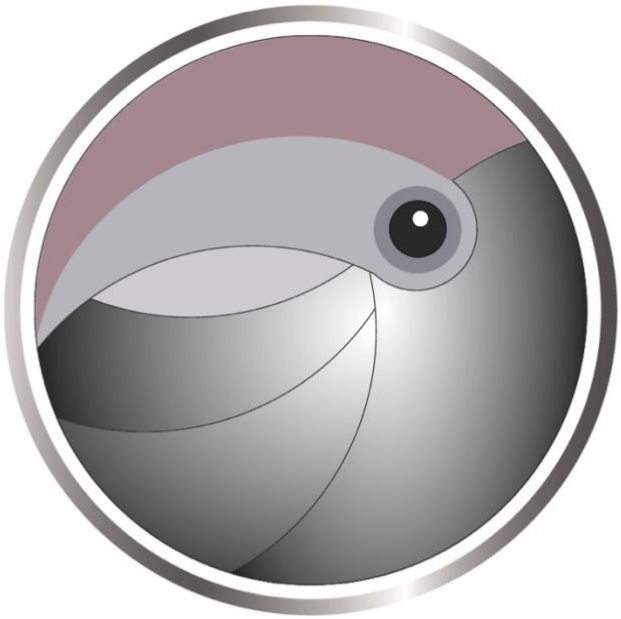

FLAMINGO

Fabrication of Lightweight Aluminium Metal matrix composites and validation In Green vehicles

Deliverable D 9.2
Data Management Plan

Lead Beneficiary	Axia Innovation
Delivery Date	29/07/2021

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the grand agreement number 101007011

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0.2	21/07/2021	AXIA	Ioanna Deligkiozi	Revised version
1.0	29/07/2021	MBN	Alvise Bianchin	Submitted version

[1]PU = PUBLIC
PP = Restricted to other programme participants (including the Commission Services)
RE = Restricted to a group specified by the consortium (including the Commission Services)
CO = Confidential, only for members of the consortium (including the Commission Services)

Publishable Executive Summary

This document is the Deliverable 9.2 for the Data Management Plan (DMP) of the FLAMINGo H2020 Project. This document aims to describe the management of the data that will be generated within the project. In general, the Data Management Plan (DMP) is the efficient management of the data life cycle for the data that are produced and assembled in an H2020 project and contains the strategy to be followed in order to have FAIR (Findable, Accessible, Interoperable and Re-usable) data. The DMP deliverable document of the FLAMINGo includes terminology of the data management EU policy and presents the plan for the identification, generation, association with metadata, and reservation of the FLAMINGo data in repositories. The deliverable is for July 2021 (M6); updates on the DMP will be included in the review reports on M18, M36 and M48.

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Abbreviations and Acronyms

Abbreviation	Explanation
DMP	*Data Management Plan*
FAIR	*Findable, Accessible, Interoperable, Re-useable*
M	*Month*
PEDR	*Plan for the exploitation and dissemination of results*
EU	*European Union*
GA	*Grand Agreement*
OpenAIR	*Open Access Infrastructure for Research in Europe*
DOI	*Digital Object Identifier*
IPR	*Intellectual Property Rights*
WP	*Work Package*

1. Introduction

1.1 Purpose and scope

The Data Management Plan (DMP) aims to reinforce the EU research and development activities through open access data for academic researchers and industrial partners. DMP will boost the collaboration among research institutes in Europe and globally and will facilitate the time consumption minimization for replication of the work that has already been conducted in EU research projects. To achieve this, EU Research-Innovation project partners need to evaluate the data they produce within the project and follow a specific data preservation plan. For instance, if the data should be preserved after the project completion and what access restrictions will be followed. However, there are some DMP challenges. One is the identification of data and compliance with data privacy regulations such as EU GDPR. Another is to define the data with information, often called metadata, in order to facilitate the future utilisation of the data. The DMP document will be constantly updated during the project to comply with the project needs.

1.2 Target Audience

The targeted audiences for the FLAMINGo DMP are:

- The FLAMINGo project partner organisations, institutes, industries, and personnel
- The stakeholders interested in the project
- The European Commission

Below (Table 1) the targeted audiences are described.

Table 1:Targeted Audience

Targeted Audience	Description
FLAMINGo project partner organisations, institutes and industries, and personnel	MBN Nanomaterialia, OGI, Brunel University London, Constellium, Instituto de soldadura e Qualidade, Group Kampakas, Alke, Axia Innovation, Exelisis, European Welding Federation, Factor CO2,
Stakeholders interested in the project	End-users, Policymakers, Public bodies, Research communities
European Commission	-

1.3 Overview of the DMP

The Data Management Life Cycle Plan (Figure 1) consists of:

- The description and definition of data produced within the FLAMINGo project as well as the processes of their creation and collection.
- The handling of the data during and after the completion of the project
- The access and restriction of data to third parties
- The preservation of the data
- The IPR and copyright issues.
- The Ethical issues: Data storage, authorization/access, preservation lifetime, anonymization of data, the permission of data sharing and reuse.

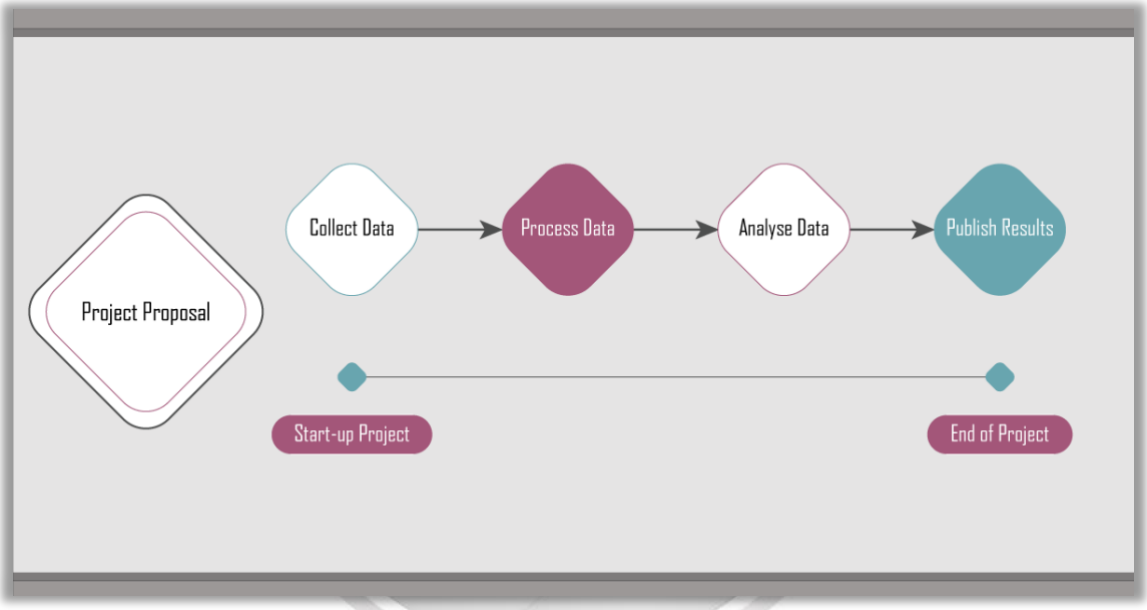

Figure 1: Data Life Cycle

2. EU Terminology

2.1 Research Data

Research data is the data generated from research activities and can be applied in many formats. They are data that can validate the research outcomes. Some research data are:

- Documents and Spreadsheets
- Questionnaires
- Laboratory notebooks
- Audio/Visual Material
- Spectra
- Codebooks, algorithms, models
- Specimens/Samples
- Protocols/manuals
- Simulation software's

However, some research data due to ethical and privacy restrictions as well as their content are not preserved or shared. For instance: Future research plans, Evaluations/Peer reviews, Draft scientific papers, Preliminary scientific papers, Confidential information/trade secrets are not preserved. In the EU most of the research data are encouraged to be preserved in online repositories. Especially the research data that underly the scientific publications must be preserved in online repositories.

Another important aspect of the DMP is the preservation of some other, research and non-research data after the completion of the project. Some data format that is necessary to be preserved after the lifetime of the project are:

- Emails
- Project files, technical reports, research reports
- Signed documents
- Grant and ethic applications

2.2 Open Access

Open access is generally the access to research results (publications and data) with no restriction. Often used as a term to describe free online access to peer-reviewed publications. Open access is vital because it facilitates the development of research activities, with the utilisation of previous research results and prevents the repetition of research activities. Open access boosts the open innovation idea, enables the sharing of the project results, and is cost and time saving for the European Union community. For Horizon 2020 European

Project the online free open access to scientific peer-reviewed publications is an obligation. There are two types of open access:

- The Green open access and,
- The Gold open access

In **Green open access** the published work or the final peer-reviewed manuscript that has been accepted for publication is made freely and openly accessible by the author in an online repository (self-archiving) . On the other hand, with **Gold open access,** a scientific article is directly published in open access mode by the publisher, based on one-off payments by the author. [2]

2.3 Open Research Data

In compliance with open access publications, the research data that validate these results need to be openly available in repositories with free access. However, if need be, restricted access and use for the data is permitted[2]. Open research data can be in different formats and metadata are used for the efficient archive and description of the research data. Metadata are the descriptive information of the research data. They are used to define large sets of data and provide information such as name, location, dates, data format, size of data, partner organisation, the versioning etc. In Figure 2, a general scheme for the access routes to publications and research data is presented.

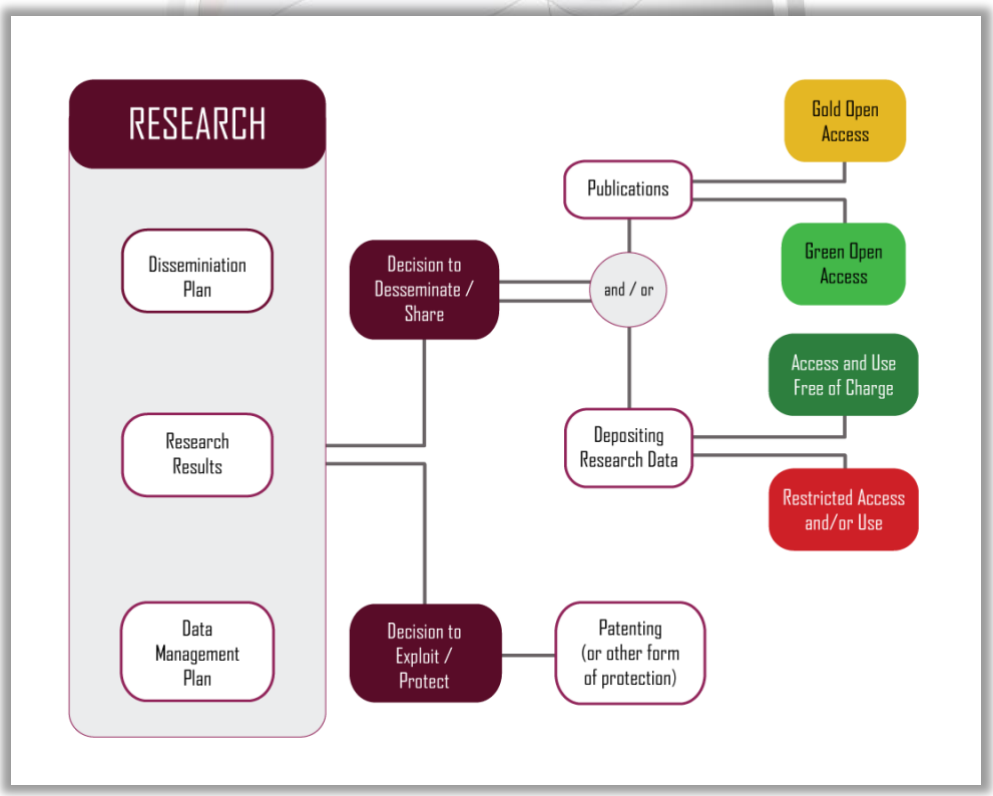

Figure 2: Open Access and Open research results chart[2]

[2] https://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/open-access-data-management/open-access_en.htm

2.4 FAIR data

Research data must be Findable, Accessible, Interoperable, and Reusable (FAIR data). The concept of FAIR data is to reinforce the open access/open research data concept, prevent the repetition of research activities and support the new generation of data. FAIR data in detail is[3]:

Findable data: The utilisation of efficient naming convention and keywords, clear version numbers, standard identification mechanisms such as appropriate metadata to achieve discoverable and locatable research data.

Accessible data: The definition of openly accessible data with free access or with restrictions (under certain reasons) is necessary. In addition, the specification of the repositories the data will be stored as well as the methods or software tools needed to access the data.

Interoperable data: Data should be allowed to be exchanged and re-used between researchers, institutions, organisations, countries, etc. through the existence of an inter-disciplinary standard vocabulary and methodologies for all data types in all data sets.

Reusable: Definition of the starting date and the duration of time that data will be reusable. Moreover, the definition of the licensing for reuse as well as whether or not the data of the project will be usable by third parties.

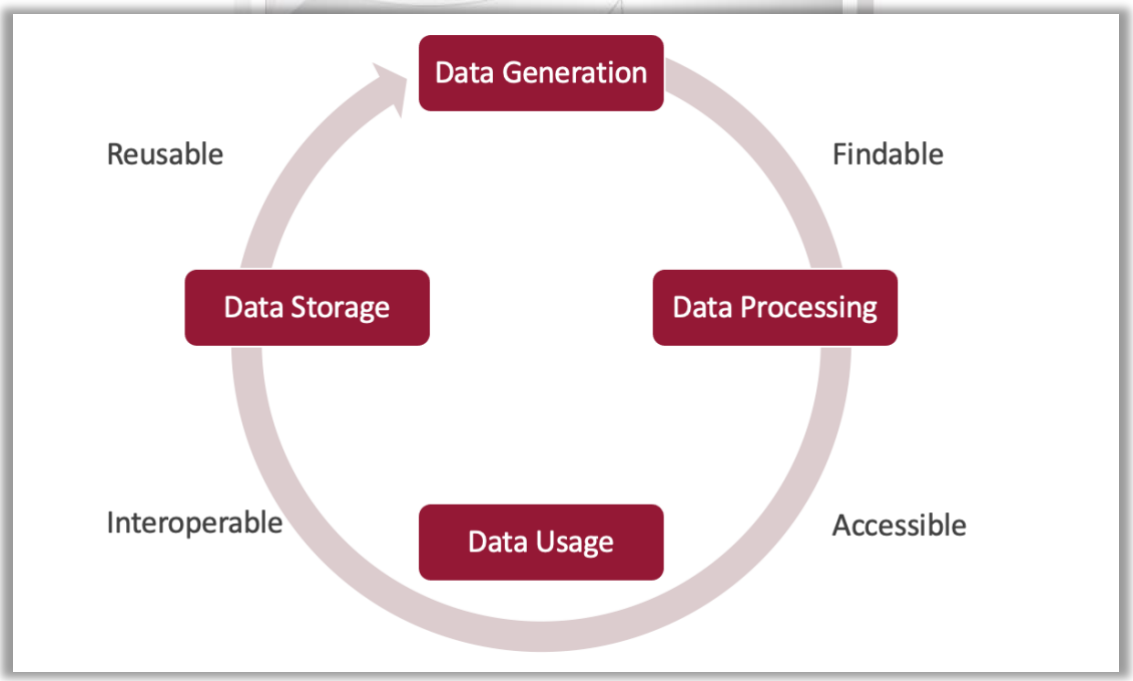

Figure 3: FAIR data cycle

[3] https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf

3. DMP Strategy

3.1 Definition of the data generated processes

In the FLAMINGo project, with the contribution of all partners, all future data generated will be described. For this reason, initially, all partners will provide information about the expected data that will be generated by them. Specifically, a questionnaire on M5 was circulated to every partner and was filled in with information for the data generating processes and the expected data. Each partner was responsible for grouping their processes' data according to their preference (per WP, per format (. xlsl, .doc), per open access route, etc) and Table 2 was filled in afterward by each one's responses. Hence, a first mapping of the expected data sets within the FLAMINGo project was defined (Section 4.2). Prior to this, a training seminar by AXIA Innovation and EXELISIS on the data management plan to all partners was conducted on the 2nd of June 2021 (Figure 4). The Open Access EU regulation for publications and research data, the general principles of the Data Management Plan, and the suggested strategy for the FLAMINGo Data Management Plan were presented in the seminar (Figure 5&6).

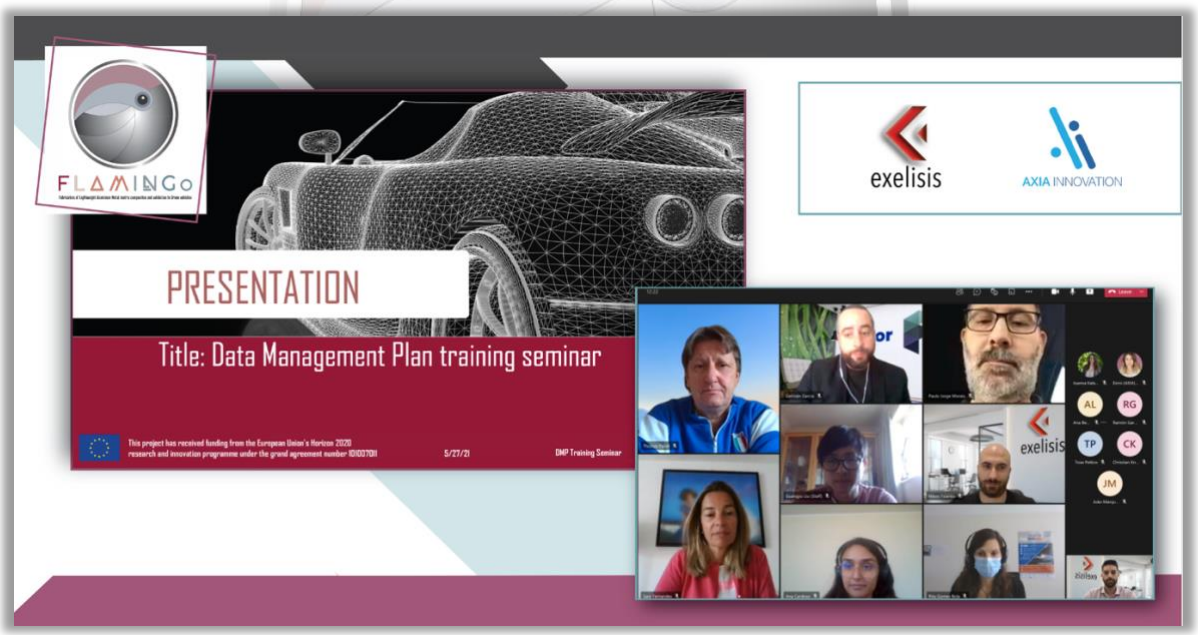

Figure 4: DMP Training Seminar by AXIA & EXELISIS

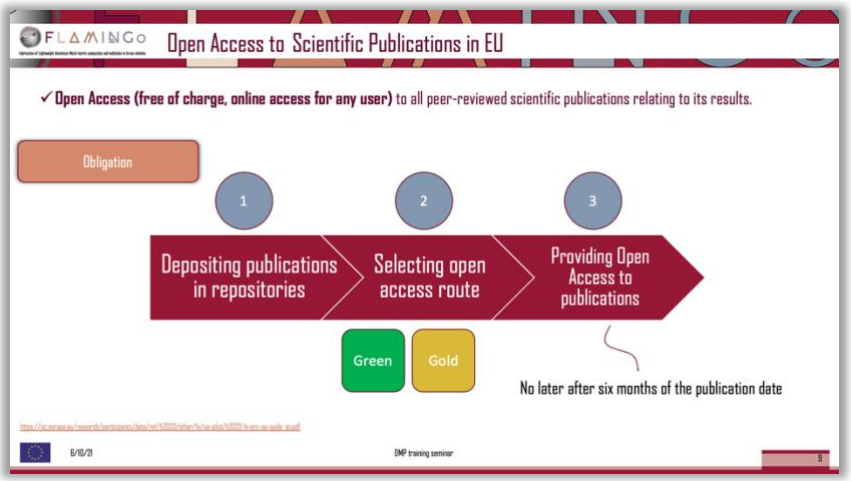

Figure 5: DMP Training Seminar by AXIA and EXELISIS (2)

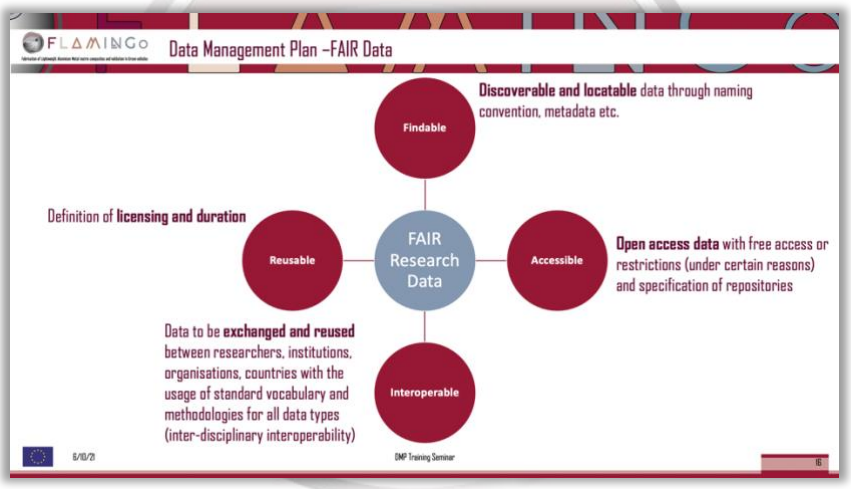

Figure 6: DMP Training Seminar AXIA & EXELISIS (3)

Table 2:Data generating processes for Partners

Title of Process	Description of data generated from the process	Work Package Relation	Open Access	Useful data to

3.2 Data Generating Processes per Partner

Regarding the Partner's DMP responses, the data generating processes, the data types and formats as well as the access routes per partner were defined and they are presented below per Partner.

Table 3: MBN Data Generating processes

Title of Process	Description of data generated from the process	Work Package Relation	Open Access	Useful data to
Production of Al-MMC formulations	Report of an analysis of produced formulations (format: including chemical and physical analysis-.pdf)	WP3: Production of Al-MMnCs	No Open Access due to commercialisation. Analysis reports are released only to material addressees or to future customers. Data underlying publications will be in open access mode.	OGI, BUL, CONST

Table 4: OGI Data Generating processes

Description of Process	Description of data generated from the process	Work Package Relation	Open Access	Useful data to
Casting of test bars and bending specimen	Tensile and hardness tests (numerical data, excel format), component testing (format: numerical data, excel)	WP4: Topology optimisation and process simulation	No open access. Know-how and development work into this work package. Probably, it could be made public by the end of the project.	All Partners

Table 5: FACT Data Generating processes

Description of Process	Description of data generated from the process	Work Package Relation	Open Access	Useful data to
Work Package 8 data	Life cycle analysis and life cost analysis (format: Excel)	WP8: Circularity and environmental sustainability	Yes	All Partners

Table 6: AXIA and EXE Data Generating processes

Title of Process	Description of data generated from the process	Work Package Relation	Open Access	Useful data to
Production of Data Management Plan	Information form partners collected through tables and questionnaires as well as training material (format: doxc / .xlsx / .mp4 / .ppt)	WP9: Dissemination, Exploitation and Communication activities	No open access. Data responses from partners are confidential according to the GDPR principles and the training material will be used internally in the project	Consortium - internally in the project
Generation of Dissemination Material	Presentations, brochures, roll ups, flyers, papers, video (format: .jpg / .png / .pdf / .mp4 / .ppt)	WP9: Dissemination, Exploitation and Communication activities	Yes	Partners - General Public - Stakeholders - Research community
Dissemination material support process	Lists with information from partners - questionnaires (format: gform /. xlsl)	WP9: Dissemination, Exploitation and Communication activities	No open access. Input from partners is confidential due to GDPR	Internally in the project - by partners and AXIA/EXELISIS
Exploitation process – IPR Process	Product information from partners, market data, exploitation activities, information from questionnaires (format: .docx /. xlsl / g.form)	WP9: Dissemination, Exploitation and Communication activities	No open access. Data related to the business plans and the exploitation are vital to staying confidential to protect the project exploitation routes and strategy from competitors	All partners

Table 7: BRUNEL Data Generating Processes

Description of Process	Description of data generated from the process	Work Package Relation	Open Access	Useful data to
DC casting process parameters	Alloy composition measurements, casting speed, melt temperature, water flow speed (format: doc, excel)	WP6: Extrusion production methods	Yes	For those who do DC casting of 6xxx aluminium nanocomposites

Table 8: Constellium Data Generating processes

Title of Process	Description of data generated from the process	Work Package Relation	Open Access	Useful data to
Constellium Data for Publication	Alloy composition measurements, process parameters, mechanical properties, energy absorption, extrusion shape, numerical data, (format: excel, word, PowerPoint, .pdf, image format in a desensitized and non-confidential shape)	WP1: Coordination and Management WP2: Specification, design, and topology optimisation WP6: Extrusion production methods WP7: Validation and demonstration of materials & components WP8: Circularity and environmental sustainability WP9: Dissemination, Exploitation and Communication activities	Yes	Project Partners & General Public for the publication process
Constellium Data Internal Project Use Only	Alloy composition measurements, process parameters, mechanical properties, energy absorption, extrusion shape, numerical data (format: excel, word, PowerPoint, .pdf, image format)	WP1: Coordination and Management WP2: Specification, design, and topology optimisation WP6: Extrusion production methods WP7: Validation and demonstration of materials & components	No Open Access. This data will be identified as sensitive and confidential and should not be used for external publication. Useful for commercialisation	Internal project work with partners

		WP8: Circularity and environmental sustainability WP9: Dissemination, Exploitation and Communication activities		

Table 9: ISQ Data Generating processes

Title of Process	Description of data generated from the process	Work Package Relation	Open Access	Useful data to
NDT Data	Numerical data of the NDT Characterisation. Ultrasonic testing, thermography, shearography, and eddy currents (format: excel, doxc, MATLAB)	WP7: Validation and demonstration of materials & components	Yes	Partners, Industry and Academic community

Table 10: KAMP Data Generating processes

Title of Process	Description of data generated from the process	Work Package Relation	Open Access	Useful data to
Chemical Analysis processes	OES Spectroscopy of Aluminium (format: .pdf print out format)	WP7: Validation and demonstration of materials & components	No Open Access. Confidential data related to the exploitation and commercialisation of the results	MBN, ALKE, OGI, BRUNEL, Constellium

Table 11: EWF Data Generating Processes

Title of Process	Description of data generated from the process	Work Package Relation	Open Access	Useful data to
Trainning activities, Standarisation activities and dissemination activities process	Standards, Guidelines and training material (Format: Word and Excel format)	WP9: Dissemination, Exploitation, and communication activities	Confidential data. Open Access upon request.	EWF, FLAMINGo Consortium, EWF Network, General public

Table 12: ALKE Data Generating Processes

Title of Process	Description of data generated from the process	Work Package Relation	Open Access	Useful data to
WP7 – Validation, and demonstration of materials and components	Task 7.3: Vehicle's status data recorded during the real demonstration of parts assembled in a vehicle and performed on the road (format: Json or MQTT over https protocol, .pdf, .xls)	WP7: Validation and demonstration of materials and components	No Open Access. Data will be confidential as part of future products. Access is limited to the consortium.	Task 7.3: Useful to final results assessment vs KPIs and their exploitation

3.3 Filename convention

All FLAMINGo partners are requested to use a consistent naming system during the collection of data that contributes to the FAIR principles. A file name with a common identity among all partners facilitates the sharing and usage of all data. Some information that will be included in the name is the date of creation, the date of format, the name of the creator, the research team and department, the name of the project, the work package, and a version number. This information will be separated with hyphens (-) or underscores (_). Moreover, extent file names are not suggested. The name format that is proposed for the FLAMINGo project is:

<date>_<work package>_<description>_<type>_<organization>_<name>_<version>

Table 13: Description of each element in the data file naming of FLAMINGo

Element	Description
<date>	Date format should be: YYMMDD, e.g. 210507 for May 07, 2021
< work package>	Work package number, e.g., WP1, WP2, etc.
<description>	The description should provide indications about the measurement and experiment, e.g., the FEM method for calculation of strength and geometry in the die casting methods. Should be less than 10 characters long
<type>	Please use IMG for all types of images, NUM for all types of numerical data, TXT for all types of documents, SIM for all types of simulations, etc.
<organisation>	This should be three letters indicating the organisation name, e.g OGI
<name>	The name should be three letters from the name of the person in charge; this may be the initials from the first, middle, and last name. In case there is more than one person with the same initials, e.g., PSC, for Peter Schumacher.
<version>	Please use three numbers for each version, e.g., V001, V002, etc.

Example: 210510_WP4_FEM_IMG_OGI_PSC_V002

3.4 Metadata

Metadata creation is key to the data management plan process. The collection of metadata will be started in the initial stage of the project by all partners and metadata should be updated during the lifetime of the project. All partners will, iteratively if necessary, fill in the following metadata table (Table 4). The metadata table was circulated to all partners on M6. By the end of the project (M48), the final metadata template will be submitted.

Table 14: FLAMINGo Metadata

1. Data Summary	Answers
Dataset name	
Related WPs	
Partner organization name	
Researcher's name and email	
State the purpose of the data collection/generation	
Which partner will use the data?	
Data origin (related Task - Title of generating process/Data description)	
Data generating process (Description of the process - what data is generated)	
Type (e.g., numerical, text, audiovisual, simulation, etc.) and format of data (e.g., Excel, Word, Image)	
To which project objectives is the data generation related?	
To which KER is the data related?	

Scientific discipline	
Instrumentation	
Data reuse (if yes, please explain)	
State the (expected) size of the data (MB, GB, …)	
Outline the data utility: to whom it might be useful	
2. FAIR Data	Answers
2.1. Findable	
Outline naming conventions used	
Outline the approach towards keywords generation (e.g., keywords will be selected according to the objective, application, and techniques)	
Outline the approach for clear versioning (e.g., v001, v002, …, Final)	
Indicate how data is made identifiable if a standard permanent identifier assignation scheme is used (i.e., ARK, DOI, PURL, URN, MODA …)	
2.2. Accessible	
Specify if data will be made openly available. If not provide a rationale	
Specify how the data will be made available (e.g., open access or institutional repositories, personal website, etc.)	
Specify where the data and associated metadata, documentation, and code are deposited (for help visit: https://www.openaire.eu/)	

Specify what methods or software tools are needed to access the data (e.g., Microsoft Excel, MatLab, PhotoShop, or ImageJ)	
Specify if there are limitations and restrictions to access the data	
2.3. Interoperable	
Is the data produced in the project interoperable between researchers, institutions, etc (data machine-actionable, data formats use shared vocabularies and ontologies)?	
Specify what data and metadata vocabularies, standards, or methodologies you will follow to facilitate interoperability (i.e., Create a README file (.txt or .pdf) to help ensure that your data can be correctly interpreted and re-analysed by others, use consistency in your file names, data variables, scripts, scripts variables and throughout similar annotations.	
2.4. Increase data reuse	
Specify when the data will be made available for re-use- Expected deliverable date. If applicable, specify why and for what period a data embargo is needed	
Specify how the data will be licensed to permit the widest reuse possible	
Are the data useable by third parties, after the end of the project?	
How long is it intended that the data remains re-usable?	
Describe data quality assurance processes. (The quality assurance plan of the FLAMINGo project or of an industrial organization will be followed)	
2.5. Allocation	

Estimate the costs for making your data FAIR (findable, accessible, interoperable, and reusable)	
Describe how you intend to cover these costs (i.e., institute dedicated resources, dedicated part of the project budget …).	
Identify the responsible person(s) for this dataset (within your research group and institute, and within the project if applicable).	
2.6. Data security and other	
Address data recovery as well as secure storage and transfer of sensitive data (e.g., office computer, external hard drive, back-up system, institute network drive, institute central data storage, private cloud storage, etc. Briefly describe the data security policy applied).	
Ethical aspects	
Refer to other national/ funder/ sectorial/ departmental procedures for data management that you are using (if any)	

Below the overall timeline DMP process is presented:

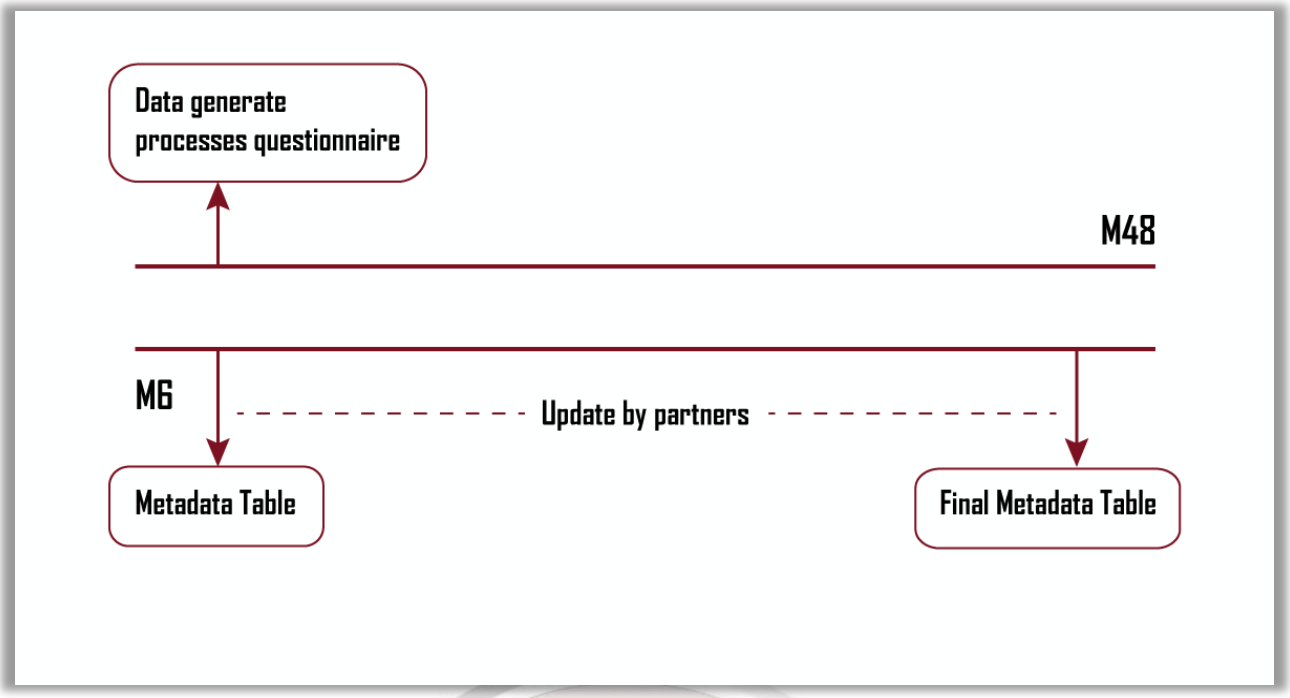

Figure 7: FLAMINGo DMP process

4. Data sharing and data storage

Some data sets will be shared among the consortium and cannot be publishable such as signed documents or contracts. All the other data that will be identified as public will be shared through the repository for deposing data. In the terms of the data management plan, it is important for the long-term preservation of the data to be considered, after the lifetime of the project.

4.1 Data sharing platforms

Partners Area

Confidential data among the consortium will be shared through a Partner's Area on the website. Partner's Area aiming to accelerate and facilitate data and document sharing among the consortium. Every partner has a unique username and password to access the platform. Moreover, this platform is hosted on the coordinator's server (MBN Nanomaterialia).

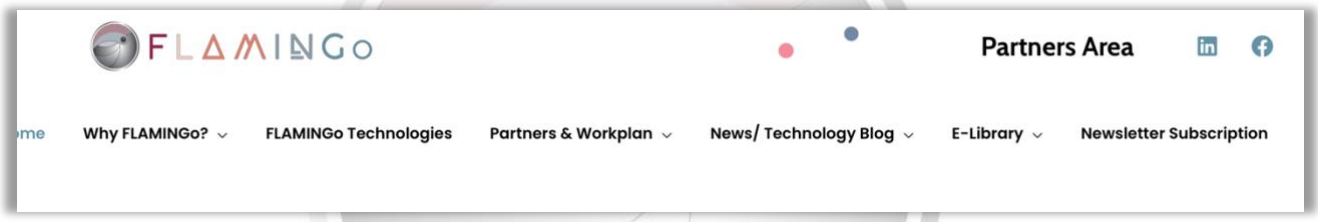

Figure 8: FLAMINGo Partners Area

Project Website

The FLAMINGo team recently launched the project website www.flamingo-project.eu. On the website, dissemination material data, publications data, and public deliverables data will be publicly shared in a PDF format with a download option. All downloads will be characterized with metadata such as the title and the type of document.

Open Access Platforms – Zenodo

The Open Access Infrastructure for Research in Europe (OpenAIR) is a platform that provides a portfolio of repositories. A collaboration among OpenAIR and CERN is the Zenodo (https://www.zenodo.org) repository which allows researchers to deposit both publications and data[4]. Zenodo (Figure 9) is an open-access EU repository suggested to be used by all FLAMINGo partners. Partners will access Zenodo via GitHub or ORCID

[4] https://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/open-access-data-management/open-access_en.htm

(an ID identifier that is used for identification and personalization of researchers) or they can create an account with a username and a password.

Users will be able to upload files at a maximum size of 50 GB and the file can be a publication, a poster, a presentation, an image, a dataset, video, audio, etc, without any additional charge to store the data to the repository. If data such as a publication, hold a DOI reference, it will be uploaded with the DOI. Otherwise, the Zenodo system generates a DOI. Necessary metadata to be filled in are the title, the date, the authors, and a description. When the files are uploaded in the system it is impossible to adjust the name or the metadata. Moreover, the user can choose for the access rights among:

- Open Access
- Embargoed Access
- Restricted Access
- Closed Access

A new initiative of the European Commission is the European Open Science Cloud (EOSC) (https://eosc-portal.eu) which is an environment for hosting and sharing research data to support EU science. Moreover, OpenAIR itself hosts a repository. These might be helpful alternatives for the FLAMINGo consortium in the data sharing processes[5].

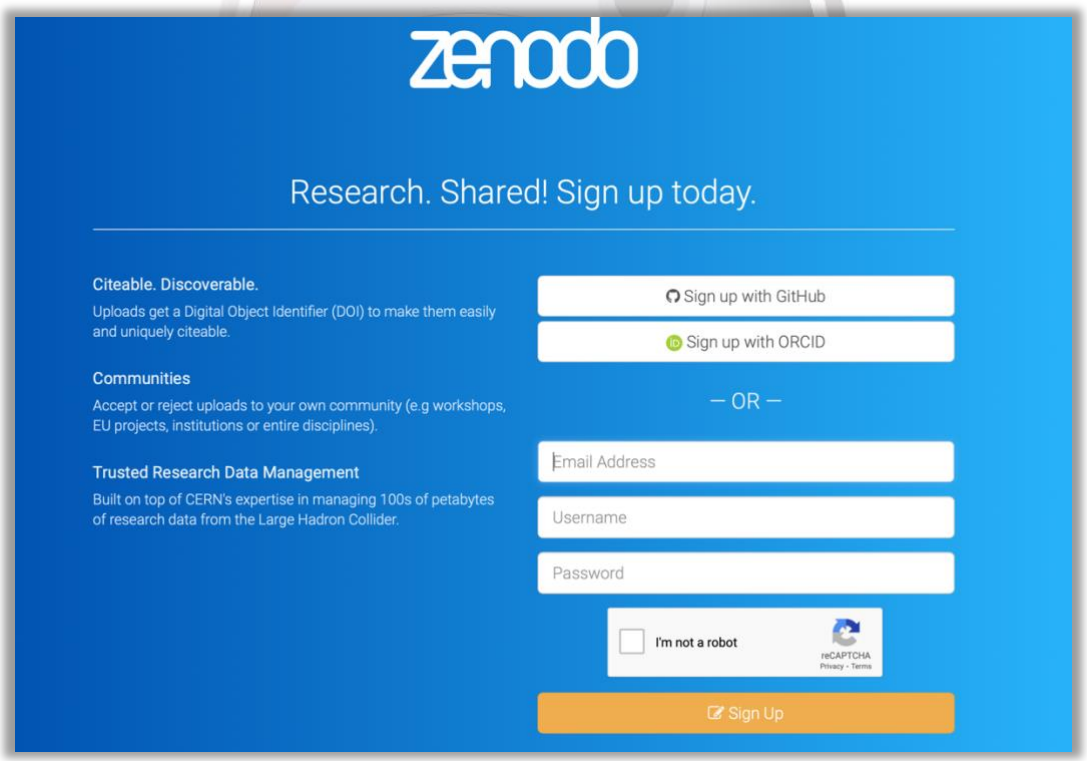

Figure 9: Zenodo repository[6]

[5] https://eosc-portal.eu/about/eosc
[6] https://www.zenodo.org/signup/

5. Legal points and GDPR

5.1 Legal points on the GA and CA

In the Grant Agreement (GA) and in the Consortium Agreement (CA) copyright and Intellectual Property Rights (IPR) of the data are explained. Therefore, the FLAMINGo DMP will comply with the signed GA and CA documents by all partners. Some other legal points underlined in the GA are the obligation by partners for Open Access to publications and research data for users. Below some of the legal points signed in the GA are presented.

Table 15: Grant Agreements obligations

Open Access to Publications
Each beneficiary must ensure open access (free of charge online access for any user) to all peer-reviewed scientific publications relating to its results. In particular, it must: (a) 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. (b) 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 (twelve months for publications in the social sciences and humanities) in any other case. (c) ensure open access — via the repository — to the bibliographic metadata that identifies the deposited publication. The bibliographic metadata must be in a standard format and must include all of the following: - the terms “European Union (EU)” and “Horizon 2020”; - the name of the action, acronym, and grant number. - the publication date, and length of embargo period if applicable, and - a persistent identifier.

Open Access to Research Data
Regarding the digital research data generated in the action ('**data**'), the beneficiaries must: (a) 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) not applicable. (iii) other data, including associated metadata, as specified and within the deadlines laid down in the 'data management plan' (see Annex 1); (b) provide information — via the repository — about tools and instruments at the disposal of the beneficiaries and necessary for validating the results (and — where possible — provide the tools and instruments themselves). This does not change the obligation to protect results in Article 27, the confidentiality obligations in Article 36, the security obligations in Article 37, or the obligations to protect personal data in Article 39, all of which still apply. As an exception, the beneficiaries do not have to ensure open access to specific parts of their research data under Point (a)(i) and (iii), if the achievement of the action's main objective (as described in Annex 1) would be jeopardized by making those specific parts of the research data openly accessible. In this case, the data management plan must contain the reasons for not giving access.

5.2 GDPR Compliance and Ethics

The FLAMINGo project must be in compliance with the GDPR regulations and the Directive 95/46/EC for the collection of personal data[7]. More information is provided in Deliverable 10.1 in the section ''Data Ethics and Security''. Despite the FLAMINGo research activities are not associated with personal data, it is vital to set some processes for the GDPR regulation where personal data are collected. Specifically personal data will be collected for:

- The personnel/partners within the FLAMINGo Project for internal use.
- Meeting data such as the list of attendance, agenda, and presentation, for internal use.
- Events (conferences, workshops, training activities) data such as vendors, attendance list, program for the utilisation in dissemination activities.
- Reports and deliverables are approved by all partners and delivered to the European Commission for review.

[7] https://ec.europa.eu/info/sites/default/files/4._h2020_experts_training_data_protection_dual_use_misuse_civilian_focus_0.pdf

- Internal documents (research data, signed documents, etc.) during the progress of the project for internal use among the consortium.
- Contacts outside the project such as stakeholder's names that have been associated with the consortium.

The FLAMINGo consortium members must comply with the ethical principles as referred in Article 34 of the Grant Agreement, which clarifies that all activities must be carried out in compliance with:

- (a) Ethical principles (including the highest standards of research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity — and including, in particular, avoiding fabrication, falsification, plagiarism, or other research misconduct)
- (b) Applicable international, EU, and national law

6. Allocation of resources

Funding sources must be acknowledged, in the case of FLAMINGo with the Grant Agreement number 101007011. Costs relating to open access to research data will be eligible as part of the grant, provided the general eligibility conditions specified in the Grant Agreement are followed[8].

7. Future Work

An updated identification of the data generated processes will take place. Partners will fill in questionnaires to define further their data generated processes as well as the data that will be generated in each WP of the FLAMINGo Project. Moreover, the metadata template that was circulated to all partners to track their data during the lifetime of the project will be constantly updated. Updated DMP versions will be included in the Plan for Exploitation and Dissemination of Results (PEDR). By the end of the project (M48), the final metadata table will be included in the final review report.

[8] https://ec.europa.eu/research/participants/data/ref/h2020/other/hi/oa-pilot/h2020-hi-erc-oa-guide_en.pdf

8. Conclusions

The Data Management Plan is part of the knowledge and intellectual property rights strategy of the project, aiming to handle all research data that will be produced during the implementation of the project. These data are connected and underly all generated results such as commercial exploitable or scientific results like products or publications.

Attainment of objectives

WP9 Objectives	Achievements
Disseminating the project results to targeted meetings, workshops and conferences, and marketing tools.	The DMP includes specifications about Open access and Open data (chapter 2) that can be employed for dissemination
To estimate the incremental economic value of the end users the project and analyze market data	Not relevant for this deliverable
Development of a proper plan for the communication, dissemination, exploitation and protection of the knowledge, technologies and products developed with the project.	The DMP is part of the knowledge and intellectual property rights strategy
Continue to monitor the market situation and assess arising business opportunities. The results of this task will be fed into the global exploitation plan. Identification of multi-interest's stakeholders.	Not relevant for this deliverable
Demonstrate the potential of FLAMINGo solution in creating industry business opportunities.	Not relevant for this deliverable
European patents: To proceed to application of patents for some of the tools or services of FLAMINGo.	Not relevant for this deliverable
To design and implement a powerful communication campaign for engagement with key stakeholders.	Not relevant for this deliverable
Use the standardization system to disseminate and facilitate the acceptance and utilization by the market of the developed solutions.	Not relevant for this deliverable
Specific project objectives related to D9.2	**Achievements**
C.2: To organize the IPR protection strategy. This will include initial patent search as well as determination of the IPR handling (e.g. patents, industrial secrets, trademarks).	The DMP allows to define research data access routes (open or restricted access), thus the organization of IPR protection strategy

Deviations

No relevant deviations on content and timing have been identified for this deliverable.