## INRAE - Institut national de recherche pour l'agriculture l'alimentation et l'environnement: INRAE - Project template

### Information concerning the management plan

**Author of the DMP (if different from the principal investigator/researcher): name, email**

**Affiliation of the author of the DMP**

*Recommandations*:

Consult the recommendations :

* [note de service Inra 2016-13 sur la signature "monoligne" des publications](https://intranet.inra.fr/ist/Media/Fichier/Publier-Valoriser/Affiliation/NS2016-13)
* [charte des publications de l'Alliance nationale pour les sciences de la vie et de la santé](http://biblioinserm.inist.fr/IMG/pdf/Modeles_adresses_Alliance_2011-1.pdf)

**Date of creation of DMP**

**Current version: (n°, date)**

### Information on the research project

**Identifier of the call for proposal**

*Exemple de réponse*:

*FP7-KBBE-2010-4*

**Project funder(s)**

*Exemple de réponse*:

[European Commission](http://dx.doi.org/10.13039/501100000780)

*Recommandations*:

For European projects one can refer to the information as they appear in [Cordis](http://cordis.europa.eu/).

[CrossRef funder registry](https://github.com/Crossref/open-funder-registry) can be used to find normalized funder names and IDs (for exemple : European Commission http://dx.doi.org/10.13039/501100000780).

**Name of research programme**

*Recommandations*:

For European projects one can refer to the information as they appear in [Cordis](http://cordis.europa.eu/)

*Exemple de réponse*:

*FP7-KBBE - Specific Programme "Cooperation": Food, Agriculture and Biotechnology*

**Reference of funding agreement**

**Project acronym**

**Name of research project**

*Recommandations*:

If the project corresponds to funding related to a call for proposal, name of the project as it appears in the response to the call for proposals

*Exemple de réponse*:

*Pesticide Use-and-risk Reduction in European farming systems with Integrated Pest Management*

**Project leader institution, coordinator & beneficiary (name, country)**

*Recommandations*:

Name of the institution as known by the funder.
Reference can be made to the [GRID Global Research Identifier Database](https://grid.ac/) or for France to the [RNSR Répertoire National des Structures de Recherche](https://appliweb.dgri.education.fr/rnsr/ChoixCriteres.jsp)

*Exemple de réponse*:

*INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE, France*

**Other partners (name, country, role of each partner other than the project leader institution)**

**Unit to which project leader belongs**

*Recommandations*:

Consult the recommendations :

* [note de service Inra 2016-13 sur la signature "monoligne" des publications](https://intranet.inra.fr/ist/Media/Fichier/Publier-Valoriser/Affiliation/NS2016-13)
* [charte des publications de l'Alliance nationale pour les sciences de la vie et de la santé](http://biblioinserm.inist.fr/IMG/pdf/Modeles_adresses_Alliance_2011-1.pdf)

**Project dates and duration**

*Exemple de réponse*:

*From 2011-03-01 to 2015-02-28*

### Brief presentation of project data

**Brief presentation of project data :**

* **Type, scope, scale**
* **Origin (new data collection; data conversion/transformation; data sharing/exchange; data purchase)**
* **Associated publications**

*Exemple de réponse*:

Data types: Experimental data, observation data, survey data, text data, genomic data, samples, images, audiovisual data, models...

### Description and organisation of data

**What methods and tools are used to acquire and process data? Specify the different formats in which the data will be available in the different phases of research**

**Documentation associated with the data**

**What types of metadata will be produced to accompany the data? What standards or taxonomies will be used to describe the data?**

**How will the metadata be produced?**

*Recommandations*:

There are tools to produce these metadata:

* [List of Metadata Tools](http://www.dcc.ac.uk/resources/metadata-standards/tools) (Digital Curation Centre)
* [RDA | Metadata Directory](http://rd-alliance.github.io/metadata-directory/tools/)  (Research Data Alliance)

**How will the data files be managed and organised during the project: control of versions, conventions for naming files, organisation of files…**

*Recommandations*:

Separate raw data from processed data, deliverables and processing programs.

Define rules for organizing and naming data files. Provide a graphical representation.

Do not modify the raw data: any change must result in a renaming of the files.

See [Naming and Organizing Data Files](http://www.inra.fr/datapartage/Gerer/Nommer-et-organiser-ses-fichiers-de-donnees) (Managing and Sharing of Scientific Data web site, in french).

**What is the quality control procedure of the data?**

**Enclose the quality insurance plan if possible**

*Recommandations*:

ISO-9001 quality procedures exist to define the data integration protocol. The integrity tool (ETL, RDBMS) guarantees the integrity of the data.

### Intellectual property rights

**Who owns the rights on data and other information created during the project?**

*Recommandations*:

Be careful when a private partner brings data into the project.

**Will material protected by specific rights be used during the project?  In this case, who will deal with the formalities required, obtain the authorisations for use and possible dissemination?**

*Exemple de réponse*:

Human samples, samples of plants or animals from third countries ...

### Data Sensitivity

**Identification of the data sensitivity Level**

* Public
* Internal
* Confidential
* Restricted

*Exemple de réponse*:

Patent pending, data sets from a private partner

**What are the measures taken and the norms that must be met to guarantee the security of sensitive data?**

*Recommandations*:

**Privacy rules must be written and disseminated to users.**

A charter may be imposed which obliges the user to respect these rules.

*Exemple de réponse*:

Informed consent of participants, server security (ISO 27001), document encryption, etc.

**If there is personal data, what measures are envisaged to protect it during the project or in the context of re-use?**

*Exemple de réponse*:

Anonymization, pseudonymisation, signature of a confidentiality agreement, etc.

### Data storage and backup during the project

**Have the information systems used been subjected to a risk analysis or certification?**

* Yes
* No

What types of physical media are used to store data during the project?

*Exemple de réponse*:

On a PC, a server in an office, in a machine room, in a datacenter, in a cloud-type service.

Input mobile terminal (tablet, smartphone ...); Sensor (probe, PLC, etc.); Computer (portable, stationary); USB key ; Paper; Server storage space; Cloud ...

**What security measures are in place during the data transfer stages of the project?**

*Recommandations*:

Possibly provide a functional diagram of the information system

*Exemple de réponse*:

Physical transfers (USB key, external hard disk...) : encryption.

Network transfers (mail, sftp, https ...) : encryption and use of secure protocols

**What is the estimated amount of data?**

*Recommandations*:

Storage capacity. It may be reassessed during the project.

*Exemple de réponse*:

*[n] Megabytes*

**Where will the data be located geographically?**

*Exemple de réponse*:

In France, in the EU, outside the EU, do not know (cloud unspecified geographic storage) ...

*Recommandations*:

From the "Confidential" sensitivity level, it is recommended to host the data in the European Union.

**Does the entity physically hosting the data have a security policy for its information system and security assurance plan?**

*Recommandations*:

The Information Systems Security Policy (ISSP) is a set of security rules that is a reference for the entity in question.
When the hosting is internal to INRAE: the INRAE PSSI applies. In other cases, ask for the security policy and the security assurance plan of the partner.

**Security - Confidentiality: will the data de exchanged or shared with third parties?**

*Recommandations*:

**Confidentiality**: means that the information is not made available or disclosed to unauthorized persons, entities or processes (ISO 27000).

See also "**Information, Confidential**" on the [Original RDC Glossary](https://www.rdc-drc.ca/glossary/original-rdc-glossary/) (Research Data Canada):

*Exemple de réponse*:

The data collected will be shared with the research group [...] of the University X ... in charge of the Y theme.

**How are rights of access to data determined during the research project?**

*Exemple de réponse*:

Access Control Policy; Established partner agreement; Formalized process; Request for one-time access authorization ...

*Recommandations*:

**Access management**: Asset owners should determine appropriate access control rules, access rights, and access restrictions to the asset user's specific functions.

Access controls are both logical and physical ([ISO 27002](http://www.iso.org/iso/fr/catalogue_detail?csnumber=54533)).

**Security – Integrity – Traceability: what measures of protection will be taken to monitor data production and analysis during the project?**

*Recommandations*:

**Integrity**: property of accuracy and completeness (ISO 27000). Data should be expected, and should not be tampered with, illicit or malicious. Clearly, the elements considered must be accurate and complete. (Wikipedia June 2016)

*Exemple de réponse*:

Laboratory logs, search protocols, logging registers, data and results timestamps, personal authentication of tools, etc.

### Access and sharing of data at the end of the project

**Is there an obligation to share data (or on the contrary a prohibition or restriction?**

*Exemple de réponse*:

Requirement of a funding agency or research institution on which the authors depend. Draw on the answers to the question on the identification of confidential datasets.

**What data will be shared at the end of the project? If all the data are not available in the same way, or at the same time, please specify**

**What are the potential reuses for these data?**

**Does reading the data require specific software or tool? If so, which one?**

**How will the data be shared?**

*Recommandations*:

The choice of a repository is discussed in the section "Data archiving and conservation".

The repository [Data INRAE](https://data.inrae.fr/) can accommodate the INRAE data sets.

**With whom? With what licence?**

*Recommandations*:

Access procedure: opening to all or to a specific group, type of control.

See: [Choose a license](http://www6.inra.fr/datapartage/Partager-Publier/Choisir-une-licence)

**As from when?**

**For how long?**

**Will the data be identified by a permanent identifier (DOI or other)?**

**Which organisation will be responsible for requesting the identifier in the case of multi-partner projects?**

*Recommandations*:

If INRAE does the DOI request, you can use the [INRAE DOI Assignment Service](https://www6.inrae.fr/datapartage/Gerer/Demander-un-DOI).

### Data archiving and conservation after the end of the project

**What data will be conserved in the medium and long term and what data will be destroyed?**

*Exemple de réponse*:

All the processed and derived data are retained in the long term as well as the useful raw data (at a later re-exploitation). Example: for the phenotyping data, retention of the raw data and a sub-set of elaborate data answering a scientific question (Eg association analysis)

**On what permanent archive platform will the data that are to be conserved long-term be archived?**

**What procedures will be set up for long-term conservation?**

*Recommandations*:

These are perennial archiving platforms designed to perpetuate data, such as the C.I.N.E.S.

Data repositories, with few exceptions, do not have this possibility.

**What is the duration of data conservation?**

**Who will be responsible for long-term conservation?**

**Name an individual contact**

*Recommandations*:

The project coordinator is responsible for managing the data during the project and archiving it at the end of the project.

The manager of the unit who coordinated the project may be responsible for the long term.

**What will be the volume of these data?**

**What funding guarantees will cover the costs of long-term conservation?**

*Recommandations*:

Elements to estimate the cost of data management*:*
*-* [UK Data Service - Data management costing tool and checklist](http://www.data-archive.ac.uk/media/247429/costing_v3.docx)
*-* [OpenAIRE - How to identify and assess Research Data Management (RDM) costs](https://www.openaire.eu/how-to-comply-to-h2020-mandates-rdm-costs)