



# ph-coding

# Predictive Haptic COding Devices In Next Generation interfaces

Grant agreement#: 829186

H2020 FET Open

Deliverable reporting document

Deliverable no: 1.7	Lead beneficiary: ULUND	WP: 1
Deliverable title: Updated data management plan	Type: Open research data pilot	Dissemination level: Public
Due Delivery date: 2020-06-30		Date delivered: 2020-06-30

# Short description of the deliverable

Plan for the organization of the PH-CODING research data depository in the Open Research Data Pilot.

## Data Management Plan

#### Data Summary

The main format of the data deposits generated in the ph-coding project will be in form of text-based spreadsheet data files.

The text-based spreadsheet format makes the data more widely importable to a large range of software and the origin of the data is hence made transparent to the user.

In order to further facilitate the access, in addition to the spreadsheet data a descriptive text will be created for each set of spreadsheet datafiles, which describes the structure of the data. This descriptive text will also state under which recording conditions/settings the data was obtained, pointers to the datafiles and the purpose of the data as well as its relationship to the objectives of the ph-coding project.

In cases where binary spreadsheet data format is instead used, the program used to create the data must be specified in order to increase reusability.

The descriptive text will also include links to the published paper, to which the reader will be referred for a more detailed account of how the data was generated.

The data can be expected to be useful for neuroscientists, roboticists, psychophysicists and electronic engineers that want to test the validity of alternative hypotheses explaining the data.

#### FAIR Data (findable, accessible, interoperable and re-usable)

The discoverability of the data will be ensured by the descriptive text which describes the structure of the data and the conditions/purpose under which it was obtained. Anyone with a reasonable level of understanding of the type of data included will hence not have problems identifying metadata analyses that could be made on the data.

No standard data identification mechanisms will be used. Instead, in-house unique coded identification mechanisms (anonymized with respect to the individual) will be used in order to identify data from different subjects or test runs.

The metadata will in applicable cases be available through the open source publication where it is available to any user.

The data created during the project will be made available when the associated scientific articles are published in order to not endanger the impact of the articles. The published data will then be in its final form, thus no version numbers will be needed.

Search keywords will not be included as the re-use of the data requires a basic understanding of the purpose of the data collections, which is described in the descriptive text. As the publications of ph-coding are open source and typically listed on one or several popular search engines for scientific publications, using keyword indexing, keyword searches on the web will anyway lead the user to the data.

The data generated during the project will be made accessible together with the corresponding descriptive text using the open access repository Figshare and is planned to be available at least for the duration of the ph-coding project but most likely much longer than that (>10 years). The coordinating institution, ULUND, has a few years of experience with the Figshare solution and so far this database has been working smoothly with no need for arrangements with the repository.

The only software tools necessary to access the majority of the data will be software used to open text-based spreadsheets. In cases where other software is needed this will be specified in the header document outlining the structure of the data.

There will be no restrictions on the use of the data. The data will be made available when the corresponding paper is published and is available to any person interested in accessing them (hence no identification is required or will be used).

There will be no need for a data access committee as all data underlying the published papers will be made open access.

The data will be shared among the partners using Figshare.

#### 3. Allocation of resources

No additional cost will be required in order to make the data FAIR in the project, beside the personnel hours required to upload the data. Figshare is a free to use platform. In case that Figshare is no longer available or changes is free-to-use policy, the steering board will either decide to use management budgets to cover the cost or to identify new possible platforms/repositories.

#### 4. Data security

In addition to the platform Figshare, the data will be stored on a local storage server at the institution/department of the partner that generated the data in question. Hence, even if repository providers break down, the data will be saved for uploads to new repository if required.

### 5. Ethical aspects

GDPR legislation will be followed by having fully anonymized data in cases where human data needs to be uploaded. The informed consent questionnaires include questions on data sharing and long-term preservation of human data. Due to anonymization procedures, no personal data will be traceable to recording data.