



FOSTERING INDUSTRIAL SYMBIOSIS FOR A SUSTAINABLE RESOURCE  
INTENSIVE INDUSTRY ACROSS THE EXTENDED CONSTRUCTION VALUE CHAIN

# Data Management Plan

## Executive summary

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 642154.

*The European Commission promotes open access as it serves as an option of how to gain affordable and easy accessible scientific information for the scientific community.*

According to the Guidelines on Open access to Scientific Publications and Research Data for projects funded or co-funded under Horizon 2020, Europe 2020 strategy underlines the central role of knowledge and innovation in growth generation. For these reasons, the European Union strives to improve access to scientific information and to boost the benefits of public investment in the research funded under the EU Framework Programme Horizon 2020. As the FISSAC project participates in the Commission's Open Pilot Open Research Data, a data management plan is essential for the consortium.

*A data management plan (DMP) outlines how data are to be handled both during a research project as well as after the project is completed.*

A DMP deals with many aspects of data management such as main data uses, data users, data transferability as well as restrictions related to IPR.

#### Open Access and Open Research Data Pilot

It is the practice of providing online access to scientific information that is free of charge to the reader and that is reusable. Within the context of the FISSAC project, "scientific information" may refer to peer-reviewed scientific research articles or research data.

Horizon 2020 Regulation and the Rules of Participation state that the open access to scientific peer-reviewed articles must be available. Consequently, **all scientific peer-reviewed articles** produced within FISSAC will be accessible. Each beneficiary must:

- as soon as possible and at the latest on publication, deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications. Moreover, the beneficiary must aim to deposit at the same time the research data needed to validate the results presented in the deposited scientific publications;
- ensure open access to the deposited publication — via the repository — at the latest:
  - (i) on publication, if an electronic version is available for free via the publisher, or
  - (ii) within six months of publication in any other case (twelve months for social sciences and humanities publications);
- ensure open access — via the repository — to the bibliographic metadata that identify the deposited publication.

**Research data** refers to information, in particular facts or numbers, collected to be examined and considered as basis for reasoning, discussion, or calculation. The scientific research data should be easily discoverable, accessible, intelligible, usable, interoperable. Each of the FISSAC partners must:

- deposit in a research data repository and take measures to make it possible for third parties to access, mine, exploit, reproduce and disseminate — free of charge for any user — the following:
  - (i) the data, including associated metadata, needed to validate the results presented in scientific publications as soon as possible;
  - (ii) other data, including associated metadata, as specified and within the deadlines laid down in the 'data management plan';
- provide information — via the repository — about tools and instruments at the disposal of the beneficiaries, necessary for validating the results (and, where possible, provide the tools and instruments themselves).

*The beneficiaries do not have to ensure open access to specific parts of their research data if the achievement of the action's main objective would be jeopardised by making those specific parts of the research data openly accessible.*

#### Information Management and Policy

*Content Management* systems allow storing and organizing files while providing version-controlled access to the data. The goal of *Information Management* is to capture, manage, preserve, store and deliver the right information to the right audience at the right time. For FISSAC, the project website will be used for storing both public and private documents related to the project and dissemination.

#### FISSAC Data Sets and Data Sharing

A data set is defined as a structured collection of data in a declared format. The responsibility to define and describe all non-generic data sets specific to an individual work package shall be with the Work Package (WP) leader.

WP No.	WP leader	Dataset reference	Dataset name
1	Acciona	FISSAC_WP1	Industrial symbiosis
2	Acciona	FISSAC_WP2	Recycling processes
3	RISE	FISSAC_WP3	Eco-design
4	Tecnalía	FISSAC_WP4	Preindustrial demo
5	Acciona	FISSAC_WP5	Real-scale demo
6	Ekodenge	FISSAC_WP6	FISSAC model
7	RINA	FISSAC_WP7	Replicability
8	Fenix	FISSAC_WP8	Exploitation
9	ACR+	FISSAC_WP9	Dissemination
10	Acciona	FISSAC_WP10	Management

Each individual project data set item shall be allocated a 3-character “dissemination classification” for the purposes of defining the data sharing restrictions. Those are:

- **PU:** Public (data can be shared outside the consortium without restriction)
- **CO:** Confidential, only for members of the consortium (including the Commission Services)
- **CI:** Classified, as referred to in Commission Decision 2001/844/EC

The Lead author is responsible for getting approvals and then sharing the data and metadata on **Zenodo** ([www.zenodo.org](http://www.zenodo.org)), a popular repository for research data. The Lead Author will also create an entry on **OpenAIRE** ([www.openaire.eu](http://www.openaire.eu)) in order to link the publication to the data.

### Technical Requirements of Data

The applicable data sets are restricted to the following data types for the purposes of archiving. The copyrights with respect to all data types shall be subject to intellectual property rights (IPR) clauses in the Grant Agreement (GA), but shall be royalty-free.

### Static Graphical Images

Graphical images shall be defined as any digital image irrespective of the capture source or subject matter. Images should contain only objects that are directly related to FISSAC activity and do not breach IPR of any third parties.

*Image default sizes and resolutions*

PPI	Pixels	mm	Paper size	Size (Greyscale)	Size (RGB)
300	11114x14008	840x1186	A0	155.7MB	467MB
300	7016x11114	594x840	A1	78MB	234MB
300	4961x7016	420x594	A2	34.8M	104.4MB
300	3508x4961	297x420	A3	17.4MB	52.2MB
300	2480x3508	210x297	A4	8.7MB	26.1MB
300	1748x2480	148x210	A5	4.3MB	13MB
300	1240x1748	105x148	A6	2.2MB	6.5MB
300	874x1240	74x105	A7	1.08MB	3.25MB
300	614x874	52x74	A8	0.54MB	1.6MB

### Animated graphical image

Graphic animation is a variation of stop motion consisting of the animation of photographs (in whole or in parts) and other non-drawn flat visual graphic material. The two allowed animated graphical image file formats are AVI and MPEG.

### Audio data

An audio is a file format for storing digital audio data on a computer system. The data can be a raw bitstream in an audio coding format, but it is usually embedded in a container format or an audio data format with defined storage layer.

### Textual data

A text file is structured as a sequence of lines of electronic text. These text files shall not contain any control characters including end-of-file marker. In principle, the least complicated form of textual file format shall be used as the first choice.

### Numerical data

Numerical data is information that often represents a measured physical parameter. It shall always be captured in number form.

### Process and test data

Standard Test Data Format (STDF) is a proprietary file format originating within the semiconductor industry for test information, but it is now a Standard widely used throughout many industries.

### Microsoft Office Application Suite

FISSAC participants shall use the currently MS supported operating system and convert from any previous obsolete releases.

At the Microsoft Office Application level the “file properties” shall be configured using the “document properties” feature as follows:

Title	Duplication of the name used for the data file name
Subject	Identifier for FISSAC work package in following format FISSAC_WPxx (xx is the WP number from 1 to 10)
Author	Name of the person creating the document as follows: surname_firstname_secondname
Manager	Name of the author’s immediate line manager as follows: surname_firstname_secondname
Company	Company name of the author to be stated as follows: companyname_FISSAC participant number
Keywords	Key words that would be relevant and useful to future data searches. The keywords should all be in lower case and separated with commas
Comments	Description of file contents in free format text
Hyperlink base	Blank

*\*The tick box indicating “Save Thumbnails for All Word Documents” shall be untagged.*

### Naming Convention

The last section of the Deliverable sets the rules for naming the relevant FISSAC files. There are different formats of naming a document for *Deliverables*, *Appendixes*, and for *documents approved by the European Commission*.