

ERC Data Management Plan

Under Horizon Europe, all data generated in ERC Projects must be openly accessible according to the [FAIR principles](#). Data must be deposited in “trusted” repositories (see “Making Data Findable” below for explanation), under the principle “as open as possible, as closed as necessary”.

ERC info document- [Open Research Data and Data Management Plans](#)

All projects must submit a **Data Management Plan (DMP)** up to 6 months after signing the agreement.

The required **DMP template** is available [HERE](#) (see also annotated template below)

An example of a filled-out template is available [HERE](#)

Issues covered in the DMP include:

0. SUMMARY (dataset(s) reference and name; origin and expected size of the data generated/collected; data types and formats-more than one dataset can be covered by a single DMP)
1. MAKING DATA FINDABLE (dataset description: metadata, persistent and unique identifiers e.g., DOI)
2. MAKING DATA OPENLY ACCESSIBLE (which data will be made openly available and if some datasets remain closed, the reasons for not giving access; where the data and associated metadata, documentation and code are deposited (repository?); how the data can be accessed (are relevant software tools/methods provided?)
3. MAKING DATA INTEROPERABLE (which standard or field-specific data and metadata vocabularies and methods will be used)
4. INCREASE DATA RE-USE (what data will remain re-usable and for how long, is embargo foreseen; how the data is licensed; data quality assurance procedures)
5. ALLOCATION OF RESOURCES and DATA SECURITY (estimated costs for making the project data open access and potential value of long-term data preservation; procedures for data backup and recovery; transfer of sensitive data and secure storage in repositories for long term preservation and curation)

The DMP should be maintained as a living document and updated over the course of the project whenever significant changes arise. This includes, but is not limited to the generation of new data, changes in data access provisions or curation policies, attainment of tasks (e.g. datasets deposited in a repository, etc.), changes in relevant practices (e.g. new innovation potential, decision to file for a patent).

Beneficiaries are encouraged to encode their DMP deliverables as non-restricted, public deliverables, unless there are reasons (legitimate interests or other constraints, see below: Exceptions) not to do so. In the case they are made public, it is also recommended that open access is provided under a CC-BY license to allow a broad re-use.

Exceptions: Exceptions are permitted which consider the obligation to protect results, confidentiality obligations, security obligations, the obligation to protect personal data and other legitimate constraints. These exceptions should be noted in the associated Data Management Plan.

See also:

-Horizon Europe [Data Guidelines](#) for Do's and Don'ts, list of repositories, and more.

-List of Open Research Europe [approved repositories](#)

-[Technion policy](#) for handling classified data

Note that a [Data Availability statement](#) must be included in all publications, even when no data is associated, and that data must be linked to the publication (see Data Guidelines, link above).

Who can assist?

A network of Technion contact points is available to support DMP preparation and data management in ERC projects:

Topic	Role	Contact
Data repositories (Library will assist in identifying which repository best suits needs of project)	The Reference and Information Services Team, the Elyachar Central Library	reflib@technion.ac.il 04-829-2520/13
Privacy (Any privacy related issues, including clinical studies, GDPR, etc.)	Data Protection Officer (DPO)	Ofer Rosenbloom dpo@technion.ac.il (Please cc Research Authority on any correspondence)
Data protection (Procedures for backup and recovery; transfer of sensitive data and secure storage in repositories for long term preservation and curation)	Chief Information Security Officer (CISO)	Moshe Glickstein glickstein.m@technion.ac.il
Technical assistance with EU portal and communication with EU Project Officer	Research Authority	<u>ERC:</u> Ella Klainer eklainer@trdf.technion.ac.il Michal Lotem michall@trdf.technion.ac.il Dr Shunit Ben Ari shunitb@trdf.technion.ac.il <u>Other Horizon Europe projects:</u> Hayley Binia-Wolman HayleyB@trdf.technion.ac.il Lee Zur leeh@trdf.technion.ac.il

*Note that privacy and protection issues often are often entailed



ERC Data Management Plan

Annotated Template

Any text with blue background is not part of the original template and consists of our (RA TRDF) suggestions, examples, and explanations.

Use only whatever relevant for your project.



ERC OPEN RESEARCH DATA MANAGEMENT PLAN (DMP)

European Research Council

Established by the European Commission

Project Acronym

Project Number

--	--

Template for the ERC Open Research Data Management Plan (DMP)¹. The following sections should describe how you plan to make the project data Findable, Accessible, Interoperable and Reusable (FAIR). Each of the following five issues should be addressed with a level of detail appropriate to the project.

SUMMARY (dataset² reference and name; origin and expected size of the data generated/collected; data types and formats)

Examples:

1. What is the purpose of the data collection/generation and its relation to the objectives of the project? (Describe in a few sentences what the data will be used for)
2. The collected research data will be divided in #X datasets:
 - a. [NAME1] - [description]
 - b. [NAME2] – [description]
 - c. etc.
3. What types and formats of data will the project generate/collect?
 - a. [NAME1] - [description]
 - b. [NAME2] – [description]
 - c. etc.
4. Will you re-use any existing data and how?
 - a. [NAME1] - [description]
 - b. [NAME2] – [description]
 - c. etc.
5. What is the origin of the data?
 - a. [NAME1] - [description]
 - b. [NAME2] – [description]
 - c. etc.
6. What is the expected size of the data?
 - a. [NAME1] - [description]
 - b. [NAME2] – [description]
 - c. etc.
7. To whom might it be useful ('data utility')?

¹ Based on '[Guidelines on FAIR Data Management in H2020](#)', version 3.0. 26.07.2016, Annex1

² Several datasets may be included into a single DMP.

ERC OPEN RESEARCH DATA MANAGEMENT PLAN (DMP)

1. MAKING DATA FINDABLE (*dataset description: metadata, persistent and unique identifiers e.g., DOI*)

1. Example: "Data collected in this project will be deposited in [REPOSITORY_NAME], a **trusted repository**. As a trusted repository [REPOSITORY_NAME] assures that the data published in a data catalogue is findable, accessible, interoperable and reusable, and uses DDI standard and persistent identifiers."
 - a. "**Trusted repository**" - according to ERC is: Certified repositories (e.g., CoreTrustSeal, nestor Seal DIN31644, ISO16363) or disciplinary and domain repositories commonly used and endorsed by the research communities. Such repositories should be recognized internationally.
-See page 7-8 [HERE](#) for a ERC recommended repositories.
-A recommended all-domain repository: [Zenodo](#) (not-for-profit, hosted by CERN)
2. Describe what naming conventions are used for the data

2. MAKING DATA OPENLY ACCESSIBLE (*which data will be made openly available and if some datasets remain closed, the reasons for not giving access; where the data and associated metadata, documentation and code are deposited (repository?); how the data can be accessed (are relevant software tools/methods provided?)*)

- (The following are examples and there is no requirement to answer all. Use whatever is relevant for your project)
1. Describe which data produced and/or used in the project will be made openly available as the default.
If certain datasets cannot be shared (or need to be shared under restrictions), explain why, clearly separating legal and contractual reasons from voluntary restrictions.
 2. Where will the data and associated metadata, documentation and code be deposited?
How will the data be made accessible?
(e.g., by deposition in [REPOSITORY_NAME], a [REPOSITORY_TYPE] seal repository)
 3. What methods or software tools are needed to access the data?
Is documentation about the software needed to access the data included?
Is it possible to include the relevant software (e.g., in open source code)?
 4. Have you explored appropriate arrangements with the identified repository? If there are restrictions on use, how will access be provided?
 5. Is there a need for a data access committee?
 6. Are there well-described conditions for access (i.e., a machine readable license)?
 7. How will the identity of the person accessing the data be ascertained?

ERC OPEN RESEARCH DATA MANAGEMENT PLAN (DMP)

3. MAKING DATA INTEROPERABLE *(which standard or field-specific data and metadata vocabularies and methods will be used)*

For example:

1. Are the data produced in the project interoperable, that is allowing data exchange and re-use between researchers, institutions, organizations, countries, etc. (i.e., adhering to standards for formats, as much as possible compliance with available (open) software applications, and in particular facilitating recombinations with different datasets from different origins)?
2. What data and **metadata** vocabularies, standards or methodologies will you follow to make your data interdisciplinarily interoperable?
 - a. **Metadata** of deposited data must be open under a Creative Common Public Domain Dedication (CC0=dedicating a copyrighted work to the public domain) or equivalent, in line with the FAIR principles (in particular machine-actionable) and provide information at least about the following: datasets (description, date of deposit, author(s), venue, and embargo); Horizon Europe funding; grant project name, acronym and number; licensing terms; persistent identifiers for the dataset, the authors involved in the action. Where applicable, the metadata must include persistent identifiers for related publications and other research outputs
3. In case it is unavoidable that you use uncommon ontologies or vocabularies or generate project specific ones, provide mappings to more commonly used ontologies (provide a list here), and keep updating this mapping as the project progresses

4. INCREASE DATA RE-USE *(what data will remain re-usable and for how long, is embargo foreseen; how the data is licensed; data quality assurance procedures)*

For example:

1. How will the data be licensed to permit the widest re-use possible?
2. When will the data be made available for re-use? If an embargo is sought to give time to publish or seek patents, specify why and how long will apply, bearing in mind that research data should be made available as soon as possible
3. Are the data produced and/or used in the project useable by third parties, in particular after the end of the project?
4. If the re-use of some data is restricted, explain why
5. How long is it intended that the data remains re-usable?
6. Describe data quality assurance processes

ERC OPEN RESEARCH DATA MANAGEMENT PLAN (DMP)

5. ALLOCATION OF RESOURCES and DATA SECURITY *(estimated costs for making the project data open access and potential value of long-term data preservation; procedures for data backup and recovery; transfer of sensitive data and secure storage in repositories for long term preservation and curation)*

For example:

1. Estimated costs for making the project data open access and how they will be covered
2. Who will be responsible for data management in the project?
3. Are the resources for long term preservation discussed (costs and potential value, who decides and how what data will be kept and for how long)
4. What provisions are in place for data security (including data recovery as well as secure storage and transfer of sensitive data)?
5. Procedures for data backup and recovery, backup frequency, disaster recovery plans
6. Procedures for transfer of sensitive data

DISCLAIMER. Please note that the ERC Data Management Plan is not a part of the Ethics Review. It is the responsibility of the Principal Investigator to inform the ERCEA Ethics Team of any ethics issues/concerns regarding the collection, processing, sharing and storage of data in relation to the project. The Principal investigator can also be asked to submit an Ethics Data Management Plan (Ethics DMP).