



## 6<sup>TH</sup> STAKEHOLDERS WORKSHOP, BRUSSELS

### Inventory of Tools for FOTs

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FOT-Net is a support action co-funded by the European Commission to network FOT activities at European, national and international level.

# CONTENT

- Collection of existing Tools for FOTs
  - Tools for data acquisition
  - Tools for data base structure and data management
  - Tools for data analysis
  - Other tools (travel diary, questionnaire etc.) with focus on driver
- Overview of available Tools
  - FOT WIKI
  - Integration of FOT Tools into FOT WIKI

# OBJECTIVES

- Inventory and analysis of tools utilized in existing FOTs
- Tool chain will consider all steps of FOTs:
  - data acquisition methods and systems
  - data base structure and data management
  - data analysis
- Collection of experience of the FOT parties which utilized the corresponding tools
- Suitability of a specific tool for a specific type of FOT will be treated in the inventory

# PROCESS

- Inventory List for FOT Tools
- Identification of responsible persons for different FOTs
- Data collection
- Presentation of results (WIKI)

# DATA ACQUISITION SYSTEMS - REQUIREMENTS

- Main requirements for data acquisition systems in FOTs
- Requirements of different FOTs

# DATA ACQUISITION SYSTEMS – TEMPLATE FOR CAN DATA

- Information about:
  - Provider
  - Name
  - # of CAN channels
  - Memory
  - Filtering
  - Trigger
  - Diagnose
  - GPRS/GSM, GPS
  - WLAN
  - LAN
  - Input
  - Energy Save
  - Consumption idle
  - Consumption on
  - Other inputs
  - Other outputs
  - Price
  - Contact
  - Casing
  - Size
  - Interfaces
  - Audio
  - Usage in FOT

# DATA ACQUISITION SYSTEMS - TEMPLATE FOR „OTHER“ DATA

- Information about:
  - Provider
  - Name
  - Type of recorded Data
  - Memory
  - Filtering
  - Trigger
  - Diagnose
  - GPRS/GSM, GPS
  - WLAN
  - LAN
  - Input
  - Energy Save
  - Consumption idle
  - Consumption on
  - Other inputs
  - Other outputs
  - Price
  - Contact
  - Casing
  - Size
  - Interfaces
  - Audio
  - Usage in FOT

# DATA ACQUISITION SYSTEMS - OTHER TOOLS WITH FOCUS ON DRIVER

- Templates for tools on e.g.:
  - Travel patterns
  - Travel diary
  - Questionnaire, Lime Survey  
(e.g. driver behaviour (Driver Behaviour Questionnaire), sensation seeking (Sensation Seeking Scale), mental workload (NASA TLX) etc.
  - Interviews



# DATA BASE STRUCTURE AND DATA MANAGEMENT - TEMPLATE

- Templates for
  - Test Planning Tools
  - Test Control Tools
  - Test Monitoring Tools
- Information about:
  - Provider
  - Tool Name
  - Category
  - Purpose
  - Description
  - Data sources
  - Displayable Information
  - Recording
  - Limitations
  - Usage in Project
  - Graphical User Interface
  - Operating System/Platform
  - Open Source
  - Typical Users
  - Release Date
  - Year last updated
  - Contact Person

# DATA ANALYSIS - TEMPLATE

- Information about:
  - Provider
  - Tool Name
  - Category
  - Purpose
  - Description
  - Type of Data Analysis
  - Input Data
  - Output Data
  - Limitations
  - Usage in Project
  - Graphical User Interface
  - Operating System/Platform
  - Work Mode
  - Open Source
  - Typical Users
  - Release Date
  - Year last updated
  - Contact Person

# FOT WIKI

The FOT-Net Wiki is the Free Living Encyclopedia of FOTs that anyone can edit:  
it is the tool “for and by” the FOT community.

It can be accessed via: [www.wiki.fot-net.eu](http://www.wiki.fot-net.eu)

What can I do?

Create an account

Update and upload information about your FOT

Monitor FOTs in your geographical area/field of expertise and edit the Wiki directly or contact [info@fot-net.eu](mailto:info@fot-net.eu)



The screenshot shows the homepage of the FOT-Net Wiki. At the top, there are navigation tabs for 'page', 'discussion', 'view source', and 'history'. The main heading reads 'Welcome to the wiki of Field Operational Tests'. Below this, a yellow box contains the text 'Welcome to the FOT-Net Wiki, the free encyclopaedia of Field Operational Tests that anyone can edit! 161 articles and 1,951 edits by 71 registered contributors.' To the right of this box are links for 'Create an account', 'Write the article of a new FOT', and 'Request an article about a new FOT'. A blue box below contains the text 'This wiki intends to be a resource for anyone interested in Field Operational Tests, their organisation, their set up and their results. We strongly encourage you to contribute to this online resource.' and a link to 'Sign up to FOT Wiki here'. Below this is a section for 'This month's featured FOT: sim<sup>TD</sup>' with a description of the project. To the right is a section for 'The FOT Catalogue' with a description of the catalogue and a link to 'add a name, please use the FOT sheet'. On the left side of the page, there is a 'navigation' menu with links to 'Main Page', 'FOT Catalogue', 'List of FOTs', 'List of Fields', 'List of Methodology projects', 'List of Test Sites', 'FOT Glossary', 'Who's who in FOTs?', 'Recent changes', and 'Help'. Below the navigation menu is a 'search' box with 'Go' and 'Search' buttons. At the bottom left, there is a 'toolbox' with links to 'What links here', 'Related changes', 'Special pages', 'Printable version', and 'Permanent link'.

# FOT WIKI

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## Welcome to the wiki of Field Operational Tests

Welcome to the **FOT-Net Wiki**,  
the free encyclopaedia of **Field Operational Tests** that anyone can edit!  
170 articles and 2,446 edits by 77 registered contributors.


- Create an account
- Write the article of a new FOT
- Request an article about a new FOT

**This wiki intends to be a resource for anyone interested in Field Operational Tests, their organisation, their set up and their results. We strongly encourage you to contribute to this online resource.**

Sign up to [FOT Wiki here](#)

Experiencing problems using the wiki? Check the [help](#) page or contact us at [info@fot-net.eu](mailto:info@fot-net.eu).

### This month's featured FOT: **sim<sup>TD</sup>**



The **sim<sup>TD</sup>** project includes applications in the field of traffic monitoring and management, driving and road safety, as well as additional services, and will put the results of previous research projects into practice. Realistic traffic scenarios will be addressed in a large-scale test field infrastructure around the Hessian city of Frankfurt am Main. The project will also pave the way for the political, economic and technological framework to successfully set up car-to-car and car-to-infrastructure communication.

To achieve those objectives, numerous automotive and telecommunication companies, the Hessian state government and renowned universities and research institutions have partnered up. The Federal Ministry for Economics and Technology, the Ministry for Education and Research as well as the Ministry for Transport, Building and Urban Affairs are funding and supporting the project.

The FOT execution and evaluation (phase 3) is planned to start in June 2011 and to last 15 months up to the end of the project in September 2012.

More information on: <http://www.simtd.de/>

### Frequently asked questions

[What are Field Operational Tests?](#)

[What is the FOT-Net support action?](#)

[What are the objectives of Field Operational Tests?](#)

[Is the data from the different FOTs comparable?](#)

### The FOT Catalogue

With the aim to involve all experts, FOT-Net has created a [FOT Catalogue](#) to which everyone can contribute. It is an online list of past and present FOT activities for anyone interested in FOTs, their methodology, their set-up and their results.

With this Wiki pages, we aim to build up a catalogue of key information about various past, current and planned field tests in [Europe](#), [North-America](#) and the region [Asia-Pacific](#). You can help us build the [FOT Catalogue](#) by listing or enriching information about your field test in this catalogue!

**If your Field Operational Test is not listed and you would like to add a page, please use the [FOT sheet template](#)**

You can copy the code and headings and create a new FOT page based on the defined template.

### The FOT Glossary

The FOT community has gradually set up a Glossary starting from the activities of [FESTA](#) and now further improved by [euroFOT](#). FOT-Net is trying to bring the Glossary to the whole FOT community in the [FOT Glossary](#) where anyone can suggest an addition or amendment.

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# FOT WIKI - TOOLS

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## Tools for FOTs

The conduction of an FOT or a Naturalistic Driving Study (NDS) requires specific tools. In previous projects these tools were developed each time an FOT or NDS was conducted by the FOT/NDS partners taking into account the specific needs and requirements of their FOT/NDS. This leads to a considerable amount of work, which partly could have been avoided, if existing tools would have been used and additionally if these tools would have been developed in a more general way considering a broader field of application and not only the projects these have been developed for. A reason besides the missing general tools for non-reuse of FOT/NDS tools is that project partners are often not aware of what is already available and accessible.

Therefore this section is aiming for an inventory of FOT and NDS **tools**, which can be used by all parties interested in conducting an FOT/NDS. The inventory aims to list all tools and specify these tools as far as the tool specification are accessible and public. Additionally experience gathered with these tools in existing projects will be considered in the inventory, in order to allow the reader for the choice of the best suited tool for his type of FOT. It is not the intention of the WP to rate and evaluate the tools but to indicate e.g. whether a specific data acquisition system (DAS) could be useful for an FOT with extensive data collection including also video or is better suited for FOT where only CAN data is collected. By doing so, future FOTs/NDS should be able to re-use existing tools and just adapt these according to their specific needs instead of developing new tools starting from scratch.

The following tools shall be considered:

**Tools for data acquisition:** These tools considers all tools which can be used for data collection in the field and its storage in the vehicle

**Tools for data management:** These tools considers all tools which can be used for data management, which starts at storage of the data in the vehicle and ends when the data is stored in a database on a server

**Tools for data analysis:** These tools consider all tools for processing and aiding the data analysis, which starts after the data is put on the database

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**The collected data will be constantly updated** by the FOTNET consortium partners, but can also be updated by the user of this wiki. If you or your company would like to contribute to the tools list, please feel free to add to this wiki or contact us directly.

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- 2 Other data acquisition tools
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### CAN data acquisition tools


**Tool Name**

- Datalogger II

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### Other data acquisition tools

**Tool Name**



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# FOT WIKI - TOOLS

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## Datalogger II

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### General Information

Provider	Tool Name	Category	Purpose	Release Date
CTAG	Datalogger II	CAN Data Acq.	---	---

Last Update	Operating System/Platform	GUI	Size	Price	Usage in FOT
---	---	---	32x108x80 mm	---	euroFOT, TeleFOT

Contact
david.sanchez@ctag.com

### Specific Information

#### Hardware:

# of CAN channels	Memory	GPRS/GSM	GPS	USB
4	SDHC	yes	yes	---

WLAN	LAN	Interfaces	Casing	Input
no	no	4 x CAN, GPRS, GPS, USB, Serial Bus	Aluminium Box, Automotive Connector	9V - 18V, 18V - 30V

#### Other:

Other inputs	Other outputs	Consumption idle	Consumption on	Energy Save
no	no	30 mA	350 mA	yes

Filtering	Trigger	Diagnose	Audio
yes	yes	yes	no

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**search**

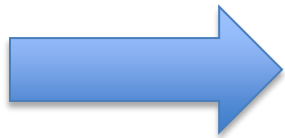
**toolbox**

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# DATA COLLECTION - STATUS

- First information already collected
- Data collection activities ongoing
- Tool manufacturers are being contacted in order to get permission and check content
- First results are available in FOT WIKI!



**Please feel free to enter additional data**

# THANK YOU!