



DEVELOPING A DATA SHARING FRAMEWORK

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CONTENT



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- FOTNet Data - WP3 Data sharing framework
- FOTNet 2 - WG Data sharing
- UDRIVE – Test bed for data sharing
- Focus of WP3 Data sharing framework

INTRODUCTION

- Huge datasets have been collected
- Global level – US, EU, Japan, Australia, Korea, China – both data collection and data sharing discussions
- FOT, NDS, Event recorders, Probe data
- ITS Congress 2013 in Tokyo – Big Data and Open Data; the same issues
- How to share the data?



WP3 FOT DATA SHARING FRAMEWORK

The main objective of WP3 is to develop a data sharing framework for use in global data sharing:

- WP3.1 Develop procedures and templates for data sharing to enable data to be re-used
- WP3.2 Create framework for description of FOT/NDS data types and meta data and identify minimum data set to be collected
- WP3.3 Give recommendations for data protection depending on data type

Based on the WG Data sharing work

FOT-NET 2 - WG DATA SHARING TOPICS

1. Data sharing in project documents
2. Valid data – Data and meta-data descriptions
3. Data protection
4. Education on data protection related to personal data and IPR
5. Support and research functions
6. Financial funding for post-project funding
7. Application procedures

1. DATA SHARING IN PROJECT DOCUMENTS

1. Grant agreement
2. Consortium agreement
3. Participant agreement
4. External data provider agreement

Participant agreement

I also consent to have video recordings or pictures being published or shown in public events (e.g. research reports or conferences)

Yes No

Consortium agreement

Storage and download of data

Where will the data be stored, centrally or distributed?
What are the requirements on data protection and how are they assured?
Shall all data/part of the data be downloadable for all partners and if so, under which conditions?
Shall all data/part of the data be downloadable for third parties and if so, under which conditions?
Is there a time limit to request data for download?

2. VALID DATA – DATA AND META DATA DESCRIPTIONS

USE

- Harmonized interface for analysis tools
- Standard description of the data at a data broker
- Suggestion for a minimum requirements in terms of data characteristics

Data classification

Data type	Data category	Ownership
Questionnaires- and interview data	Personal	Jointly
Video	Personal	Jointly
GPS	Personal	Jointly
Vehicle mounted sensors (eyetracker, lanetracker, radar, etc)	Sensor	Jointly/supplier

Data types

Data	Specification
Measures	Measures pre-processed and derived from the data collected.
Processed data	Data that has been produced using available data in order to enrich the data set; derived measures, events, locations, situations, performance indicators.

3. DATA PROTECTION

- **Data protection level depending on data type**
 - Personal data
 - Commercial data
- **Data protection at Data Centres and Analysis Sites**

Analysis Sites (AS)

List of data protection requirements

AS-1: The AS organisation must document its data protection implementation if handling data within their organisation.

AS-2: The analysis work stations must be physically protected.

Documents at AS

- Confidentiality or Non-Disclosure Agreement (CDA or NDA), between analyst/visitors and AS organisation.
- Approved training certificate for analyst.
- Data protection implementation documentation signed by the AS leader.
- Approval from ethics committee for intended research (if applicable).
- Data extraction request

4. EDUCATION ON DATA PROTECTION

Two levels:

- Web-based general education; e.g. NIH
- Education on local procedures

The content of local procedures could involve

- Description of the data with special focus on personal data and Intellectual Property Rights (IPR)
- Requirements on the data handling from a legal point of view
- The content of the consent forms, especially the specific active consents related to data sharing
- Data ownership and access rights for partners/third parties
- The set-up of the physical workspace
- Local procedures on how to perform analysis

5. SUPPORT AND RESEARCH SERVICES

- Support and research services – a core in data sharing
- Support services will assist the researchers, who does the actual work. Includes analysis tools.
- Research services - perform the research itself or extract usable datasets.

6. FINANCIAL MODELS FOR POST-PROJECT FUNDING

- Items requiring funding
- Financing bodies
- Financial models
 - Per project
 - Base funding and per project funding
 - Base funding for specific purposes

Items requiring funding

Research infrastructure for FOT/NDS data	Comments
Management & coordination	Management of the infrastructure
Analysis platform support	Data management – expert knowledge Tool support - further develop and adapt the analysis tools to new types of analysis Access management
Facilities & analysis work stations	Physical secure work space
IT operations	Database servers, storage and licenses
Data documentation	Post-project clean-up and structuring of data

7. APPLICATION PROCEDURES

The application procedure shall at least address the following items:

- Where to apply
- Which information is needed?
- Who can approve an application, response times, conditions to be taken into account in the approval decision?
- Requirements on mandatory training
- Information on the data access procedure
- Requirements on data protection
- Potential costs for data access, support and research services
- Requirements on acknowledgements on publications, reports and presentations
- Documentation of data applications and the related approval decision(s).

UDRIVE – EUROPEAN NDS TEST BED FOR DATA SHARING

- 7 test sites
- Central Data Center (CDC) located at SAFER
- Analysis performed remotely on the common dataset
- Set-up of infrastructure for remote access including data protection



FOTNET DATA - FOCUS OF DATA SHARING FRAMEWORK

Two step approach

Further develop the FOTNet 2 platform

- Further develop the procedures and templates
- Develop data and meta data descriptions
- Further develop the data protection

Obtain support for the framework

- In-depth discussions and collection of comments on a global scale
- Formulate a data sharing framework that is endorsed by at least 20 organisations globally

THANK YOU FOR YOUR ATTENTION!

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