Organization and Relevant Milestones for Data Management and Data Management Plan

1. Data Management Main Activities and Responsibilities

At the start of the Project, each partner involved in research must define the datasets that will be created, identify packages of activities required for data management and check in-house skills and infrastructures. Each partner must define people and responsibilities involved in data management and establish whether it requires external support for specific tasks. Each partner should consider re-allocation of budgetary resources if necessary.

Relevant iterative steps in Data Management are: creation, manipulation, sharing, and preservation. These steps consist in many different activities and issues that must be detailed in the Data Management Plan:

1. **Creation**: involves issues about IP rights on third-party data (if applicable); procedures for collecting data (both analog and digital – and eventually digitization); adoption of standards or definition of common rules used for data description and naming.

2. **Manipulation**: concerns issues about middle-term storage (where, when and how) and access to data; software, tools and methodologies needed for manipulation of data – and related skills; processes of data cleaning, data anonymizing or others; IP rights and Privacy; versioning and organization of data.

3. **Sharing**: involves legal issues for the definition of Licenses; technology and systems required for valorization and dissemination with respect of restrictions and terms of use of data.

4. **Preservation**: involves data curation issues (identification, data processing and metadata creation for long-term access and re-use, data quality monitoring); strategies for long-term storage; back-up and security system.
As regards responsibilities involved in data management, research groups must provide name, contact information and role for (at least):

- principal investigators designing research;
- research staff collecting, creating, processing and analysing data;
- external contractors with a role in data collection, collation or processing if applicable (e.g. transcribers);
- support staff managing and administering research data;
- institutional IT services providing data storage, security and backup services;
- external data centres or archives who facilitate data sharing and preservation.

These details are required in the Data Management Plan.

2. Data Management Plan: Main Activities and Milestones

The Data Management Plan (DMP) of the Project is the document that details what data the project will generate, whether and how it will be exploited or made accessible for verification and re-use, and how it will be curated and preserved. The DMP must cover the data management life cycle for all the datasets that will be collected, processed or generated by the research project.

As a consequence, the DMP is not a fixed document: it evolves and gains more precision and substance during the lifespan of the project and it requires monitoring and update.

2.1 Main DMP Milestones

1. Within the first 6 months of the project: first version of DMP compliant with the Commission template;
2. mid-term: reviewed version;
3. end of the project: final version;

Periodical updates are required whenever important changes occur to the project, such as creation of new datasets or changes in consortium policies.
2.2 Activities

The DMP is a policy statement that must be shared and agreed upon by all partners of the consortium. It requires a clear definition of data management responsibilities and procedures for each research partner. It requires constant monitoring and update.

The consortium must identify staff in charge for DMP preparation, monitoring and updating and allocate budget for activities connected with its preparation, updating and application.

Staff in charge for DMP shall:

- collect information from partners regarding data creation and management;
- plan meetings to involve the Consortium partners in the assignment of roles and responsibilities and in the definition of the procedures according to standards and good practices;
- address IP and copyright issues by referring to legal experts;
- provide guidance regarding application of procedures;
- regularly monitor the adoption of the policy by all partners with respect to the H2020 pilot requirements in terms of open data dissemination and preservation;
- regularly update the DMP according to the Commission requirements;
- provide professional expertise and support (training, legal advice, data conversion, metadata assistance, unique and persistent identification, data documentation and description, data cleaning, transcription, digitization, data processing and organization, data anonymisation).