

## **Annex to Rules of Operation CF MAFIL No. 2: Storing and securing data acquired in CF MAFIL**

Multimodal and Functional Imaging Laboratory (CF MAFIL) collects following data types during the research studies realization:

- 1) Data with the characteristics of measured subjects and measurements carried out on those subjects for individual research studies. These data are generated on the basis of the MR safety questionnaire, eventually also of the informed consent of the given project or the order of the measurement. Entries in the MR safety questionnaire are converted into electronic form and stored into a database placed in a secure infrastructure that uses the principle of dual authentication. Original paper forms are then archived in a private room of the laboratory in a locked cabinet. Access to the aforementioned paper and electronic data is restricted to authorized employees of CF MAFIL (device operators, data administrators). Authorized members of particular research teams may have access to their research data as well. Collected (personal) information includes:
  - a. name and surname
  - b. personal identification number (or similar identification number for foreigners)
  - c. date of birth
  - d. sex
  - e. laterality
  - f. native language
  - g. vision correction
  - h. height, weight
  - i. telephone, e-mail (optional/signed consent for the transfer of data by electronic means)
  - j. basic indication about the state of health (in terms of possible contraindications and risks of MR examination)
  - k. invoicing data (in the case of a filled-in measurement order)
- 2) The data from the magnetic resonance (MR). These data includes the personal data (name, surname, date of birth, personal identification number, sex, height and weight) and may potentially contain information about the health of the measured subject (some of the acquisition techniques are similar to the medical diagnostics, depending on the specific protocol, location of the measured area and in particular on the capability of evaluating person to discern health information from the data). Given their nature, these data are considered sensitive personal data. Secure network infrastructure, where the MR data are located, is completely separated from the Internet and meets all requirements for the storage of medical records. Physical security of the devices and computers connected to secure network is implemented at both the access restriction level (key) and a password. Access to these data is limited to authorized employees of CF MAFIL (device operators, data administrators).
- 3) The pseudonymized MR data, which were created by removing the identification/personal data from the original MR data. During the pseudonymization process, the subject's name, surname, personal identification number and date of birth are replaced by a unique code. These data are forwarded upon request ([datarequest.mafil@ceitec.muni.cz](mailto:datarequest.mafil@ceitec.muni.cz)) to researchers\* for further

processing/evaluation in the context of the given project and only to persons listed by the project investigator as authorized to access the measured data.

- 4) The data from electrophysiological methods (e.g. EEG, ECG, etc.), records of eye movements (eyetracking) and, in case of functional measurement, also information about experimental stimulation (course of stimulation, recordings of the subject's response). These data is stored directly in pseudonymized form (using the unique code) – it is not possible to assign them to a specific person without access to a database in point 1.

Only pseudonymized data are forwarded to researchers (points 3 and 4).

\*) Possible exception is the situation when the measured data may be important for clinical diagnostics. A signed request for transfer of personal data to the selected healthcare facility is a prerequisite. The signed requests are then archived in CF MAFIL together with the safety questionnaires.

Annex approved on 8.7.2024

Approved by: Michal Mikl, head of CF MAFIL