Use and Impacts of Aftermarket & Nomadic Devices in Vehicles

TeleFOT approach

D1.1.1 Project Presentation

Petri Mononen, VTT Finland (Coordinator)  petri.mononen@vtt.fi
A general presentation of TeleFOT

- Project overview
- Approach
- How TeleFOT works
- Field Operational tests
Portable navigators and smart phones are penetrating the Market, but their safety and other impacts are little known.

Previous experiences in Europe, US and Japan recognize Field Operational Testing as an effective tool to:
- test new transport technologies in a real-life context
- raise awareness
- collect real data
- enhance the take-up of ICT solutions.
TeleFOT in a Nutshell

- 48 months
- 100 man-years
- 3000 drivers
- 3 Test Communities
- 24 partners
- 14.5 M€ volume
  EC Contribution 9.7 M€

To assess the impacts of aftermarket and nomadic devices in vehicles for driver support and raise wide awareness of their functions and potential.
Field Operational Tests in TeleFOT

- Finnish test site
- Swedish test site
- UK test site
- German test site
- Spanish test site
- Italian test site
- Greek test site

3000 drivers: their vehicles and own/test devices

Benchmarking of devices in lab conditions

Piloting the FOTs

Experimental vehicles: detailed tests in controlled conditions

Data transferred automatically M2M, centralized server

Key experimental design: test groups and control groups

Feedback of results

TeleFOT approach
Field Operational Tests

Three test communities:
- Northern (Finland, Sweden),
- Central (Germany, UK)
- Southern (Greece, Italy, Spain)

Two phases for field tests:
- short and long term testing with a large number of vehicles
- detailed testing with a limited number of subjects with instrumented cars

Drivers have access to smart phones and navigators

The usability and safety of the devices and services are studied carefully in laboratory conditions before any field operational tests
In large scale:

- Traffic information
- Speed limit information
- Speed alert
- Navigation support (static)
- Navigation support (dynamic)
- Green driving support
- Parking support
- Speed camera alert
- Telephony

and, in Detailed FOTs, also:

- Forward Collision Warning
- Lane Departure Warning
- eCall
TeleFOT experimental design

Control group

C0 -> C1 -> C2

Test group

T0 -> T1 -> T2

Equipping the vehicles
Baseline measurements
Treatment (Test group)
Learning phase measurements (right after "Treatment")
Mid-term measurements (6 months)
Long-term measurements (1 year+)
Petri Mononen, TeleFOT Coordinator
VTT Senior Research Scientist

Tel: +358 20 722 2325
Mob: +358 40 515 5808
Fax: +358 20 722 2090
Email: petri.mononen@vtt.fi
Mail: VTT Technical Research Centre of Finland
P.O Box 1100, 90571 Oulu (FINLAND)

More info on:
www.telefot.eu
www.telefot-eu.org
http://telefot.openinno.fi
(partners only)