**WG eRTD**

Meeting: 1st June 2007: 10.00h – 15.00h

Location: EUCAR Office, Av. des Nerviens 85, 1040 Brussels

# Draft Minutes

**Action List** from eRTD meeting 1 June 2007

| No | What | Who | Due Date | Status |
|---|---|---|---|---|
| 1 | eRTD to give inputs to R&D chapter in Green Paper on Urban Transport. | Suzanne Hoadley, Polis | Autumn 2007 | Open |
| 2 | eRTD to give input on ICT FP7 Workprogram for 2009 – 2010, including to give priorities on Workprogram topics and calls regarding; - Impact, - Functions, Systems, - Technologies. | eRTD Members | 4 Sept – Oct. 2007 | Open |
| 3 | eRTD to give recommendations on funding levels for the activities and cost categories in a FOT. | eRTD Members | October 2007 | Open |
| 4 | Each of the eRTD members has the homework to check his sectors and MSs interest in FOT coordination and to what extent the eSafety Forum WG RTD can and should be used for that. | eRTD Members | 4 Sept. 2007 | Open |
| 5 | eRTD Members were given the task to consider a deputy chairman of the eRTD. | eRTD Members | 4 Sept. 2007 | Open |

**Attachments** (electronically to email):

1. Presentation by F Minarini, DG InfSoc, on FOT
2. Presentation by J Engström, Volvo TEC on SAFER

## Participants

| Affiliation | NAME |
|---|---|
| Bosch / Consultant | MR. UWE DANIEL |
| CEC | MR. FABRIZIO MINARINI |
| ERTICO | MR. VINCENT BLERVAQUE |
| EUCAR | DR. ULF PALMQUIST |
| EUCAR | DR. ALESSANDRO CODA |
| FIAT | MR. GIANFRANCO BURZIO |
| FITSA | MR. JOSÉ RODRIGUEZ |
| INRETS/ECTRI | MR. JEAN-PIERRE MEDEVIELLE |
| POLIS | MRS. SUZANNE HOADLEY |
| TELE ATLAS | MR. STEPHEN T'SIOBBEL |
| TNO | DR. KERRY MALONE |
| VOLVO | MR. JOHAN ENGSTRÖM |
| VTT | MR. RISTO KULMALA |

**MINUTES FROM THE MEETING**

1 **Welcome. Purpose of meeting.**
Ulf Palmquist, acting as the chairman of the meeting, welcomed the participants and outlined the meeting and its purpose.

2 **Introduction of new members in the WG eRTD.**
Vincent Blervaque representing Ertico, introduced himself and explained the interest and contribution of Ertico to the WG eRTD.
All the other members welcomed Vincent.

3 **Agreement previous meeting minutes, this meetings agenda.**
Minutes and agenda were agreed.

4 **Terms of Reference for WG eRTD.**
The earlier circulated draft ToR was approved as final ToR for WG eRTD.

## 5 R&D issues from other eSafety Forum WGs

Ulf Palmquist had sent the message to the other eSafety Forum WGs that eRTD will meet on 1st June and encouraging them to put forward the R&D issues they had come across in their WG's domain (since eRTD is intended to be the body handling the R&D for the eSafety Forum).
So far, no one of the other WG Leaders had reported any R&D issue to the WG eRTD.

## 6 Intelligent Vehicles and Roads

i) R&D dimensions: General discussion.

A "broad and free" discussion took place regarding various aspects of ICT research and deployment. Among others, the following were "ventilated":

a. Business case/model aspects are clear problems. They should be included in the FOT activities.
   Opinion / acceptance of final customers (of services and systems) are very important to find the right understanding of the cost model.
b. Better coverage of benefits of ICT system;
   i. Travel behaviour
   ii. Safety impact
   iii. Environmental impact
c. Scale of economy for ICT systems, e.g. through using same sensors for several functions.
d. System view of ICT – Transport Systems needs to be stronger promoted in the FP7 Workprogram and accepted projects.

ii) R&D issues: Role of eRTD.

Various tasks and roles of the eRTD were suggested in the broad discussion, among others;

**Action point**

Green Paper on Urban Transport is under development by DG TREN. There is a small chapter on research. eRTD could give some inputs to this chapter. Suzanne Hoadley, Polis, will handle the eRTD input.

**Action point**

ICT FP7 Workprogram for 2009 – 2010 needs to be written.
eRTD is expected to give input on this, including to give priorities on Workprogram topics and calls regarding; - Impact, - Functions, Systems, - Technologies.
This work will start close after summer break 2007.

iii) Lead market initiative

With a lead market is meant a local – regional market that is progressive in some aspects in introducing new product and services and to create the framework conditions therefore. For instance, Germany has been identified as a lead market in Europe for Intelligent

Vehicles.

Vincent Blervaque reported that eSafety Forum has an open call for a small study on "Lead Market Initiative" for Intelligent Vehicle and Roads. This study is for 2 – 3 months with a 10 000 Euro budget. Deadline for proposal is 8 June 2007.

The followed discussion included questions on "Who is the customer of this study?" and what results could be expected. It was concluded that the eSafety Forum is not the sole customer, more important are the Industry and Public Authorities.

Risto Kulmala, VTT, informed that;
1) Deployment study is soon being launched by eSafety Forum
2) On 14 November 2007 is the eSafety Deployment Workshop, with international guests
3) By end of June 2007 is the eSafety Benchmark study finalised

7 **International Contacts and Collaboration.**
This agenda items was postponed due to lack of time during the meeting.

8 **Outcome of FP6 research. FP7 1st call proposals. Additional R&D Needs**
The outcome of FP6 projects were discussed on a somewhat higher level. It is recommended, among others, to participate to the PReVENT Workshop/Conference/Demo in Versailles, 18 – 22 September to see the progress on active safety.
Since the 1st call FP7 proposals are presently under evaluation, the report on the outcome is postponed to the next eRTD meeting.

Additional R&D Needs
An "around the table" inventory of R&D needs as seen by the participants gave the following result:

a. Integration Aspects
   i. Drivers reaction on several systems action together
   ii. Technological, architectural synergies
   iii. HMI integration.
   Driver in the centre.
   Easy usability (for the driver) of all ICT functions
   Individual adaptation to the driver. Intuitive, self-learning systems
   iv. Systems and Functionality integration.

b. Horizontal issues
   i. Need of Maps serving many applications
   ii. Drivers input to navigation systems
   iii. Learning, adaptive navigation systems
   iv. Maintenance of maps, in particular maps used in/for safety systems.
   v. Modification of maps. Today there are too many uncorrelated actors involved in making changes to roads and streets. A universal map should be made available for all qualified users, and local authorities should have to report their changes to the "keeper of this universal map" (instead of having Navteq and TeleAtlas running around trying to keep track of all the

changes).

c. Human factors (can be done ion FOT).

d. New role of road operators (in the ICT world).
   This was concluded not to be an R&D issue, but an institutional administrative.

e. Cooperative Systems: Structure the complex and wide systems to understand what functions are needed (to be activated) in order to achieve a particular effect.

f. Model for traffic behaviour to simulate safety. Model to include driver, road users with the possibility that they meek errors.

g. Intelligent Travel Space: Making the infrastructure even more intelligent beyond Cooperative Driving, e.g.
   i. Smart Multi- Mode Transport
   ii. Use of RFID

h. Security and Safety.

i. Traffic management:
   i. the use of the vehicle
   ii. the support from infrastructure

j. Local and Regional Traffic Authorities aspects:
   i. More intelligence into the infrastructure
      1. Autonomous
      2. Self learning
      3. Self intervening
   ii. Data collection in real-time (suitable in FOT).
      E.g. only the city centre of London is instrumented for data collection. The Traffic Centre therefore only knows what happen in the inner London, but not in the Greater London area.
   iii. Data fusion.
   iv. Prediction tools
   v. Decision support systems
   vi. Dynamic Navigation allowing intervention by Traffic Management
   vii. Traffic Management – Route Guidance of Freight Trucks (through urban areas).

k. Additional Driver Support Functions, e.g.
   i. curve warning through navigation systems
   ii. warning of black spots by infrastructure

l. Standardisation of interfaces for sensors, maps, … , applications.

m. Nomadic Devices integration in the vehicle, e.g. for navigation.

n. Green Mobility; Action plan

o. FOT: Form for collaboration between the necessary and sufficient stakeholders

By the end of this "R&D Needs inventory" Fabrizio Minarini, DG InfSoc informed about the major priorities of the "Intelligent Cars Initiative":

- FOT: 1 –2 FOTs may be financed by the 2nd FP7 call.
- Clean Mobility aspects linked to traffic management
- Evaluation and impact assessment.

9 **Lunch**: EUCAR hosted the lunch in the ACEA/EUCAR 8th floor restaurant, over-looking Brussels.

10 **Field Operational Tests (FOTs)**

Fabrizio Minarini opened by explaining the DG InfSoc objective for FOTs (see attached presentation).
For the coming call 2 there is a budget (funding) of 48 MEuro for ICT, maybe 50% of that can be allocated to 1 – 2 FOTs. The funding level of a FOT is max. 50%.

Coordination of the different FOT activities is a key issue.
Scattered, individual FOTs should be avoided. Openness of the potential FOT consortia is important.

G Burzio raised the potential problem with the funding level (max 50%). The FOTs require quite some equipment and vehicles, and will therefore be costly. It may be a challenge to convince the OEMs of the benefit of FOTs if they are too expensive for the OEMs.

**Action Point**
F Minarini suggested that the WG eRTD could give recommendations on funding levels for the activities and cost categories in a FOT.

An **Inventory of FOT interest and initiatives** in various countries and sectors was made among the meeting participants. The following were reported.

**Sweden: SAFER** (Safety initiative in Göteborg region) (see attached slides)
Johan Engström, Volvo TEC reported on the SAFER activities in Göteborg and their preparation for FOT project. They already now start with a small scale FOT in 2007, funded by Swedish industry and state. Intention is to evolve in next phase (2008 - ) into a EU FOT. Initially is safety highest priority, without neglecting traffic efficiency and environment. Contacts and collaboration are already established with the Univ. of Michigan, U.S. of A.

**Germany: Safe and Intelligent Mobility, Test Site Deutschland** (SIM - TD)
Uwe Daniels reported on the status in Germany. One major FOT relevant proposal is under development, with deadline August 2007 and earliest start in November 2007. It goes under

the abbreviation SIM - TD (see above) and located to Hessen, Frankfurt area. It is supported by German industry and three Ministries (Research, Economics, Transport).

Functions and systems to be considered are C2C, C2I, Beacons, Floating car Data, … . .
Safety and Efficiency are the major objectives.
Aspects to be consider are also; Legal aspects, Proof of concept, Germany wide harmonisation, EU wide harmonisation, Data exchange.

Expected funding is 5 – 10 MEuro.

On the question: "Isn't this more a functional – technical test than a FOT?" Uwe Daniels replied that the SIM - TD do not intend to focus on Technology R&D, instead the aim is to use available hardware and investigate performance.

**BeNeLux**
Stephen T'Siobbel reported that no FOT initiatives were know in BeNeLux.

**France**
Jean-Pierre Médevielle reported that in France the Ministries have not yet coordinated any FOT plans or initiatives. But there are some projects around Paris, in Brittany or in the Eastern part of France. Besides that, there is also a project between Italian and French motorways operators around traffic information and management.
There is a project called VOLTAIRE coordinating Paris and Brittany FOT projects.

**The Netherlands (NL)**
Kerry Malone reported that there is a definite interest by ministries and regions in NL to get involved in FOTs. Concrete plans have, however, not yet been formulated, since most things are still open. Possible FOT sites are those being prepared by Safespot and CVIS.

**Finland**
Risto Kumala reported on the Finish and VTT plans for FOT

a. Mobile After Market Terminals in Vehicles
   "100 000 cars test"
   Mobile phones as nomadic devices in cars, enabling various functions, e.g. Floating Car Data.
   Budget 5 – 10 MEuro.
   Start 2008
b. Intelligent Road User Charging
   10 000 OBUs performing "pay as you drive" charging.

**Spain**
José Rodríguez reported that in Spain at least two research centres are going to work in FOTs, one of them in eCall and the other one in ADAS testing. Additionally, another research centre, that is working in a testing project, has been contacted to participate in a FOT.

**OEM / EUCAR**
Alessandro Coda and Gianfranco Burzio reported on the OEM's activities as they know it. The OEMs have submitted a proposal on a preparatory FOT for the 1st call, and are now in preparation for a call 2 FOT proposal that likely will focus on autonomous vehicle systems, including naturalistic driving studies.
Cost of equipment, maintenance, data acquisition, … is a difficult issue. The advantages of FOTs therefore need to be carefully prepared and clarified.

**CLEPA**
Björn Hedlund expressed that the CLEPA suppliers are very interested to participate to FOTs, in particular as a mean to raise awareness of the ICT systems.
CLEPA intends to involve an Austrian consult company to assist CLEPA in their FOT activities.

**POLIS: Local and Regional Traffic Authorities**
Suzanne Hoadley reported that among POLIS 65 members about 10 – 15 have indicated interest to participate in FOTs. They see their main task as to act as host site, and to take interest in infrastructure and vehicle – infrastructure issues.
Major topics are: Road safety, Reducing congestions, Environmental protection, Weather conditions monitoring, Road conditions monitoring, Vehicle performance (emissions).

There is already a cluster in Brittany for setting up ITS and FOT.

**Ertico**
Vincent Blervaque reported that Ertico has worked on FOT since October 2006, tries to collect all stakeholders and to investigate their interest in FOT, to make use of experience from FP6 and Member States FOT.

Ertico propose the following "Key Principles for FOT":
- All stakeholders to be involved
- Dialogue Road Operators – Industry
- Avoid to have a FOT dominated by one sector
- Look at functions, not products
- Give priorities to non-technical aspects
  - Impact assessment
  - Deployment issues
  - User acceptance
- Re-use test sites from Safespot and CVIS
- Synchronise FOT/EU level with
  - FOTs/MS level
  - FP6 Integrated Safety Projects (EUCAR's Program).

Ertico has submitted "FOT Net" as a FOT proposal 1st call FP7. Its objective is to network and interact FOTs at EU and MS level.

Ertico plan to focus the FOT on "Public Authority Applications", including eCall, RTTI, Speed Alert, Road Charging and Dynamic Insurance.

**Why and How to link EU and Member State FOT activities?**

A difficult discussion took place on the motivation and means to link FOTs on EU and MS levels. No clear answers could be found during the meeting, although several smart statements and suggestions were made.

Fabrizio Minarini informed that it could be considered to fund by FP7

- a Network Mechanism
- Methodology toolkit to enable comparing data and building a EU database.

Jean-Pierre Medeville judged that the authorities are most interested in comparing data from different countries on the same ICT systems. Vincent Blervaque repeated that FOT-Net project proposal is aiming at setting up this needed network mechanism and at providing the exchange platform to link EU and Member State FOT activities.

**Action Point**

The discussion on FOT coordination ended in the agreement that each of the eRTD members was given the homework to check his sectors and MSs interest in FOT coordination and to what extent the eSafety Forum WG RTD can and should be used as a body for

- Discussion
- Information exchange
- Recommendations on compatibility and synergies

regarding EU and MS levels FOTs.

11 **Administrative matters.**

This point was postponed due to lack of time.

**Action Point**

eRTD Members were given the task to consider a deputy chairman of the eRTD.

12 **Next Meeting.**

Date: 4th of September 2007, 10h – 16h

Location: Brussels

Major topics:

a. FP7 ICT Workprogram 2009 – 2010
b. FOT.

13 **Summary of the Meeting**

Ulf Palmquist made an over-all summary of the meeting by concluding that the eRTD WG truly has a role to play and tasks to do, in particular in supporting the development of the Workprogram and to clarify the FOT activities.

He also alerted the eRTD Members that this implies that they have to be prepared for active contribution from the early September onwards.

14 **Closing of the Meeting:**

Ulf Palmquist thanked every one for a very fruitful meeting, wished everyone a safe and efficient trip home, and closed the meeting.