP(s)/Task(s) involved	WP1
During the project - Storage, access and security	
Projected volume	Volume can slightly increase with new people involved in the secretariat but from the same partners. Currently this database counts 29 members
Data Storage/Hosting	Microsoft Teams repository, on the domain of InnoEnergy (COO)
Sharing level	Only accessible to Secretariat Members, after COO provides them with access
Sharing medium	Emails, Outlook
Data re-use	For sending out meeting invitations and follow-ups
Dissemination	N/A
At the end of the project Data sharing, diffuse and reuse	
General principle for diffusion	Only for a potential transfer to a new ETIP Batteries
Potential for re-use	N/A
Publication related to the data	N/A
Data repository and access	Microsoft Teams repository, on the domain of InnoEnergy (COO) Only accessible to Secretariat Members, after COO provides them with access
Preservation duration	5 years after project end
Preservation medium	Microsoft Teams

Preservation costs	N/A
<i>Protection of sensitive data: Data security, privacy, confidentiality</i>	
Risks or threats of the data	Hacking of corporate InnoEnergy teams (probability: low), email addresses copied by partners when in cc (probability: low)
Justification for the exception to the general principles of diffusion	No exceptions. Contacts can be shared with Project Officer when requested
Precautionary measures	Access can only be granted by Coordinator.

<i>Data Description</i>	
Dataset ID	DB1.4
Description	Contact Lists of Governing Board (GB) members, Working Groups (WGs) , Task Forces (TFs), Streeting Board (SB) Excel files including contacts of the WGs and TFs Experts from Batteries Europe and BEPA, the Steering Board members and the Secretariat
Dataset responsible	Gabriele Gaffuri (ZAB)
Data nature	Personal data (name, surname, company, email)
Sensitive data	Name, surname, company, email
Method of production of data	Gathered during experts' application to BE or BEPA, or sent by email to the BE Secretariat
WP(s)/Task(s) involved	WP2 (T2.1), WP3 (whenever WGs are involved)
<i>During the project - Storage, access and security</i>	
Projected volume	Volume will not increase, it is now collecting 6 WGs of ca. 100 experts
Data Storage/Hosting	Microsoft Teams repository, on the domain of InnoEnergy (COO)
Sharing level	Only accessible to Secretariat Members, after COO provides them with access
Sharing medium	Emails, Outlook
Data re-use	For sending out meeting invitations and follow-ups
Dissemination	N/A
<i>At the end of the project Data sharing, diffuse and reuse</i>	
General principle for diffusion	Only for a potential transfer to a new ETIP Batteries
Potential for re-use	N/A
Publication related to the data	N/A
Data repository and access	Microsoft Teams repository, on the domain of InnoEnergy (COO) Only accessible to Secretariat Members, after COO provides them with access
Preservation duration	5 years after project end

Preservation medium	Microsoft Teams
Preservation costs	N/A
Protection of sensitive data: Data security, privacy, confidentiality	
Risks or threats of the data	Hacking of corporate InnoEnergy teams (probability: low), email addresses copied by Experts when in cc (probability: low, they have been working together for 3 years already)
Justification for the exception to the general principles of diffusion	No exceptions. Contacts can be shared with Project Officer or JRC when specific experts are considered interesting for attending sectorial panels/events on battery topics
Precautionary measures	Access can only be granted by Coordinator, emails are sent in BCC any time is possible, ZAB is centralizing this role in order to filter any external person asking for a contact request

Data Description	
Dataset ID	DC4.1.4
Description	Proceedings of WGs, TFs, SB, NRCG meetings Documents compiled after each technical meeting
Dataset responsible	Gabriele Gaffuri (ZAB)
Data nature	Minutes and actions decided during BE meetings
Sensitive data	Specific actions, recommendations or requests to Experts, in order to convey practical messages aimed at delivering the technical R&I documents of the ETIP
Method of production of data	Minutes are taken during online and physical meetings, and saved in pdf before being shared
WP(s)/Task(s) involved	WP2 (T2.1)
During the project - Storage, access and security	
Projected volume	One doc for each WG meeting (6*6*year), TF meeting (4*6P year), SB meeting (6*year), NRCG meeting (1*year)
Data Storage/Hosting	Microsoft Teams repository, on the domain of CLERENS
Sharing level	Only accessible to WG Members and Secretariat, after CLERENS provides them with access (each expert can access only its WG folder)
Sharing medium	Emails with links of the Teams folder
Data re-use	For reviewing and assessing internal progress of BE
Dissemination	WGs experts level
At the end of the project Data sharing, diffuse and reuse	
General principle for diffusion	Only for a potential assessment in case of a new ETIP Batteries
Potential for re-use	N/A
Publication related to the data	N/A

Data repository and access	Microsoft Teams repository, on the domain of CLERENS. Only accessible to Secretariat and WGs Members, after CLERENS provides them with access
Preservation duration	5 years after project end
Preservation medium	Microsoft Teams
Preservation costs	N/A
Protection of sensitive data: Data security, privacy, confidentiality	
Risks or threats of the data	Hacking of corporate CLERENS teams (probability: low), documents externally shared by Experts (probability: low, documents have an almost-public utility, as they are shared to align everyone on the main topics discussed
Justification for the exception to the general principles of diffusion	No exceptions.
Precautionary measures	Access to the folders can only be granted by CLERENS, ZAB is centralizing this role in order to be the only partner accredited for drafting procedures. Before being published, the content is reviewed also by each WG Technical Support from BE (for WG and TF minutes), by EERA (for the NRCG meetings) and by the Coordinator, the BE Technical Leader and the BE Chair for Steering Board minutes, in order to ensure a high quality and agreed contents.

Data Description	
Dataset ID	DM4.5.1
Description	Technical inputs and contributions received by experts of the WG, BEPA and other stakeholders coming from the EU Batteries Ecosystem
Dataset responsible	SINTEF and Batteries Europe (as coordinator of the project)
Data nature	The technical input are collected via surveys, consultations, Workshops etc...
Sensitive data	No
Method of production of data	Literature survey, working group participants contribution in written.
WP(s)/Task(s) involved	WP 3
During the project - Storage, access and security	
Projected volume	Technical reports.
Data Storage/Hosting	Innoenergy's Team share point folder and Batteries Europe and BEPA's websites
Sharing level	Public
Sharing medium	Website
Data re-use	Yes

Dissemination	Public
<i>At the end of the project Data sharing, diffuse and reuse</i>	
General principle for diffusion	Public
Potential for re-use	Yes, but at the end of the project the values might be obsolete
Publication related to the data	Roadmap, SRIA, Potential white paper or scientific publication
Data repository and access	Batteries Europe and BEPA's websites
Preservation duration	2-3 years
Preservation medium	Stored on Internet
Preservation costs	Free
<i>Protection of sensitive data: Data security, privacy, confidentiality</i>	
Risks or threats of the data	Not applicable
Justification for the exception to the general principles of diffusion	Not applicable
Precautionary measures	Not applicable

<i>Data Description</i>	
Dataset ID	DM4.5.2.2
Description	The KPI benchmarking report will include definition and values for the KPI identified
Dataset responsible	CIC energiGUNE and Batteries Europe (as coordinator of the project)
Data nature	The definitions are collected as plain text and the values can be alphanumerical
Sensitive data	No
Method of production of data	Literature survey, working group participants contribution in written.
WP(s)/Task(s) involved	WP 3 Taks 3
<i>During the project - Storage, access and security</i>	
Projected volume	Technical report of 30 pages aprox.
Data Storage/Hosting	Innoenergy's Team share point folder and Batteries Europe and BEPA's websites

Sharing level	Public
Sharing medium	Website
Data re-use	Yes
Dissemination	Public
At the end of the project	
Data sharing, diffuse and reuse	
General principle for diffusion	Public
Potential for re-use	Yes, but at the end of the project the values might be obsolete
Publication related to the data	Potential white paper or scientific publication
Data repository and access	Batteries Europe and BEPA's websites
Preservation duration	2-3 years
Preservation medium	Stored on Internet
Preservation costs	Free
Protection of sensitive data:	
Data security, privacy, confidentiality	
Risks or threats of the data	Not applicable
Justification for the exception to the general principles of diffusion	Not applicable
Precautionary measures	Not applicable

Data Description	
Dataset ID	DB1.3
Description	Feedback and basic personal data (e.g., name, surname and organisation) about the persons completing the survey. That information will be retrieved from experts and relevant stakeholders on the topics of interest of the Task Forces of WP4 (Strengthening a holistic battery R&I ecosystem with synergistic efforts)
Dataset responsible	Ivan Matejak
Data nature	Feedback from experts relevant for the task forces and basic personal data
Sensitive data	Basic personal data (e.g., name, surname and organisation) about the persons completing the survey
Method of production of data	Surveys and questionnaires
WP(s)/Task(s) involved	WP4
During the project - Storage, access and security	

Projected volume	5 MB
Data Storage/Hosting	EERA Share Point + TEAMS
Sharing level	Private
Sharing medium	TEAMS
Data re-use	No re-use of the sensitive personal data, only of the treated feedback received from experts if applicable
Dissemination	No dissemination of the sensitive personal data, only of the treated feedback received from experts if applicable
<i>At the end of the project Data sharing, diffuse and reuse</i>	
General principle for diffusion	The sensitive basic personal data will not be shared
Potential for re-use	The sensitive basic personal data will not be re-used
Publication related to the data	The sensitive basic personal data will not be published
Data repository and access	EERA SharePoint with password
Preservation duration	5 years after the project end
Preservation medium	EERA SharePoint
Preservation costs	0
<i>Protection of sensitive data: Data security, privacy, confidentiality</i>	
Risks or threats of the data	No major risk or threat foreseen
Justification for the exception to the general principles of diffusion	N/A
Precautionary measures	Password only known by the EERA project management team involved in the project

<i>Data Description</i>	
Dataset ID	DC4.3.1
Description	Questionnaires and surveys - Transcript or verbatim of interviews and focus groups of experts and relevant stakeholders on the topics of interest of the Task Forces of WP4 (Strengthening a holistic battery R&I ecosystem with synergistic efforts). Basic personal data of the persons giving the interviews (e.g., name, surname and organisation)
Dataset responsible	Ivan Matejak
Data nature	Transcript or verbatim of interviews of the above-mentioned experts

Sensitive data	Basic personal data (e.g., name, surname and organisation) about the persons providing the interviews
Method of production of data	Transcribers
WP(s)/Task(s) involved	WP4
<i>During the project - Storage, access and security</i>	
Projected volume	5 MB
Data Storage/Hosting	EERA Share Point + TEAMS
Sharing level	Private
Sharing medium	TEAMS
Data re-use	No re-use of the sensitive personal data, only of the treated data from the interviews if applicable
Dissemination	No dissemination of the sensitive personal data, only of the treated data from the interviews if applicable
<i>At the end of the project Data sharing, diffuse and reuse</i>	
General principle for diffusion	The sensitive basic personal data will not be shared
Potential for re-use	The sensitive basic personal data will not be re-used
Publication related to the data	The sensitive basic personal data will not be published
Data repository and access	EERA SharePoint with password
Preservation duration	5 years after the project end
Preservation medium	EERA SharePoint
Preservation costs	0
<i>Protection of sensitive data: Data security, privacy, confidentiality</i>	
Risks or threats of the data	No major risk or threat foreseen
Justification for the exception to the general principles of diffusion	N/A
Precautionary measures	Password only known by the EERA project management team involved in the project

<i>Data Description</i>	
Dataset ID	DC4.5.2
Description	Data collection on International Contacts, International R&D&I Priorities and International KPIs
Dataset responsible	Monika Curto Fuentes
Data nature	Personal contact details, Reports and strategic documents

Sensitive data	High
Method of production of data	Through personal contacts, Desk research, Personal visits
WP(s)/Task(s) involved	WP5 T5.4
<i>During the project - Storage, access and security</i>	
Projected volume	0,5 GB
Data Storage/Hosting	Data Collection: Internal InnoEnergy Teams folder, Data Assessment and final documents: External Clerence Teams folder
Sharing level	Contact details, non-public strategic documents: Internal Public strategic documents, results: External (BE Members)
Sharing medium	Teams folder
Data re-use	
Dissemination	Public Report, Presentations on Conferences
<i>At the end of the project Data sharing, diffuse and reuse</i>	
General principle for diffusion	
Potential for re-use	
Publication related to the data	International Benchmarking Report: To be delivered in M24
Data repository and access	
Preservation duration	
Preservation medium	
Preservation costs	
<i>Protection of sensitive data: Data security, privacy, confidentiality</i>	
Risks or threats of the data	Personal contact details have to be handled in compliance with GDPR
Justification for the exception to the general principles of diffusion	
Precautionary measures	

<i>Data Description</i>	
Dataset ID	DB1.4
Description	Subscription to Batteries Europe Newsletter
Dataset responsible	Adeola Adeoti (CLERENS)
Data nature	First name, surname, e-mail address, company

Sensitive data	First name, surname, e-mail address, company
Method of production of data	Voluntary subscription to the Batteries Europe Newsletter via the website
WP(s)/Task(s) involved	WP6 -Task 6.1
<i>During the project - Storage, access and security</i>	
Projected volume	>200 subscribers
Data Storage/Hosting	Mailchimp
Sharing level	Only accessible to CLERENS project management team involved in the project
Sharing medium	Mailchimp
Data re-use	Publication of newsletter
Dissemination	N/A
<i>At the end of the project Data sharing, diffuse and reuse</i>	
General principle for diffusion	Only for a potential transfer to new ETIP Batteries
Potential for re-use	N/A
Publication related to the data	N/A
Data repository and access	Mailchimp
Preservation duration	5 years
Preservation medium	Mailchimp
Preservation costs	0
<i>Protection of sensitive data: Data security, privacy, confidentiality</i>	
Risks or threats of the data	No major risk or threat foreseen
Justification for the exception to the general principles of diffusion	No exceptions
Precautionary measures	Password only known by the CLERENS project management team involved in the project

2.1.1 Publications

The publications issued during the project will include the Grant Number, acronym and a reference to the HEU Programme funding, including the following sentence:

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme under Grant Agreement N. 101069676

When displayed together with another logo, the EU logo will have appropriate prominence.

Any dissemination of results must indicate that it reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains.

Each paper must include the terms HEU the name of the action, acronym and the grant number, the publication date, the duration of embargo period (if applicable) and a persistent identifier (e.g. DOI).

2.1.2 Use of persistent and unique identifiers

Metadata of deposited publications will provide the following information:

- author(s),
- title,
- date of publication,
- publication venue,
- grant Project name,
- acronym and number,
- licensing terms.

Where applicable, the metadata will include persistent identifiers for any research output or any other tools and instruments needed to validate the conclusions of the publication.

2.1.3 Naming conventions

For metadata, dataset and template names, naming convention are defined consisting in the following mandatory parts:

- A prefix, indicating if it is a dataset, a metadata or a template
- A root composed by:
 - The short and meaningful name of the dataset/template
 - The acronym/short name of the data provider organisation(s) (BEST by default for templates)
 - A suffix indicating the date of the last upload into the Repository in YYYYMMDD format.

2.1.4 Making Data Accessible

2.1.4.1 Overview of access to data







In the following table, the accessibility to the different types of data involved in the project is contemplated:



Open Access



Confidential access

Type Data	Access	Main exploitation guidelines
Stakeholders		Online access to research outputs provided free of charge to the end-user.
Personal data		Personal data will be collected treated following the General Data Protection Regulation (GDPR).
Technical data Surveys outcomes		Technical data and outcomes of surveys will be collected and gathered in documents. These documents, if not in conflict with confidentiality, will be published on the official Project website. Any personal data included in these docs will be treated following the General Data Protection Regulation (GDPR).
Data exchanged among partners		Emails or certificate emails, File Transfer Protocol (FTP) and secured collaborative space (share point).

2.2 Sharing and storing data among the consortium

Data will be open and available, but with some specifications depending on the data treated. Project-relevant documents will be collected and managed and, if not in conflict with confidentiality, will be **published on the official project website**. Any personal data will be treated following the General Data

Protection Regulation (GDPR). **GDPR policies will be strictly followed**, and appropriate access permissions and security measures will be put in place.

The data will be accessible through a free and standardized access protocol, as the platform will continue to provide a **free, open, accessible, transparent forum** enabling engagement for all. On addition, the new website, more friendly and intuitive, will facilitate the access to information, being a showroom to present the reports, roadmaps, SRIAs and other relevant news for battery community. For the sharing of information, a clear pipeline to distribute all collected information internally, analyse, provide feedback and communicate the results internally and externally is set up.

A captivating website has been developed to provide visibility to the project besides giving public access to relevant non-IP-sensitive results, downloadable publishable periodic reports and other publishable documents.

The Secretariat hosts, develops and maintains the Batteries Europe Website, where all the data is concentrated.

Data related to the project are categorized in 3 groups:

- a. **Data for scientific publications:** BEST will guarantee the data utilised in scientific publications is reusable and accessible. For this purpose, it will use a data repository (TEAMS).
- b. **List of contacts:** According to the GDPR regulation, BEST partners will be requested to provide informed consent to include their contact details on a project dataset, only accessible to the people participating in the project.
- c. **Presentations:** All the presentation materials, for which this is appropriate, will be published on the project's website.

2 main sharing tools are used in BEST	Use in BEST
BEST webpage	Accessible to all: main tool for sharing information with the wide audience about BEST main results, initiatives, and activities
Teams	Consortium internal sharing

Table 4 – BEST Sharing tool

BEST website

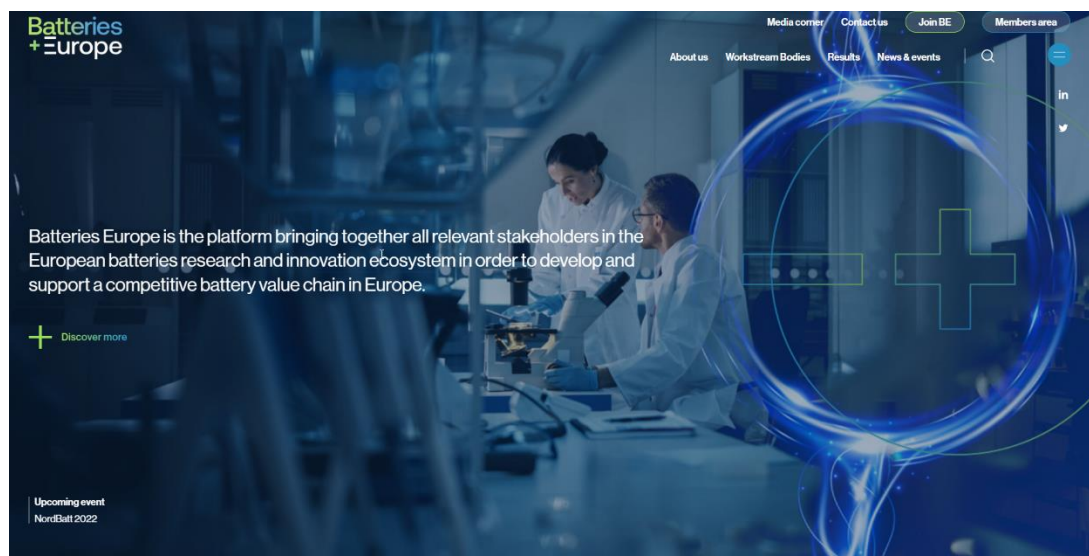


Figure 1 – BEST Website Homepage

Batteries Europe has its own website, where everyone has access and can discover the scope, objectives, workstream bodies, results, news and events about the project among other information offered by the platform.

Batteries Europe, the European Technology & Innovation Platform on batteries provides the community with a forum to spearhead Research and Innovation actions so to accelerate the establishment of a globally competitive European battery industry and in so doing enact the Implementation Plan of the SET plan Action 7, among other priority actions that could contribute to accelerate the energy system transformation and the realisation of the EU's aim to become the global leader in the deployment and use of renewable energy.

TEAMS

Teams is own by INNOENERGY and it is accessible by BEST consortium partners for the project management and sharing of documents between Tasks/WP leader.

The architecture of the folders storing the data in Teams is the following:

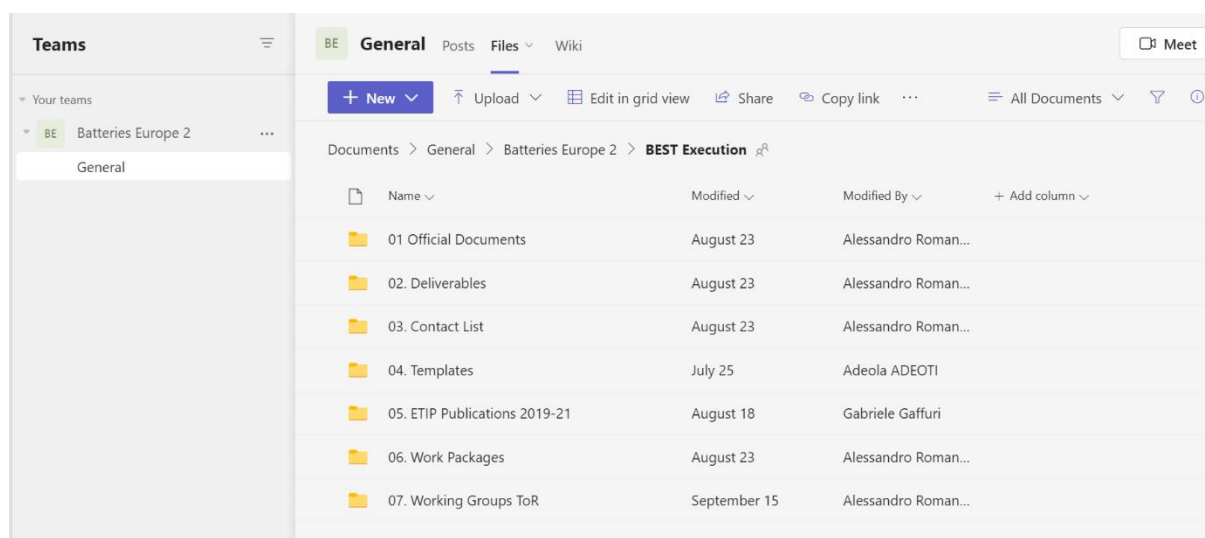


Figure 2 – BEST TEAMS Configuration

2.2.1 OPEN ACCESS

The BEST Consortium will guarantee the open access to peer-reviewed scientific publications relating to the project results.

A machine-readable electronic copy of the published version or the final peer-reviewed manuscript accepted for publication, is deposited in a trusted repository for scientific publications and immediate open access is provided to the deposited publication via the repository, under the latest available version of the Creative Commons Attribution International Public Licence (CC BY).

2.2.2 INCREASE DATA RE-USE

This section will be compiled during the project as datasets will be made available for BEST and shall include information on:

- Licensing of data
- Availability of data and embargo period
- Re-use of data by third parties
- Data quality Insurance processes
- Duration of data for re-use

The data will be made freely available in the public domain, also permitting the widest re-use possible.

The new website, more friendly and intuitive, will facilitate the access to information, being a showroom to present the reports, roadmaps, SRIAs and other relevant news for battery community.

The data will be reusable and open, and the consortium will ensure that dedicated platforms to store data are set up and that access to the platforms is properly coordinated.

3 ALLOCATION OF RESOURCES

3.1 ESTIMATION OF COSTS

The establishment and maintenance of the repository will not generate any costs. Regarding, publications in gold open access, this path shall be opted in where possible.

A full list of publications shall be annexed to the Data Management Plan during the project.

3.2 DATA MANAGEMENT RESPONSIBILITIES

Two main partners are deeply involved with the data storage as described below:

1. INNOENERGY role:

INNOENERGY as coordinator is the main responsible of data management for the whole BEST project both internal and external partners. They will strictly respect GDPR compliance for BEST project.

INNOENERGY Data Protection Officer (DPO) will be the DPO for the BEST project. Alessandro Romanello (INNOENERGY), Coordinator of the project is responsible for BEST treatment.

INNOENERGY ensures the consortium collaboration via Teams solution, guaranteeing appropriate levels of confidentiality and security.

All the documents put in TEAMS are not property of Microsoft. INNOENERGY pays a license subscription in order to be the exclusive owner of the space in the cloud. Microsoft has not access to space. INNOENERGY has created a specific shared folder in the cloud to be used by all registered BEST consortium partners.

The frequency of potential server crash is very limited. In fact, Teams is a SaaS model with a high level of availability (nearly 100%) and redundancy. Potential issues regarding recovering data or any risk of losing definitely the data are almost zero, since the solution is based on 365 data loss prevention policies defined by Microsoft. Moreover, Teams platform has a solution of recycle bin to recover in case of mistake.

All the documents are saved in European data centers according to GDPR requirements.

The security policy of Teams is clearly described in the terms of reference of the product.

As mentioned, Microsoft TEAMS is under GDPR policies set by EU Commission. Teams is Tier D-compliant. This includes the following standards: ISO 27001, ISO 27018, SSAE16 SOC 1 and SOC 2, HIPAA, and EU Model Clauses (EUMC). For further information. <https://docs.microsoft.com/en-us/microsoftteams/security-compliance-overview>

To ensure appropriate and effective project management, it is necessary to know who will access to data stored in Teams. As Microsoft has no right on the data, INNOENERGY as the owner has full rights and defines the access to the space and invite the persons that can have access to the information.

2. CLERENS role:

CLERENS is the responsible of data collected and shared in the website. CLERENS will guarantee a high-level of security and data confidentiality.



4 DATA SECURITY

4.1 PROTECTION OF PERSONAL DATA

Personal data collection and processing as well as protection measures will comply with the Regulation 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons about the processing of personal data and on the free movement of such data ('GDPR') and national legislations.

The collected data (name, surname, contract details) from experts and stakeholders with the partners consortium from Norway. These data will be used by SINTEF in Norway in fully compliance with the GDPR regulation and with all the national regulations into force in Norway about data protection. There are not activities in which these collected data will be used that go beyond the specific activities and scope detailed in the WP2-WP3-WP4. All the partners that will gather, store, use and share data within the project are aware and committed to comply with the regulation above.

4.2 SHARING DATA WITH CONFIDENTIAL ACCESS

When dealing with confidential data, partners will ensure that they comply with the non-disclosure policy.

Confidential information shared within the consortium via email must be encrypted and attachments will be protected with a password in .rar or .zip files. The password will be sent in a separate email to the recipients.

4.3 ARCHIVING CONFIDENTIAL INFORMATION

Partners collecting confidential data will archive them on secured internal servers and restrict their sharing.

4.4. Specific responsibilities regarding data protection (BEST Consortium Agreement – Signed)

Where necessary, the Parties shall cooperate in order to enable one another to fulfil legal obligations arising under applicable data protection laws (the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and relevant national data protection law applicable to said Party) within the scope of the performance and administration of the Project and of this Consortium Agreement.

In particular, the Parties shall, where necessary, conclude a separate data processing, data sharing and/or joint controller agreement before any data processing or data sharing takes place.

CONCLUSIONS

The BEST's Data Management Plan will serve as main reference document during all the life of the project and showed clearly the procedures and the role of each partner in collecting, using and storing all the produced data.

Specific datasets categories have been identified and detailed in structured tables. These tables describe the status of the data before, during and after the implementation of the project and they will be used as guidelines from all the data controllers and data processor during BEST duration.

No update of this Data Management Plan has been foreseen in project, however, if it should be needed to collect new and different dataset from the ones already identified, they will be duly communicated to the Project Officer.