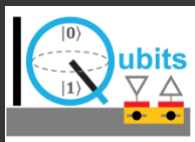


IQubits

D1.2 Data management plan

November 2019



Contact information

PROJECT COORDINATOR

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EXECUTIVE SUMMARY

This deliverable provides the first version of the Data Management Plan (DMP) elaborated for the IQubits project. This document provides an overview of the main elements of the data management policy used for all the data sets generated by the project. In particular, this deliverable outlines the collection, generation, processing and sharing of data by IQubits. Moreover, it addresses the adopted methodology and procedures about how the data will be disclosed and stored. Since the DMP is expected to mature during the project lifetime, more detailed versions of this document will be made available over the project execution.



1 DATA SUMMARY

The data collected and generated by IQubits allow the scientific and administrative management and coordination of the project, the execution of the research and administrative tasks, the processing of the scientific and financial results, the dissemination of the scientific results and the interactions with the partners, stakeholders and the Society at large.

The data collected and generated by the project can be confidential or non-confidential (public) in nature, with different levels of disclosure, as regulated by Grant Agreement (GA) and Non-Disclosure Agreements (NDAs), with the objective of maximizing the impact of the project, following the principle of the Open Research Data (ORD) Pilot – “as open as possible, as closed as necessary”.

IQubits generates and collects different data types and formats that constitute the entire project data set. The data can be classified in relation to the nature of the project tasks (administrative, scientific, dissemination), as reported in Table 1.

Table 1: Data types and formats in relation to the nature of tasks

Nature of Tasks	Types	Formats
Administrative	• Financial	• document, table, image.
	• Personal	• document, table, image.
	• Public	• document, table, image.
	• Confidential	• document, table, image.
	• Managment	• document, table, image.
	• Legal	• document, image.
Scientific	• Publications	• document, table, image.
	• Simulations	• table, image.
	• Measurements	• table, image.
	• Demonstrations	• table, image, video.
	• Software	• code, document, image.
	• Reports	• document, table, image.
Dissemination	• Stakeholder contacts	• document, table, image.
	• Papers	• document, table, image.
	• Presentations	• slide, document, table, image.
	• Videos	• video
	• Press releases	• document, table, image.

To collect, generate, process and share the foreground data of the project, the Consortium may make use of any background data already available from previous works, such as previous publications, presentations, simulation results, measurements, etc.

The project data may have origin from publicly available data, generated by the consortium partners and third parties.

The size of the data may vary in relation to types and formats. Likely, video and software will be those with the largest sizes. In order to self-contain the data sets collected and generated by the project, private area of the website that is expected to host the project data has been sized to 20 GB (i.e. size of the hosting storage space).

The data will be useful to the consortium partners, the Advisory Board, and stakeholders, including international scientific community and Society at large.



2 FAIR DATA

2.1 Making Data Findable, Including Provisions for Metadata

The data produced and used in the project are searchable with metadata, identifiable and locatable by means of standard identification mechanisms such as tags, keywords, unique identifiers, Digital Object Identifiers.

The data follow naming convention that makes explicit reference to name of the document, status (e.g. draft or final), author, institution and version.

2.2 Making Data Openly Accessible

The data produced and used in the project will be made openly available following the principle of the ORD Pilot, i.e. as open as possible, as closed as necessary. This will allow maximizing the impact of the project in terms of both commercial exploitation and dissemination through the dissemination channels. Background knowledge and know-how will be clearly distinguished from foreground knowledge and know-how, and these last ones will be first evaluated for protection of the intellectual property rights, and only after disclosed and/or disseminated, as per provision in the Consortium Agreement.

The data will be primarily made accessible by the deposition in the IQubits data repository, accurately designed and implemented to this end. The repository allows access according to user rights granted by the Project Coordinator. Public repositories, such as Cornell's arXiv, will be also adopted for green and open access publications.

2.3 Making Data Interoperable

The data produced in the project will be provided in the most widespread standard formats, in order to assure an adequate level of interoperability, so allowing data exchange and re-use between researchers, institutions, organisations, etc.

2.4 Increase Data Re-Use (Through Clarifying Licences)

In compliance with the terms and conditions reported in the Consortium Agreement and Grant Agreement, open access data will be made available to users under common creative licences, in order to permit the widest re-use possible by the international scientific community and Society at large. The data produced and used in the project may be useable by third parties, also after the end of the project. The IQubits data repository is intended to remain in operation at least for eight years, i.e. four years after the project end. This term is two years longer than the original term reported in the project proposal. Quality is assured by the service agreement with the host provider.



3 ALLOCATION OF RESOURCES

The coordinator will be responsible for data management. The costs for making the project data FAIR through the IQubits repository amount to about 1600 euro. Costs for making the data open access through other repositories related to the targeted publications may amount to a few thousands euro. These costs will be covered by the project funds.



4 DATA SECURITY

The provisions in place for data security, including data recovery as well as secure storage and transfer of sensitive data, have been defined by the very detailed service agreement with the provider, who has certified that data safely stored in secure repositories for long term preservation and curation. The data will be backed up on a daily basis, with weekly and monthly images. After the agreed terms, the data will be archived and delivered to the Coordinator, and only after a guard period of one month, will be deleted from the host servers.



5 ETHICAL ASPECTS

There are no ethical issues in this project.



6 OTHER ISSUES

No other issues.

