

**Energy Efficiency Performance-Tracking Platform for Benchmarking Savings and Investments in Buildings** 

# Data Management Plan



Deliverable nº: **D8.1** 

Deliverable name: Data Management Plan

Version: 1.0

Release date: 26/04/2021

Dissemination level: Public

Status: Submitted

Author: CIMNE – Stoyan Danov, Josep Mayos

#### DISCLAIMER

The information and views set out in this deliverable are those of the authors and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.

#### **Document history:**

Version	Date of issue	Content and changes	Edited by
0.1	15/03/2021	First draft version	Josep Mayos
0.2	29/03/2021	Introducing modifications in the data management process description	Stoyan Danov
0.3	15/04/2021	Description of the FAIR data management principles	Stoyan Danov
0.4	21/04/2021	Incorporating partner feedback	Stoyan Danov
0.5	26/06/2021	Incorporating internal review comments	Stoyan Danov
1.0	28/04/2021	Formatting	Josep Mayos

## Peer reviewed by:

Partner	Reviewer
JOULE	Eddie Streng
Subcontractor (CIMNE)	Mike Barker

#### **Deliverable beneficiaries:**

WP / Task	
All WPs and tasks	

## **Table of contents**

Ex	ecutive	summary	8
1	Introd	luction	10
	1.1	Related external platforms	10
	1.2	Guiding principle for data management	11
	1.3	Legal framework	12
2	Data s	summary	14
	2.1	Purpose of data collection	14
	2.2	Data types, formats and size	14
	2.3	Origin of data	17
	2.4	Data utility	19
3	Makin	g data FAIR	20
	3.1	Making data findable	20
	3.2	Making data openly accessible	21
	3.3	Making data interoperable	22
	3.4	Increase data re-use	23
4	Alloca	ation of resources	25
5	Data s	security	26
	5.1	Nextcloud shared repository	26
	5.2	Data security as specified for Zenodo	26
	5.3	Data security for the EN-TRACK platform	27
6	Ethica	al Aspects	28
7	Concl	usions	29
8	Apper	ndix A. Personal data collected per task	30
9	Apper	ndix B: Confidentiality agreement	38

## **List of Tables**

Table 1. Registration of data treatment activities in the project	25
Table 2. Personal data collected per task	30
Table 3. Task 2.6 personal data collection	31
Table 4. Task 3.1 personal data collection	32
Table 5. Task 3.2 personal data collection	32
Table 6. Task 3.3 personal data collection	32
Table 7. Task 4.1 personal data collection	32
Table 8. Taks 4.2 personal data collection	33
Table 9. Task 4.4 personal data collection	33
Table 10. Task 4.5 personal data collection	34
Table 11. Task 6.2 personal data collection	34
Table 12. Task 6.3 personal data collection	34
Table 13. Task 6.4 personal data collection	35
Table 14. Task 6.5 personal data collection	35
Table 15. Task 7.1 personal data collection	35
Table 16. Task 7.3 personal data collection	36
Table 17. Task 7.4 personal data collection	36
Table 18. Task 8.1 personal data collection	36
Table 19. Task 8.2 personal data collection	37
Table 20. Task 8.4 personal data collection	37

## **Abbreviations and Acronyms**

Acronym	Description	
API	Application Programming Interface	
BEDES	Building Energy Data Exchange Specification	
СС	Creative Commons	
DEEP	De-Risking Energy Efficiency Platform	
DMP	Data Management Plan	
DOI	Digital Object Identifier	
DPO	Data Protection Officer	
Data controller	The institution/company/other legally responsible person who determines the purposes, conditions and means of the processing of personal data. The Data Controller is a formal position and involves requirements for compliance with a number of duties in the Personal Data Act (GDPR).	
Data processor	An external person or business that processes personal data on behalf of the Data Controller. The law requires that this relationship should be regulated by a data processing agreement.  Examples of a Data Processor can be an external (i.e. not employed at the data controlling institution) provider of online surveys,	
	transcription service provider or an interpreter.	
EC	European Commission	
EEM	Energy Efficiency Measures	
EEI	Energy Efficiency Investments	
EFFIG	Energy Efficiency Financial Institutions Group	
ESCO	Energy Service Company	
FAIR	Findable, Accessible, Interoperable and Reusable	
GDPR	General Data Protection Regulation	
IPR	Intellectual Property Rights	
MD5	Message Digest Algorithm	
M&V	Measurement and Verification	
ORDP	Open Research Data Pilot	
SLA	Service Level Agreement	
SSL	Secure Sockets Layer	
WP	Work Package	

## **Executive summary**

This deliverable presents the first version of the EN-TRACK Data Management Plan (DMP) and describes:

- The guiding principles for data management in the project
- The legal framework constituted by the General Data Protection Directive (GDPR)
- Data Summary: Overview of what data will be gathered and processed in the project
- How data will be stored and processed according to the H2020 FAIR Data Management principles, making data: findable, accessible, interoperable, and reusable.
- Resource allocation: The costs of making data FAIR in this project
- Data Security: How we intend to keep the data secure
- Ethical aspects: A summary of the ethics and privacy strategy in EN-TRACK.

The EN-TRACK Data Management Plan (DMP) clarifies the handling of research data during and after the project. It includes data that will be collected, processed or generated during the project, methodology and standards that will be applied, whether data will be shared and how data will be curated and preserved, taking into account all data-related aspects of the project.

The principal objective of EN-TRACK is the gathering of data from building owners on the performance of energy efficiency investments in buildings. The data will be used for benchmarking and identification of energy efficiency opportunities. The collected data during the project will be made publicly available to its users in an aggregated and anonymised form through the EN-TRACK platform web interface. Irreversibly anonymised datasets will be shared with the DEEP platform in order to support the European Commission's priority policies in stimulation of energy efficiency investments. The non-anonymised buildings information collected in EN-TRACK will never be shared on individual basis among the platform users or any outside entity. Within the scope of its interoperability services, EN-TRACK will enable the possibility users to export data to external platforms, but this will always be done with their express desire and consent.

During the 36 active months of the project, a Nextcloud repository will be used as the online working and collaboration platform. The Nextcloud repository is only accessible to project participants and can provide further access control through establishing folders and sub-sites with stricter access granted than to the main site.

EN-TRACK will use the open research data repository Zenodo to comply with the Horizon 2020 Open Access Mandate. This mandate applies to the underlying research data of publications. In EN-TRACK, all public deliverables, publications and the anonymous parts of the underlying datasets will be uploaded to the H2020 EN-TRACK Community as well as the European Commission Funded Research (OpenAIRE) Community in Zenodo. Uploads will be done upon approval of the deliverables by the European Commission, upon publication or acceptance of scientific publications, or, for underlying datasets, at the end of the project at the latest. Each dataset will be given a persistent identifier (Digital Object Identifier, DOI), supplied with relevant metadata and linked to the project name and grant agreement number. Publications and underlying

research data will be linked to a Creative Commons license, which regulates re-use. Data security arrangements are defined for the Nextcloud repository and Zenodo.

Ethical aspects have been considered and nothing in this project shall be deemed to require a party to breach any mandatory statutory law under which the party is operating. This includes any national or European regulations, rules and norms regarding ethics in conducting research. The day-to-day data management will be ensured through continuous collaboration between the coordinator, the task leaders and the DPO.

The DMP is a living document and will be updated at the end of the project to reflect the actual research data generated during the project and include updated instructions on the open data access.

#### 1 Introduction

The present document provides an overview of research data the project is expected to generate, the types and formats of this data, and how this data is processed and stored to make them findable, accessible, interoperable and re-usable, according to the principles of FAIR data management. The purpose of the DMP is to contribute to good data handling during the project's lifetime, and to describe how such data will be curated and preserved.

The document is intended for use by all project participants who are responsible or in any way involved in the data collection in order to guide them in the handling, storage and processing of the data. The document aims also to provide transparency of the data management process and the implementation of the data protection procedures for the stakeholders involved in the project pilot activities and other relevant stakeholders interested in the adoption of the project solution.

The DMP is a living document that will evolve with the advance of the project activities and new information on data collection, generation and handling arises. A revised and extended version of this DMP will be prepared in month 30 to reflect the current status of data management in the project.

#### 1.1 Related external platforms

The EN-TRACK project involves sharing of data with several external platforms. This aspect is envisaged as essential part of the project operation and is highly considered in the overall data management, as well as in the context of the project participation in the Open Data Pilot of the Horizon 2020 Programme.

A brief description of the external platforms referenced in the document is provided in continuation.

#### 1.1.1 DEEP (De-Risking Energy Efficiency Platform)<sup>1</sup>

DEEP was launched in 2016 by the Energy Efficiency Financial Institutions Group (EEFIG), and is the largest pan-EU open-source database containing detailed technical and financial performance data of over 17,000 industrial and buildings related energy efficiency projects. DEEP is a source of operational risk management information, which helps project developers, financiers, and investors better assess the risks and benefits of energy efficiency investments across Europe. The DEEP database is owned by the European Commission's DG Energy and is a priority area for it in relation to the Renovation Wave Strategy and the Recovery and Resilience Facility.

<sup>1</sup> https://deep.eefig.eu





#### 1.1.2 eQuad<sup>2</sup>

Developed within the SEAF project, the eQuad platform helps European energy efficiency project managers (ESCOs, engineering firms, and construction companies) access appropriate project finance while lowering upfront due diligence costs for investors. The platform is owned by Joule Assets Europe, a partner of EN-TRACK.

#### 1.1.3 Enerinvest<sup>3</sup>

Enerinvest is a Spanish Sustainable Energy financing Platform that provides consultancy on the technical and economic viability of sustainable energy projects, and offers financial, technical and legal solutions, facilitating the dialogue among the different stakeholders involved.

#### 1.1.4 Zenodo<sup>4</sup>

Zenodo is a general-purpose open-access repository developed in 2013 under the European OpenAIRE program and operated by CERN. It allows researchers to deposit research papers, data sets, research software, reports, and any other research related digital artifacts. For each submission, a persistent digital object identifier (DOI) is minted, which makes the stored items easily citeable.

#### 1.1.5 Nextcloud<sup>5</sup>

Nextcloud is open-source software that allows running a personal storage service on cloud or on-premise, on the user's own servers. It has features that are comparable to other services such as Dropbox,Office 365 or Google Drive when used with its integrated office suite solutions. Nextcloud is the software supporting the internal EN-TRACK repository used in the project for data sharing among the project partners. The EN-TRACK repository is installed on the project coordinator's servers.

#### 1.2 Guiding principle for data management

The principle of EN-TRACK is to be an open project, making all the main results of the project widely available, with 23 out of 35 deliverables in the project being public. Driven by the objective to enable an open eco-system of interoperable and complementary tools for supporting sustainable energy efficiency investments and financing, the project will provide open access to all the documentation necessary to ensure its connection to external systems.

EN-TRACK intends to combine individual buildings data from many building owners in order to use them for benchmarking, identification of energy efficiency opportunities and support of building retrofit decisions. The data provided to the EN-TRACK platform from individual users or organisations will not be shared on individual building level to users from other organisations. Only anonymised and aggregated data will be disclosed to other platform users, not allowing identifying individual buildings.

<sup>&</sup>lt;sup>5</sup> https://nextcloud.com



.

<sup>&</sup>lt;sup>2</sup> https://www.eu.jouleassets.com/about-equad

<sup>&</sup>lt;sup>3</sup> https://cordis.europa.eu/project/id/695822/es

<sup>4</sup> https://zenodo.org

EN-TRACK will fully support the European Commission's strategy for gathering and making publicly available information about the technical and financial performance of energy efficiency investments across Europe. In this relation, the project will facilitate irreversibly anonymised data to the DEEP database.

To protect the privacy of individual participants, only data that can be irreversibly anonymised to the degree that it is impossible to identify individuals will be shared publicly. Non-anonymised data will be kept internally in the project and used as input to project work, but never shared publicly in its original format. Both the anonymised and non-anonymised data will, in an aggregated format, feed into project work and provide the basis for analysis in deliverables and scientific publications. If the editor of a deliverable is concerned that their deliverable contains personal information, they request a separate screening for privacy and ethics issues before submission to be sure that no personal data is included. The leader of Task 8.5 Ethics & data protection management is responsible for performing these screenings. Public deliverables, publications and anonymised datasets will be shared openly through an open research data repository.

During the lifetime of the project, partners might discover special parts of the project's results that should be protected for further developments or commercial exploitation. If these cases arise, appropriate steps to protect such results for exploitation purposes will be taken.

#### 1.3 Legal framework

The principles of the European Convention on Human Rights, the Rules of the Council of Europe Convention for the Protection of Persons on the automatic processing of personal data and especially the General Data Protection Regulation (GDPR) of the EU 2016/679, for Protection of personal data will be strictly followed when addressing ENTRACK's ethical issues.

The laws and directives to consider by area are summarized in the list below.

- The EU General Data Protection Regulation (GDPR) 2016/679, adopted on April 27, 2016, replaced Directive 95/46 / EC
- EU Directive 2016/680 on the protection of police data (PDPD), adopted on April 27, 2016.
- Standard contractual clauses (CEC). Standard contractual clauses for data transfers between EU countries and outside the EU.
- Binding Corporate Rules (BCR). Corporate rules for data transfer within multinational companies.
- EU-US data transfers. How personal data transferred between the EU and the US is protected.
- Article 29 Working Party on data protection: Working document on privacy on the Internet.

- Spanish Organic Law 3/2018, of December 5, on the Protection of Personal Data and guarantee of digital rights.
- Spanish Law 34/2002, of July 11, on services of the information society and electronic commerce.
- Bulgarian Personal Data Protection Act 2002, of January 4, last amended on November 26, 2019.
- Bulgarian Access to Public Information Act 55/2000, of July 7, last amended on July 1, 2016.

## 2 Data summary

#### 2.1 Purpose of data collection

The objective of EN-TRACK is to create a platform for gathering of data on Energy Efficiency Investments (EEI) in buildings, comprising the actual energy and costs savings achieved by them, and producing statistical evidence to support decisions on investments in building refurbishment, putting it into practice with the financial sector. This will be done by automated acquisition of energy data from external databases, and collection of data uploaded and introduced on the platform by the users through a web interface. The project will also collect data from different stakeholders and individuals as a result of surveys, interviews, consultations, conference calls and meetings, with the objective of supporting the platform design with requirements, usability tests and feedback on performance, as well as for promotion of the project results.

Ensuring interoperability with external platforms and enabling data exchange with them is an essential objective of the project. The EN-TRACK platform will provide anonymised data to the De-Risking Energy Efficiency Platform (DEEP) owned by the European Commission in order to enrich its database. EN-TRACK will also provide the possibility upon user consent to exchange data with other platforms offering services related with energy efficiency investments, such as eQuad.

#### 2.2 Data types, formats and size

The data management in EN-TRACK is an end-to-end process that includes the phases of collection, processing, generation and sharing of data throughout the project duration and beyond. The data management process is represented in Figure 1.

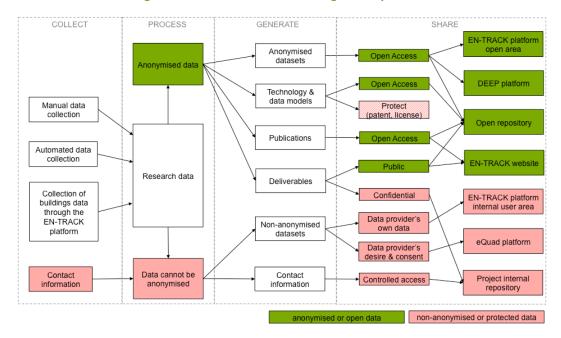


Figure 1. EN-TRACK data management process

#### 2.2.1 Data types

The data collected in EN-TRACK can be split into the following three categories:



- 1. Manually collected data:
  - a. Interviews on pilot buildings
  - b. Recording webinars and workshops
  - c. Data on user acceptance
  - d. Pictures, audio and video (project meetings, pilots and workshops)
- 2. Automatically collected and platform's user provided data:
  - a. Building characteristics
  - Building energy consumption data
  - c. Data on building improvements or Energy Efficiency Measures
  - d. Data on investments in building improvements
  - e. Meteorological data
  - f. User contact data (name, email)
- 3. Contact information
  - a. Project members
  - b. Advisory board
  - c. Subscribers in the project web and social media
  - d. Project external individuals who voluntarily participate in project activities

The data generated by EN-TRACK can be split into the following types

- 1. Publications
- 2. Deliverables
- 3. Datasets
- 4. Technology and data models

During the development of the EN-TRACK project different stakeholders will be involved. Depending on their interaction with the EN-TRACK platform the stakeholders are split into the following categories:

<u>Participants:</u> Take part of the project activities such as communication, dissemination, discussion forums, and provide feedback to the project that is valuable for the design and uptake of the project solution. They can access the open project data, but do not provide data for buildings to the EN-TRACK platform.

<u>Providers:</u> Provide data for buildings in the EN-TRACK platform, including building characteristics, energy consumption, investments, etc., and make use of the platform services. Data providers include persons, organisations or their representatives.

<u>"Participant data"</u> refers to the personal profile information, email and other contact information of the different interested parties participating in the different activities of the project.

<u>"Provider data"</u> refers to all data related to the buildings of the person or organisation owing the data and the providing it to the EN-TRACK platform. It includes different types of personal, technical and financial data that is necessary to develop the data analyses and services in the project. This data includes "proprietary data" defined as follows:

- (a) data that embody trade secrets or are commercial or financial information that is confidential and privileged.
- (b) data that are not customarily released to the public.
- (c) data whose disclosure to the public could result in financial harm to the provider, to owners of buildings whose information is contained in the data, or to other stakeholders.

Both participant and provider data will be recorded only if they give their informed consent, accept the purposes of data use of EN-TRACK, and the registration of these data is relevant to the project.

EN-TRACK will reduce by design the collection of personal information to the strictly necessary contact information for fulfilling the planned services, avoiding the registering of any sensitive data<sup>6</sup>.

Proprietary data submitted to EN-TRACK will be treated as confidential and the access to it will be protected and restricted to the data provider or authorised from users, only for the purpose of planned services.

Participants and providers must comply with the right to information and, where appropriate, with the anonymisation of the resulting data for statistical purposes only. If data cannot be irreversibly anonymised, it will be considered confidential and will be stored in the internal project repository managed by Data Protection Officer. Personal data will be subject to European legislation for processing and will also comply with the development regulations and each of the national legislations. An overview of the personal data collected in each task of the project is presented in Appendix A.

#### 2.2.2 Data formats

A dataset can include different types of formats. As an example, a manually collected dataset concerning user acceptance can consist of both written interview notes, audio files from interviews, pictures from pilot sites, and survey responses. Some of these data cannot be anonymised within the scope of this project (e.g. audio files), so in most cases only parts of a dataset can be made openly available. Concerning the automatically



https://ec.europa.eu/info/law/law-topic/data-protection/reform/rules-business-and-organisations/legal-grounds-processing-data/sensitive-data/what-personal-data-considered-sensitive\_en

collected data the project expects to deliver these datasets anonymised as open research data.

EN-TRACK will use widely accepted formats for data generation, such as:

Documents/Reports/Publications: .PDF/A, txt, doc/docx

Spreadsheets: .xls/.xslx

Databases: APIs, .cvs

Audio files. .mp3, .wav, .wma, .ra

Pictures: jpg, png

Video: avi, flv, mov, mp4, wmv

#### 2.2.3 Data size

During its duration EN-TRACK aims to collect data on about 1,150 energy efficiency projects containing in overall approximately 4,500 energy efficiency measures with evaluated energy and financial performance. This data will extend over approximately 4,500 buildings foreseen to be included in the data collection.

#### 2.3 Origin of data

EN-TRACK will collect data mainly in Spain and Bulgaria, which are the countries where the building data gathering through the project platform will be piloted. Additionally, data from relevant stakeholders may be collected from all the participant countries, including Belgium, Denmark, Italy and the UK. The methods and means used to collect data will vary, on a site-specific basis, as a function of the type of data to be collected.

For manually collected data the main origins will be:

- Interviews with groups and individual participants and external stakeholders
- Feedback from participants at stakeholder workshops
- Survey responses
- Market surveys
- Literature study/review and open data (re-use of existing data)

For automatically collected data the main origins will be:

- Data from utility smart meters and utility bills
- Data from various databases with different building data including building characteristics, energy consumption and energy efficiency investments
- Building energy certificates



- Energy audits
- Regional and local public administrations

For contact information the origins will be:

- Data provided from subscriptions in the project web, social media and events
- Data provided from the users of the platform
- Direct contacts from the project partners

#### 2.4 Data utility

The anonymised and aggregated data collected in EN-TRACK will be used for benchmarking of energy performance of buildings and evaluation of energy and financial performance of building efficiency investments. The identification of energy efficiency opportunities, recommendation of measures and support of building retrofit decisions are well within the scope of the uses of data. The data can be used by energy managers, investors, energy efficiency program implementers and policymakers to analyse energy efficiency features and trends in the building stock performance.

The proprietary data in the EN-TRACK platform will be used for services intended for commercial real estate portfolio and asset managers, building owners and operators, energy managers and other relevant stakeholders. The objective of the platform is to provide the users with technical infrastructure in a "one-stop-shop" fashion that will enable them to gather securely in single place all their building-related data, and to monitor and manage their building stock efficiently. The interoperability with other relevant platforms and the alignment with the main data standards will give EN-TRACK access to data stored in various formats and databases, and will enable its users with access to a large eco-system of tools for de-risking investments, helping them also to ensure financing for their buildings' energy efficiency plans.

## 3 Making data FAIR

EN-TRACK will manage data in accordance with the principles of FAIR data management<sup>7</sup> (Findable, Accessible, Interoperable and Re-usable data). The project aims to maximise access to, and re-use of research data generated by the project. At the same time, there are datasets, or parts of datasets, generated in this project that cannot be shared in order to protect the privacy of the users at the pilots and their proprietary data.

## 3.1 Making data findable

#### 3.1.1 The H2020 EN-TRACK Community in Zenodo

EN-TRACK will use the Zenodo repository as the main tool to make its research data findable in accordance with the H2020 Open Access Mandate. A H2020 EN-TRACK8 community has been established on the Zenodo website, and there, the project will upload all public datasets and deliverables as well as the scientific publications. In addition, EN-TRACK will link the uploads to the European Commission Funded Research (OpenAIRE) community for maximum findability. Publishing of research articles on the Open Research Europe9 platform will also be considered. All uploads will be enriched with standard Zenodo metadata, including Grant Number and Project Acronym. Zenodo provides version control and assigns DOIs to all uploaded elements.

#### 3.1.2 Metadata in Zenodo

Metadata associated with each published data set in Zenodo will include as follows:

- Digital Object Identifiers
- Abstract/description
- File sizes
- Keywords
- Related identifiers
- Version numbers
- Associated project and community

<sup>&</sup>lt;sup>9</sup> https://open-research-europe.ec.europa.eu



https://ec.europa.eu/research/participants/data/ref/h2020/grants\_manual/hi/oa\_pilot/h2020-hi-oa-data-mgt\_en.pdf

<sup>8</sup> https://zenodo.org/communities/h2020-en-track/

- Associated publications and reports
- Access and licensing info
- Language

In addition, the project name and Grant Agreement number will be included.

#### 3.1.3 Search keywords

The uploaded datasets will be accompanied with keywords that are descriptive of the content of the dataset. The project has already defined an initial general set of keywords that could be adapted and applied to the public datasets, scientific publications and public deliverables. These are as follows:

Data gathering, de-risking, benchmarking, standardization, interoperability, open source, operational database, data-driven risk assessment, building refurbishment decision-making, operational benefits, energy reporting, carbon reporting, energy efficient buildings, energy efficient Europe, energy efficiency, energy efficiency financing, energy efficiency investments, public buildings, residential buildings, innovative solutions, finance innovation, sustainable finance, green finance, M&V, M&V2.0.

#### 3.1.4 Versioning

Zenodo provides DOI versioning of all datasets uploaded to their communities, which allows users to edit and update the uploaded datasets after they have been published. This also allows users to cite specific versions of an upload and cite all versions of an upload. As an example, DOI versioning of an uploaded software package that is released in two versions can look like this<sup>10</sup>:

v1.0 (specific version): 10.5281/zenodo.60943

v1.1 (specific version): 10.5281/zenodo.800648

Concept (all versions): 10.5281/zenodo.705645

The first two DOIs for versions v1.0 and v.1.1 represent the specific versions of the software. The last DOI represents all the versions of the given software package, i.e. the concept of the software package and the ensemble of versions. They are therefore also referred to as Version DOIs and Concept DOIs, but technically they are both normal DOIs. A new DOI version will be created only if you update the actual files you have uploaded but not if you edit the metadata related to your upload (e.g. change the title of a file or dataset).

#### 3.2 Making data openly accessible

The principal objective of EN-TRACK is the gathering of data on the performance of energy efficiency investments in buildings and their use for research, benchmarking,



<sup>10</sup> https://help.zenodo.org (DOI versioning)

identification of energy efficiency opportunities, and building renovation decision support. The data will be used for research purposes and societal benefit. The public access to this data is indispensable for fulfilling this objective. However, it is necessary to guarantee the confidentiality of the individual buildings data provided by the EN-TRACK users in order to avoid disclosure of any privileged commercial or financial information that might harm the data provider or other stakeholders in any way. Guaranteeing by design the confidentiality of the proprietary data submitted to EN-TRACK is considered to be an essential feature for the future wide uptake of the solution. For this reason, the open access to the EN-TRACK data will be limited only to either aggregated data or irreversibly anonymised data that do not allow the identification of individual buildings. The full non-anonymised information on individual buildings will be used only for providing value-adding services (e.g. energy management, monitoring of the performance of the building stock, or recommendations for energy efficiency) to the EN-TRACK users that provide the data. It will never be shared with other platform users or third parties and will not be used for other purposes than the stated above.

The access to the EN-TRACK open data will be enabled in the following ways.

- Access through the EN-TRACK web tool (aggregated data)
- Sharing with / through DEEP (irreversibly anonymised data)
- Uploading of datasets on Zenodo (irreversibly anonymised data)
- Publishing articles on the Open Research Europe platform (articles using aggregated and/or irreversibly anonymised data)

Exporting or sharing of non-anonymised information with external platforms might be beneficial service for the individual EN-TRACK users, e.g. for internal use or consolidation of proprietary data within the user organisation, or for using external services, e.g. access to investors or financing. EN-TRACK will ensure that non-anonymised data is only exported or shared with the explicit consent of the user and to the extent of the consent granted by the data provider and data owner. In this respect, EN-TRACK will establish data sharing capabilities with the eQuad<sup>11</sup> platform, owned by the project partner Joule Assets, providing access to sustainable financing and investors. Any data sharing with other platforms considered in the course of the project will follow the same principles of requiring explicit user consent.

#### 3.3 Making data interoperable

The EN-TRACK platform will adopt the Building Energy Data Exchange Specification<sup>12</sup> (BEDES) dictionary of common terms as an internal standard for data harmonization and interoperability with other databases and tools. The internal data model will be publicly available and mapped to the BEDES dictionary of standard terms. This will make data from different sources comparable and suitable for integration in the platform. Several public deliverables are dedicated to the interoperability of the project data:

<sup>12</sup> https://bedes.lbl.gov



.

<sup>11</sup> https://www.eu.jouleassets.com/about-equad

- D1.1 EN-TRACK overall requirements and data model
- D1.5 Report on interoperability with external platforms
- D1.6 EN-TRACK & DEEP mapping to BEDES
- D2.3 Analytics and interoperability implementation report

Interoperability and data exchange with the DEEP and other currently active third-party platforms such as eQuad and Enerinvest, will be ensured through mapping of relevant data fields, including the taxonomies of energy efficiency measures (EEM), building typologies, etc.

The public access to the EN-TRACK internal data model and its alignment to other platforms promoting energy efficiency investments aims the creation of an eco-system of complementary databases and tools for supporting the technical and financial decision making in refurbishment of the existing building stock.

#### 3.4 Increase data re-use

EN-TRACK aims at ensuring wide availability and re-use of the collected data on performance of energy efficiency investments in buildings. Irreversibly anonymised data will be shared with the DEEP platform. The collected data in EN-TRACK could also be re-used in other platforms upon the desire and consent of the EN-TRACK users and data providers, within the limits of their credentials for the platform use. This will be done by enabling the export of the data from the platform, which is an envisaged service within the scope of EN-TRACK.

#### 3.4.1 Licences

Application of licences will be assessed on a case-by-basis in close collaboration with the Coordinator, the IPR manager and the partners concerned.

Where applicable, EN-TRACK will make use of Creative Commons licences (CC), which are tools to grant copyright permissions to creative work. As a default, CC BY-SA licence will be applied for the public data of EN-TRACK. This license lets others remix, adapt, and build upon your work even for commercial purposes, as long as they credit you and license their new creations under the identical terms. This license is often compared to "copyleft" free and open-source software licenses. With this licence all new works based on EN-TRACK will carry the same license, so any derivatives will also allow commercial use. This does not preclude EN-TRACK from use of less restrictive licenses as CC BY or CCO, or more restrictive licenses such as CC BY-NC, which does not allow commercial usage.

#### 3.4.2 Longevity of the research datasets

#### Public data (anonymous)

For data published in scientific journals, the underlying data will be made available no later than by the date of the journal publication. The data will be linked to the publication. Data associated with public deliverables will be shared once the deliverable has been approved and accepted by the EC. For other public datasets not directly linked to a scientific publication or deliverable, such datasets will be made available upon assessment by the project participants when they are ready for publishing, and in the final month of the project at the latest.

Open data can be reused in accordance with the Creative Commons licences. Data classified as confidential as default will not be re-usable due to privacy concerns.

The public data will remain reusable via Zenodo for at least 20 years. This is currently the lifetime stated by the host laboratory CERN. In the event that Zenodo has to close their operations, they have provided a guarantee that they will migrate all content (including metadata) to other suitable repositories.

#### Confidential data (non-anonymous)

The EN-TRACK platform is intended to be kept operational beyond the project duration. The proprietary data for buildings provided by the users to the platform are essential for its operation and the services it provides and will be stored in the platform according to the subscribed Service Level Agreement (SLA) between the users/data providers and the EN-TRACK platform. The SLA will be elaborated towards the end of the project within the scope of the project results exploitation (WP5-Exploitation and business plan) and will contain the rules and the longevity of the data storage in the platform, as well as the rules for deleting these data.

All other non-anonymous data will be deleted 6 months after the end of the project. These additional 6 months are necessary to keep the underlying datasets available to allow the completion of any scientific publications being prepared towards the end of the project. An exemption is pictures and videos, taken with consent from voluntary pilot participants that are used for communication purposes. If consent is not withdrawn at an earlier time, such data will be kept for up to 5 years after the end of the project in order to comply with the EC contractual obligation to continue dissemination and exploitation activities after the project ends. If a party withdraws the consent to use this material (pictures, videos), it will be deleted without delay.

## 4 Allocation of resources

EN-TRACK uses standard tools and free of charge repository for research data. The costs of data management activities are limited to project management costs and will be covered by allocated resources in the project budget.

Long-term preservation of the public data is ensured through Zenodo. Other resources needed to support reuse of data after the project ends will be solved on a case-by-case basis.

The overall responsibility for the data management lies in the project coordinator and the designated data protection officer. CIMNE will act as a Data Controller for the EN-TRACK platform. Detail on the data treatment activities is presented in the table below.

Table 1. Registration of data treatment activities in the project

Responsible for the data treatment	CENTRE INTERNACIONAL DE METODES NUMERICS EN ENGINYERIA (CIMNE) C/ Gran Capità, s/n Edifici C1, UPC-Campus Nord 08034 Barcelona
Group object of treatment	Project participants
Category of interested parties	Users and contact persons
Type of data	VAT number, name, address, telephone, email
Legal basis	Consent (form)
Purpose of treatment	Participation of the EN-TRACK project
Recipient categories	No data will be transferred outside of the project consortium
International transfer	Not foreseen outside the EU area
Technical and organisational measures	Data stored in EU servers  Access by username and password  Access control  Backup copies
Conservation period	6 months after the end of the project In case of contact data, based on legitimate interest, they will be kept for the communication of events and similar services / products
Address for rights exercise	rgpd@cimne.upc.edu  More information on: https://www.cimne.com/3011/policy
Data Protection Officer	dpo@cimne.upc.edu

## 5 Data security

In this section the security features of the research data infrastructure used to store and handle data in the EN-TRACK project are described.

#### 5.1 Nextcloud shared repository

CIMNE as a project coordinator of EN-TRACK have set up Nextcloud as a file-sharing repository for all project partners. The Nextcloud repository is installed and operates on CIMNE's servers hosted on OVH Group cloud. Nextcloud will be the project's online collaboration platform during the project lifetime, and for up to 6 months after the end of the project for final closing activities.

The EN-TRACK's Nextcloud repository has the following security settings:

- Access level: Restricted to persons (project members only). Further access restrictions on specific folders is enabled.
- Encryption with SSL/TLS protects data transfer between partners and the Nextcloud repository.
- Tracking and monitoring for file/data integrity, user modifications, and possible manipulation of data
- Automatic daily backups during each month. Monthly backups during the whole project period.

#### 5.2 Data security as specified for Zenodo

The following list describes the security settings for Zenodo:

- Versions: Data files are versioned. Records are not versioned. The uploaded data
  is archived as a Submission Information Package. Derivatives of data files are
  generated, but original content is never modified. Records can be retracted from
  public view; however, the data files and records are preserved.
- Replicas: All data files are stored in the CERN Data Centres, primarily Geneva, with replicas in Budapest. Data files are kept in multiple replicas in a distributed file system, which is backed up to tape on a nightly basis.
- Retention period: Items will be retained for the lifetime of the repository. The host laboratory of Zenodo CERN, has defined a lifetime for the repository of the next 20 years minimum.
- Functional preservation: Zenodo makes no promises of usability and understandability of deposited objects over time.

- File preservation: Data files and metadata are backed up nightly and replicated into multiple copies in the online system.
- Fixity and authenticity: All data files are stored along with an MD5 checksum of the file content.
- Files are regularly checked against their checksums to assure that file content remains constant.
- Succession plans: In case of closure of the repository, a guarantee has been made from Zenodo to migrate all content to suitable alternative institutional and/or subject based repositories.

#### 5.3 Data security for the EN-TRACK platform

- Replicas: All data stored in the EN-TRACK platform will be kept in multiple replicas in a distributed file system to avoid data loss, as well as to increase system availability for delivering services. The data will be stored in Europeanbased servers.
- Access level: All individual buildings data stored in the EN-TRACK platform, including the data for building identification such as building name, building owner, exact location, will be accessible only for the building data providers. The access will be password protected, with different level of credentials for the authorised users (e.g. read only or read and modify) and fully traceable within the system. The users and data providers of the platform will access only anonymised and aggregated information of other users for the purpose of receiving benchmarking and other statistical analysis-based services.
- Authentication: EN-TRACK will use the Kerberos authentication protocol to
  ensure the secure authentication of the users. Kerberos uses tickets to
  authenticate users and completely avoids sending passwords across the
  network. The provided API for accessing the data from external sites will be
  secured using authentication tokens and SSL.

## 6 Ethical Aspects

The legislation that impacts the project data sharing is described in section 1.2 Legal framework. The proposed work will fully comply with the regulations set out in the GDPR. In addition, EN-TRACK complies with the principles of the European Charter for Researchers, the European Code of Conduct for Research Integrity, including ethical standards and guidelines, regardless country in which research is carried out.

Nothing in this project shall be deemed to require a party to breach any mandatory statutory law under which the party is operating. This includes any national or European regulations, rules and norms regarding ethics in conducting research.

The coordinator of EN-TRACK will oversee the conformance with ethical principles and data protection legislation within Task 8.5 Ethics & data protection management.

All data collection in the project will be guided by the principle of informed consent. An information letter will be provided to the participants prior their data collection, on paper or electronically. The letter will be adapted to the different types of project activities and will address the following aspects of data collection and use:

- The type of data that will be collected during the event or study.
- How the data will be collected (interview, automatic data collection, etc.)
- The purpose of the data collection and the expected results.
- How the data collected will be handled.
- Who will have access to the data.
- The rights of the participants.

## 7 Conclusions

Formal approval and release of this deliverable within the consortium constitutes a formal commitment by partners to adhere to the data management strategy and the procedures it defines. When the deliverable is formally approved by the European Commission, this constitutes confirmation that the procedures are considered by the European Commission to be adequate.

As coordinator of the EN-TRACK project, CIMNE will ensure that any data management issues which may arise during the project will be handled appropriately and in a transparent and fair manner.

The DMP is a living document that will expand as the project evolves and new information on data collection, generation and handling arise. Day to day data management will happen through the online tools described in this document, and through continuous collaboration between the coordinator, the task leaders and the DPO. A revised and extended version of this DMP will be prepared in month 30 of the project to reflect the current status of data management.

# 8 Appendix A. Personal data collected per task

The following table shows if there is foreseen to collect personal data per each tasks of the project.

Table 2. Personal data collected per task

Will collect personal data?		
Task number and description	Responsible	
Task 1.1 – Data requirements definitions	ENERGYPRO	NO
Task 1.2 – Definition of data sources for EN-TRACK	CIMNE	NO
Task 1.3 – Analytic output requirements	CIMNE	NO
Task 1.4 – Definition of measurement and verification procedures	ENERGYPRO	NO
Task 1.5 – Standardisation and interoperability assuring	CIMNE	NO
Task 2.1 – Implementation of the EN-TRACK data model	CIMNE	NO
Task 2.2 – Data cleaning and quality checking	CIMNE	NO
Task 2.3 – Adaptation of the user interfaces	CIMNE	NO
Task 2.4 – Implementation of Measurement & Verification procedures	CIMNE	NO
Task 2.5 – Implementation of benchmarking	CIMNE	NO
Task 2.6 – Development of interfaces with DEEP and third-party systems	CIMNE	YES
Task 3.1 – Building owners' needs for system functionalities and outputs	ICAEN	YES
Task 3.2 – Data location scenarios of building owner organisations	ICAEN	YES
Task 3.3 – Protocols and procedures to gather data inside the organization	ICAEN	YES
Task 4.1 – Continuous data gathering	DTES	YES
Task 4.2 – User operation and continuous engagement	DTES	YES
Task 4.3 – De-risking service operation and verification	CIMNE	NO
Task 4.4 – Project financing pre-qualification	JOULE	YES
Task 4.5 – User feedback and continuous evaluation	DTES	YES
Task 5.1 – Scenarios for exploitation of EN-TRACK after the project	ENERGYPRO	NO
Task 5.2 – Business models development	JOULE	NO
Task 5.3 – Service extension agreements preparation	CIMNE	NO

Task 6.1 – Collaboration and capacity building including training material for building owners and contractors	ENEFFECT	NO
Task 6.2 – Collaboration and capacity building including training material elaboration for investors	JOULE	YES
Task 6.3 – Engagement and capacity building through building owners forum (BOF) and financial institutions forum (FIF)	ENEFFECT	YES
Task 6.4 – On-line training course	ENEFFECT	YES
Task 6.5 – Help desk	ENEFFECT	YES
Task 7.1 – Communication and dissemination strategy	GECO	YES
Task 7.2 – Project logo, design templates and project narrative	GECO	NO
Task 7.3 – Website development and launch of social media channels	GECO	YES
Task 7.4 – Promotion, public presentations, publications	GECO	YES
Task 7.5 – Exploitation plan	GECO	NO
Task 8.1 – Consortium coordination and communication	CIMNE	YES
Task 8.2 – Administrative management	CIMNE	YES
Task 8.3 – Technical management	CIMNE	NO
Task 8.4 – Advisory group	CIMNE	YES
Task 8.5 – Ethics and data protection management	CIMNE	NO
Task 8.6 – Quality assurance	CIMNE	NO

For the tasks that will collect personal data (see preceding table), the purpose and volume of the data to be collected is anticipated here.

Table 3. Task 2.6 personal data collection

Task 2.6 Development of interfaces with DEEP and third-party systems - CIMNE		
Purpose of data collection	Manage and involve persons who will give information	
Expected number of individuals	Around 10 actors	
Expected types of data to collect	Name, e-mail, phone and Organization.	
Medium for collection	Through direct contact	
Storage and security	EN-TRACK repository with access restricted to project partners	

Table 4. Task 3.1 personal data collection

Task 3.1 Building owners' needs for system functionalities and outputs - ICAEN		
Purpose of data collection	Manage and involve persons who will give information	
Expected number of individuals	Around 200 actors	
Expected types of data to collect	Name, e-mail, phone and Organization.	
Medium for collection	Through direct contact	
Storage and security	EN-TRACK repository with access restricted to project partners	

Table 5. Task 3.2 personal data collection

Task 3.2 Data location scenarios of building owner organizations - ICAEN		
Purpose of data collection	Manage and involve persons who will give information	
Expected number of individuals	200 actors/owners (of buildings or dwellings)	
Expected types of data to collect	Name, e-mail, phone and Organization.	
Medium for collection	Through direct contact	
Storage and security	EN-TRACK repository with access restricted to project partners	

Table 6. Task 3.3 personal data collection

Task 3.3 Protocols and procedures to gather data inside the organization - ICAEN	
Purpose of data collection	Manage and involve persons who will give information
Expected number of individuals	200 actors/owners
Expected types of data to collect	Name, e-mail, phone and Organization.
Medium for collection	Through direct contact
Storage and security	EN-TRACK repository with access restricted to project partners

Table 7. Task 4.1 personal data collection

Task 4.1 Continuous data gathering - DTES	
Purpose of data collection	To manage and follow up its activity as potential users for the EN-TRACK platform, and keep

	them informed about the project progress and development, ask them for feedback.
Expected number of individuals	15-20 persons (DTES BO/DM and entities)
Expected types of data to collect	Name, email, telephone, company or organisation, location, professional position
Medium for collection	Partner contact directly
Storage and security	Document in EN-TRACK repository with access restricted to project partners

Table 8. Task 4.2 personal data collection

Task 4.2 User operation and continuous engagement - DTES	
Purpose of data collection	■To manage and follow up its activity as potential users for the EN-TRACK platform, and keep them informed about the project progress and development, ask them for feedback.
Expected number of individuals	■15-20 persons (DTES BO/DM and entities)
Expected types of data to collect	Name, email, telephone, company or organisation, location, professional position
Medium for collection	Partner contact directly
Storage and security	Document in EN-TRACK repository with access restricted to project partners

Table 9. Task 4.4 personal data collection

Task 4.4 Project financing pre-qualification - JOULE	
Purpose of data collection	To test the functionality of the financing pre- qualification process using data from the selected pilot sites
Expected number of individuals	40+ building owners
Expected types of data to collect	Energy efficiency measures Financial data/statements Company information Building information
Medium for collection	Direct contact with Building owners/contractors  Direct upload to eQuad
Storage and security	eQuad document management system  Joule internal OneDrive folders  Restricted to data owners and platform administrators.

Table 10. Task 4.5 personal data collection

Task 4.5 Continuous data gathering - DTES	
Purpose of data collection	To manage and follow up its activity as potential users for the EN-TRACK platform and keep them informed about the project progress and development, ask them for feedback.
Expected number of individuals	15-20 persons (DTES BO/DM and entities)
Expected types of data to collect	Name, email, telephone, company or organisation, location, professional position
Medium for collection	Partner contact directly
Storage and security	Document in EN-TRACK repository with access restricted to project partners

Table 11. Task 6.2 personal data collection

Task 6.2 Collaboration and capacity building including training material elaboration for investors - JOULE	
Purpose of data collection	Outreach to Financial institutions
Expected number of individuals	50
Expected types of data to collect	Name, email, telephone, company or organisation, position
Medium for collection	Direct contact with Financial institutions  Newsletters  LinkedIn lead generation
Storage and security	Joule internal OneDrive Joule Hubspot EN-TRACK repository, with access restricted to project partners

Table 12. Task 6.3 personal data collection

Task 6.3 Engagement and capacity building through building owners forum (BOF) and financial institutions forum (FIF) - EnEffect	
Purpose of data collection	FIF & BOF communication and engagement with stakeholders
Expected number of individuals	25 up to 30 persons (for both fora)
Expected types of data to collect	Name, email, telephone, company or organisation, position

Medium for collection	Partner contact directly
Storage and security	List of potential participants uploaded to EN- TRACK repository with private access restricted to project partners

Table 13. Task 6.4 personal data collection

Task 6.4 On-line training course - EnEffectConsult	
Purpose of data collection	Follow-up on developments and future engagement
Expected number of individuals	Approx. 45 up to 60 for all 3 courses
Expected types of data to collect	Name, email, telephone, company or organisation
Medium for collection	Online form filling or through FIF/BOF members' appointment
Storage and security	Document in EN-TRACK repository with access restricted to project partners

Table 14. Task 6.5 personal data collection

Task 6.5 Help Desk - EnEffectConsult	
Purpose of data collection	For general service to support users working offline, and to keep track of their current stage of engagement
Expected number of individuals	Approx. 100
Expected types of data to collect	Name, email, telephone, company or organisation
Medium for collection	Online form filling
Storage and security	Document in EN-TRACK repository with access restricted to project partners

Table 15. Task 7.1 personal data collection

Task 7.1 Dissemination and communication strategy - GECO	
Purpose of data collection	To set up the Communication and stakeholder engagement board
Expected number of individuals	13
Expected types of data to collect	Name, email, company of internal members of the Communication and stakeholder

	engagement board
Medium for collection	Direct contact by email
Storage and security	Document in EN-TRACK repository with private access restricted to project partners; Confidential D7.2 stored in the repository

Table 16. Task 7.3 personal data collection

Task 7.3 Website development and launch of social media channels - GECO	
Purpose of data collection	To monitor and manage visitors and followers on project's social medias
Expected number of individuals	1500
Expected types of data to collect	Name, social media profiles
Medium for collection	Direct subscription
Storage and security	Project's social media channels (Twitter, LinkedIn, YouTube) with restricted access to the communication officer and project coordinator

Table 17. Task 7.4 personal data collection

Task 7.4 Promotion, public presentations, publications - GECO	
Purpose of data collection	To manage speakers and participants for events and online presentations; to manage and monitor stakeholder community members
Expected number of individuals	120
Expected types of data to collect	Name, email, company, country
Medium for collection	Direct contact, subscription to stakeholder community via Mailchimp
Storage and security	Document in EN-TRACK repository with private access restricted to project partners; online storage in Mailchimp with restricted access to the communication officer and project coordinator

Table 18. Task 8.1 personal data collection

Task 8.1 Consortium coordination and communication - CIMNE	
Purpose of data collection	Project management and reporting.
Expected number of individuals	30-40 persons



Expected types of data to collect	Names, emails, telephone, company or organisation, pictures, videos and audios of project meetings.
Medium for collection	Provided by each partner or manually collected
Storage and security	Document in EN-TRACK with private access restricted to project partners

Table 19. Task 8.2 personal data collection

Task 8.2 Administrative management – CIMNE	
Purpose of data collection	Project management
Expected number of individuals	15-20 persons or organisations
Expected types of data to collect	Name, emails, fiscal address, telephone, bank account
Medium for collection	Provided by individuals or organisations
Storage and security	SIGPRO, an ERP for project management platform in CIMNE servers.

Table 20. Task 8.4 personal data collection

Task 8.4 Advisory board - CIMNE	
Purpose of data collection	To manage and organise the involvement of the Advisory Board
Expected number of individuals	6-10 persons
Expected types of data to collect	Name, email, telephone, company or organisation
Medium for collection	Partner contact directly
Storage and security	Document in EN-TRACK with private access restricted to project partners

# 9 Appendix B: Confidentiality agreement

## **CONFIDENTIALITY AGREEMENT**

#### TOGETHER:

And on the other hand, each of the Project partners:

1.	GECO Global (Denmark), Danish entity, domiciled at and provided with VAT number and on his behalf and or behalf of Mr acting in his capacity as legal representative of the same.
2.	ICAEN (Spain), Spanish entity, domiciled at and on his behalf and on behalf or Mr acting in his capacity as legar representative of the same.
3.	JOULE ASSETS (Belgium, Italy), Belgian entity, domiciled at
4.	ENERGY PRO (UK), UK entity, domiciled at
5.	ENEFFECTCONSULT (Bulgaria), Bulgarian entity, domiciled at
6.	DTES (GENCAT), Spanish entity, domiciled at

(hereinafter, "the participants").

#### STATE:

- I. That CIMNE is the coordinating entity of the project, technology provider, responsible for the development of the EN-TRACK platform, and data controller for that platform.
- II. That GECO Global (Denmark) will be in charge of communication and therefore will manage the website, Mailchimp, social networks (twitter, LinkedIn and YouTube); of the organization of forums for stakeholders, building owners and financial institutions; of the configuration of said forums in the most appropriate way and form according to their needs.
- III. That ICAEN (Gencat) is responsible for ensuring the collection and compilation of data for the EN-TRACK platform, mainly from public buildings, and for participation in dissemination and communication activities to promote, encourage, and involve the public and private sectors in the exchange of their buildings' energy data with the EN-TRACK platform.
- IV. That JOULE ASSETS (Belgium, Italy), will be in charge of acquiring financial institutions' requirements, supervising the development of the business model and the value proposition for the exploitation of the project and will work on the development of relationships with financial institutions.
- V. That ENERGY PRO (U.K) is a developer of tools and infrastructures related to energy efficiency, and will be in charge of supporting production of standardized taxonomies and interoperable data models within the project.
- VI. That ENEFFECTCONSULT (Bulgaria) is responsible for stakeholder participation and development of training materials for building owners and contractors, as well as providing information on buildings (public and private) to the project.
- VII. That DTES (Gencat) will collect building data, characteristics, and energy efficiency measures, etc. with the support of the energy managers of each building.
- VIII. That all parties want to explore the possibility of signing a professional collaboration agreement and to develop said agreement it will be necessary to exchange confidential information between all participants in the Project.
- IX. That the parties wish to regulate the way in which the confidential information exchanged should be treated to ensure the status of confidentiality and the non-

disclosure of the information that may be provided, generated or obtained from the parties in relation to said collaboration, therefore, in By virtue of all the foregoing, the Parties have agreed to sign this Confidentiality Agreement (hereinafter, the "Agreement"), which will be governed in accordance with the following

#### **CLAUSES:**

**FIRST. GENERAL.** For the purposes of this agreement, the term "Confidential Information" shall be understood in a broad sense and includes, without limitation and regardless of whether said information is identified as confidential or not by the party that provides it to the others, the following:

- a) All proprietary information of the party that provides it to the others.
- b) Any information that gives the party that facilitates it, competitive advantages in their businesses or the opportunity to obtain that advantage or whose disclosure would cause damage to that party.
- c) Any information that has or may have commercial value or other utility in the party's business or in those businesses in which it is expected to be involved.
- d) Any information that, if disclosed or used without authorization, may cause harm to the party that provided it or
- e) All information that should reasonably be considered confidential by the parties that receive it.

For example, and without being exhaustive, all information on techniques, processes, formulas, manufacturing processes, industrial secrets, inventions, technological developments, discoveries, improvements, results in research or development, specifications, compilations, data will be considered "Confidential Information". Knowhow, formats, marketing plans, accounting results, profit margins, business plans and practices, strategies, forecasts, unpublished financial information, budgets, projections, identities and information about customers and suppliers (whether past, present or potential), software in all its stages of development (for example, source code, object code, documentation, diagrams, flows), designs, drawings, specifications and models, regardless of the medium that it contains.

# <u>SECOND. EXCLUSIONS TO CONFIDENTIAL INFORMATION.</u> Confidential Information will not be considered that which:

- a) It is in or is part of the public domain and not due to a breach of this agreement by the party receiving the information.
- b) It is obtained by the receiving parties from a third party who legally owns it and who has not disclosed it to the receiving parties or third parties in breach of any commitment or confidentiality agreement with the party providing the information or a third party.
- c) It can be proven by the receiving parties that it was in their possession by legitimate means or that it was created completely and independently by said party without any confidentiality agreement being in force at that time and prior to the provision of said information by the other part.

THIRD. COMMITMENTS OF THE RECEIVING PARTIES. As a result of receiving confidential information, the receiving parties will occupy a privileged position of trust and



confidence with respect to the party that provides such information. In view of this, the parties agree that it is reasonable and necessary for the receiving parties to make the following commitments:

NO DISCLOSURE. The receiving parties will not disclose the confidential information received to any person or entity without first obtaining the written consent of the party providing such information. Nor can they use the information received without the aforementioned consent.

Confidential information may be disclosed by the receiving parties to those companies that are part of their business group as well as to those managers and / or employees who are strictly necessary to access it for the purposes of the professional collaboration described above, without prejudice to the receiving parties taking whatever measures are necessary for the exact and faithful compliance of this Agreement, and must necessarily inform and give guidelines to each other regarding the confidential, secret and restricted nature of the information they disclose, as well as of the existence of this Agreement.

Notwithstanding the foregoing, the party that provides the Confidential Information may request and collect from the receiving parties, as a condition prior to providing the Confidential Information, a list of the directors and / or employees who will have access to said information, a list that It may be restricted or reduced at the request of the party that facilitates it. This list will be signed by each of the directors and employees that appear in it, expressly stating that they are aware of the existence of this Agreement and that they will act in accordance with the provisions of it. Any modification of the list of directors and / or employees referred to above will be communicated immediately in writing, containing the points previously indicated in this paragraph. Without prejudice to the provisions of the preceding paragraphs, each party will be responsible for both the conduct of its managers and / or employees and the consequences of it that may arise in accordance with the provisions of this Agreement.

STANDARD OF CARE. The receiving parties must keep the confidential information received from the other party secret and under strict custody and custody and must keep the same measures and level of security in relation to it as those applied to their own confidential information.

MATERIAL RETURN. Once the duration of this agreement has ended, or after 5 calendar days from the written request of the parties that provide the information, the receiving party must return all the confidential information that it has received or obtained from the other party. The above obligation to return and not retain said information in any way does not exonerate the receiving party from the obligations contained in this agreement with respect to said information.

<u>USE OF TRADEMARKS OR COMPANY NAME.</u> Neither party may use the trademarks, company name or trade name of the other party, or refer to them for commercial purposes without the prior written consent of the other party.

<u>USE OF CONFIDENTIAL INFORMATION AND POSSIBLE LEAKS.</u> Both parties undertake to use the confidential information exchanged in the scope strictly necessary



for the fulfilment of the object of this Agreement, assuming the recipient of the Confidential Information the responsibility for any use other than the same made by it or by the natural persons to whom has allowed access to Confidential Information.

Each of the parties must notify the other party of any leakage of information of which they have or come to have knowledge, produced by the violation of this Agreement or for any other cause, whether or not, a consequence of their own action or omission (it is includes in this section the disclosure of the information by the people who have accessed it in accordance with the provisions of this section), well understood that such communication does not exempt the party that has breached this confidentiality agreement from liability.

**FOURTH. RESERVATION OF RIGHTS.** All rights relating to Confidential Information are reserved by the party providing such information for the EN-TRACK Project and no right or obligation other than those expressly set forth herein is recognized. In particular, no license or use right to any invention, patent, copyright or other intellectual property rights of a party over rights of this nature of the other parties is recognized by signing this Agreement, except the limited right to access Confidential Information in accordance with the terms of this agreement.

<u>FIFTH. DURATION.</u> The validity of this agreement will begin on the day of its signature and the obligations contained therein will remain in force for a period of three (3) years from the day of its signature.

<u>SIXTH. CESSION OF RIGHTS.</u> This agreement has been signed due to the special conditions that apply to the contracting parties and, therefore, cannot be assigned or in any way transferred to third parties without the prior written consent of the other parties.

**SEVENTH. APPLICABLE LAW AND JURISDICTION.** This agreement and the relationship between the parties will be governed and interpreted in accordance with the laws of Spain and will be binding on the parties throughout the world.

The parties expressly agree that any question that arises in relation to the interpretation, execution or termination of this agreement that cannot be resolved amicably will be submitted to the jurisdiction of the Courts and Tribunals of Barcelona, to which the parties expressly submit.

And for the record, and for the appropriate purposes, the parties sign this agreement on the date and place indicated below.

(Signatures follow)