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Abstract	This document contains the minutes of the 10 th eSafety Forum Plenary Meeting which took place on 6 November 2008 in Brussels, Belgium.
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Table of contents

INTRODUCTION	4
1.1 Intended audience	4
1.2 Objectives.....	4
FINAL MINUTES OF THE 10TH PLENARY MEETING OF THE ESAFETY FORUM “TOWARDS SAFER AND CLEANER MOBILITY IN EUROPE: THE FUTURE RESEARCH CHALLENGE”	6
ANNEX 1: AGENDA.....	19
ANNEX 2: LIST OF PARTICIPANTS	21

INTRODUCTION

1.1 Intended audience

This document is prepared for all the eSafety Stakeholders, that is, for each body responsible for the different eSafety priority actions, both internally and externally to the eSafety Forum.

1.2 Objectives

The objective of this deliverable is to present the minutes of the 10th Plenary Meeting of the eSafety Forum to all stakeholders of the eSafety Initiative, including the conclusions and the list of participants.



FINAL MINUTES OF THE 10TH PLENARY MEETING OF THE eSAFETY FORUM “TOWARDS SAFER AND CLEANER MOBILITY IN EUROPE: THE FUTURE RESEARCH CHALLENGE”

Opening

The chair André Vits (AV), Head of Unit ICT for Transport, Directorate-General Information Society and Media, European Commission opened the meeting welcoming the eSafety Forum members.

He then introduced Thierry Van der Pyl (TvdP) as the new director of Directorate General Information Society and Media.

TvdP made the opening address of the 10th plenary meeting of the eSafety Forum.

He started highlighting the following points:

- Achievement of the EC decision released in August 2008 on spectrum allocation.
- Thanks for participation in research on IVS and ADAS, but also for European uptake, to all the eSafety Forum members, playing an important role.
- eCall progress. Industry has worked tough, and standardisation is now close to completion. However, difficulties still exist towards the fulfilment of the roadmap objectives, and MS have an important role. The EC would like to see progress in this sense, and full deployment will continue.

TvdP reminded then the main key points of the last years in the field of the eSafety initiative. In 2006 commissioner launch the intelligent car initiative and the support of the eSafety Forum was crucial. The launch of cooperative systems and Field Operation Tests was another success within FP7. In September 2008, then, the EC organised a high level meeting with industry to define the future priorities within ITS.

TvdP then remarked that in this difficult economic environment the targets of the EC strategy will stay the same, with a strong support to the fight against road fatalities, and climate change.

In order to reach the objectives:

- Industry needs stable regulatory framework
- Collaborative Research/It is already in place
- Continue to innovate.

He also reminded that Europe needs to develop and define global cooperation.

TvdP concluded stating that setting new directions for the next two years strategy research is crucial and pointed out that the allocated budget will increase.

User benefits Drive the Market

Risto Kulmala (RK), co-chair of the Implementation Road Map Working Group of the eSafety Forum (IRM WG) reported on the conclusions of the “User Benefits Drive the Market” workshop and on the 2nd eSafety Awards ceremony taking place in Brussels the day before the 10th eSafety Forum Plenary Meeting.

The workshop mainly focused on user benefits with regard to awareness, marketing, dealers, fleet owners, road operators and incentives. The interactive sessions provided a very good fuel for discussions and resulted in valuable input for the future work of the eSafety Forum and the other working groups.

The overall conclusion is that a lot of work is still required to mainstream intelligent systems and ITS in general to make them a feasible option to invest in or to purchase.

As for the 2nd eSafety Awards ceremony, for 2008 the award winners were selected from the three categories of road safety stakeholders: Industry & Technology, Policy & Administration, and Lifetime Achievement.

The three winners rewarded by Viviane Reding, European Commissioner for the Information Society and Media, are: BOSCH; Swedish Road Administration (SRA) and G. Rollmann from SARA

Setting the Scene in Research in ICT for Mobility

The Strategic Research agenda for ICT for Mobility

Ulf Palmquist (UP) reported on the activities carried out by the Research and Technical Development Working Group of the eSafety Forum (RTD WG) and the major tasks in terms of advise, support, monitor and review the development, implementation and outcome of the Strategic Research Agenda for "ICT for Mobility". He explained that the RTD WG is also responsible for the promotion of the Intelligent Car Initiative Survey and support the activities and their synergies at National and EU level.

The RTD WG produced a Strategic Research Agenda in 2006, divided in areas for people and goods but also looking in the intelligent systems, cooperative systems fields' operative tests, and communications.

The agenda was then revised at the end of 2007 and presented at the 9th eSafety Forum Plenary Meeting on April 2008. UP went through the major highlighted items in the revised SRA:

- Urban and inter urban mobility of people and goods - clean safe secure and efficient
- Assessment of ICT/ITS systems impact in particular regarding clean, safe efficient road transport
- Field Operational Tests (FOTs): first FOTs have been accepted in FP7 to evaluate ICT functions
- Cooperative systems for reduced environmental impact/reduction of CO2
- Assessment of ICT/ITS systems for safety and efficiency purposes
- Business models

The eSafety Forum member were then encouraged to provide inputs to the co-chairs of the RTD WG, which will meet next day.

FP7 Research in ICT for Mobility

AV informed the eSafety Forum members about the release of the elmpact/Trace projects summary, which could become an EC Working Paper. Fabrizio Minarini (FM) asked the participants to send comments on the summary of the socio-economic impact assessment to be integrated in the Commission Working Paper.

FM presented the ICT for mobility topics within the new Work Programme for 2009-2010.

The goals within the new Work Programme are mainly focussing on providing drivers with relevant information to avoid accidents, congestion, optimise a journey and engine performance to improve energy efficiency. It's important to create cleaner and more efficient vehicles, as well as an energy-efficient intelligent infrastructure, and new mobility concepts.

The first area aims at road safety improvement and overall performance of transportation systems. A second area involves further improvement of energy efficiency and reducing CO2 emissions in all modes of transport. The third sub-area is open to coordination and more support actions targeting increase user awareness.

Call 4 will include road safety, to be opened at the end of November and closing on 1st April 2009. Call 6 will be open between November 2009 and April 2010 and will focus on how to assess and run field operational tests urban area mobility and new multimodal transportation.

International Initiatives

Johan Engstrom (JE) gave a picture on the international initiatives on ICT for the mobility sectors, in particular:

- Europe: Intelligent Vehicle Systems, Cooperative Systems, FOTs, Naturalistic driving studies. Advanced Collision Avoidance Technologies.
- The objectives of most of USA activities were to develop methods for safety impact assessment of active safety systems VII - cooperative systems.
- In Japan initiatives on advanced safety vehicle ASV were launched in 1996. Japan is running FOTs for cooperative systems (Smart Way).

JE concluded that the EU, the USA and Japan developed in parallel Intelligent Vehicle Systems since the 1990's. The USA were leading in the field of Intelligent Vehicle FOTs, now under way in the EU. Current major initiatives on Cooperative Systems are undergoing in all three regions (EU project cluster, VII, AHS/Smartway).

Major initiatives on naturalistic data collection for driver behaviour and accident analysis are now undertaken in USA/Canada and Japan. Preparatory activities will start in Europe. Also, there is interesting ongoing work on scenario-based simulation for safety impact assessment in the US (ACAT).

Research in ICT for mobility and transport: co-operative systems

The session was moderated by Mr. Ralf Herrtwich (RH)

The challenges are:

- Communications protocols, message format to be decided
- Need to harmonise all the EU projects; the basis architecture document exists but the obstacle now is to find the best process to make progress

The European Cooperative systems communications architecture

Ilse Kulp (IK) from the project COMeSafety presented the European Cooperative Systems Communication Architecture document.

She focussed the priorities for next steps: efforts need to be put into deployment, and a decision need to be taken in how to promote cooperative systems. Another challenge is the development of 5.9 GHz ITS band.

Different organisations are developing different standards, and there is a need to identify the main organisations that will further develop standards. IK also reported that now the spectrum



allocation is done in Europe, but Europe has got half of the US spectrum. The US solutions cannot be applied and therefore further research is needed

The conclusions are:

- Global standardisation is on the right track
- Still need to be supported and required in FOTs
- All projects should use the common architecture
- Technical testing of 5.9 GHz ITS band is a challenge
- Extension of scope of current projects may be necessary

Cooperative Systems applications

SAFESPOT

Roberto Bringolo (RB) presented the SAFESPOT integrated research project and its activities. The objective is to understand how intelligent vehicles and intelligent roads can cooperate to produce a breakthrough for road safety. The aim is to prevent road accidents developing a Safety Margin Assistant that detects in advance potentially dangerous situations and that extends in space and time drivers' awareness of the surrounding environment.

In 2009 there will be tests foreseen at sites in 6 different countries; some of the test sites are shared with the project CVIS.

CVIS

Paul Kompfner (PK) presented the activities of the integrated project CVIS. He highlighted the main differences in communications between SAFESPOT and CVIS. CVIS includes cellular, MW, infrared (Mobile WiMax seems promising). The differences are also in type of applications: CVIS focusing on efficiency applications (urban, commercial, highways), although sharing common applications.

PK set the future research requirements:

- Actual performance of DSRC and in real traffic conditions. Not a lot of BW available.
- Rapidity in real traffic with big amount focusing and also communicating with infrastructure.
- How to create effective, reliable and safe application for driver safety. Need to continue on reliable safety
- Harmonised set of core applications components. Protocols and contents to be standardised

For PK, RTD needs on applications are the following ones:

1. Identify bundles of applications that meet needs for safety, efficiency, user satisfaction, and are deployable (i.e., web based services).
2. Build common systems concepts around standards
3. Integration of network platform in vehicle, roadside, and also nomadic devices
4. Large scale trials for assessment

The deployment needs are the following ones

1. Certification framework for equipment, applications, services. Standardisation
2. Common liability framework for cooperative systems
3. Define organisational framework for deployment and operations
4. Pilot full scale deployment (i.e. some cities)

PK reminded the workshop and product launch to take place in Berlin on 10-11 December 2008.

COOPERS

Alexander Froetscher (AF) presented the vision of the integrated project COOPERS. There are overlapping elements with others projects, but COOPERS' main task is to produce Detailed and high quality traffic information, to have a reduced set of communications that would send only relevant messages to the driver (e.g. -warning message when he is in difficult situation), and to put in place demonstration on test sites using all media channels to be done.

AF said that field tests need to deliver hard facts for deployment and investments.

Conclusions for RTD:

- Enhance TMC capabilities. Monitoring, MW, SW tools
- FOTs. User acceptance (drivers, TMC operators) and hard facts for investment
- Prepare legal framework for EU-wide implementation. (like CVIS) Clear guidelines needed.

Forum debate and recommendations: Directions of research beyond 2010

RH - Question: *Do we get the balance right? Your projects take a lot of resources for the infrastructure/technology and maybe not for the applications.*

KE - CVIS has a good balance. Focus is technology activity in the core technology and common platform. More basic research would have been welcome, but it was not foreseen it. Clearly there is a gap to fill.

PK - There is a need to use the common architecture, possibly having the core technology platform available to all the projects, to avoid recreating it each time Interoperability at communication level. That's why there is a need of a strong effort at technology level.

RH - Question: *Applications are on safety, on efficient and even on comfort/convenience. What about this balance. Is there any area emerging more importantly from the applications side?*

AF - COOPERS is starting evaluating not only safety, but also more efficiency, such as energy efficiency, although it is not always easy to evaluate such aspects in economics terms.

RB - Safespot and CVIS have a clear differentiation. Safespot is focusing on safety since the beginning, on local level and on safety. The project is seeking how to integrate it in a more global view.

RH - Question: *Is there any conflict between safety and efficiency. E.g., a warning turns out in immediate speeding down, with clear effects on loss of efficiency. Did you carry out any analysis?*

RB - This was done by AIDE. It is an important issue, but an analysis has not been carried out because some results are already available from AIDE. It is important to have a good designed HMI.

PK - Yes, in this sense there is a need to configure cooperative systems applications and functions. Driver can have serious problems if applications are not integrated in a good way. Next steps include the configuration of functions, including HMI aspects. However, for the time being, there is the need of continuing the research as it's done now.

RH - Question: *Are there any set of applications not being considered on the cooperative side? Energy efficiency, traffic management? Are we doing enough, or do we need more?*

KE - There is a trade-off that needs to be taken into account: driver wants the best efficiency for himself, which is not necessarily the whole traffic efficiency. On the other hand, the two efficiencies can be conflicting and there can be an issue there.

AF - Warnings are targeting the driver directly and it's necessary to have high quality. Normally, if the driver gets imprecise or wrong warnings, then he/she will switch it off.

RH - Question: *Is the area going beyond warning something that should be looked into from the cooperative point of view?*

RB - The focus so far has been on warning to check reliability, but automated actuation may be next step.

RH - Question: *Liability and technology liability. Is there a trend going away from SRC?*

KE - There is a trend towards, but we cannot focus on one type. All types of media have a role here. From 2001 on a lot of standardisation effort has been put in this field (CALM). We need more than one media, and they need to work well together, overlap, and being transparent to the application. There is a need for an open platform (CVIS).

RH - Question: *What about the idea to have protocol and service common format at the different OSIs layer?*

KE - Most of the work is now done at lower layers. A lot of work in C2C is done in the network layers.

RB - Safespot is working on the middle layer. Upper layers (6 and 7) are being looked at.

RH - Question: *Automotive industry vs. Mobile networks. Mobile will evolve. 15 Mb in the uplink, 100 in the downlink with the network evolution - LTE. How this will affect future scenarios?*

KE - LTE offers a lot, but on a switching environment, so it is not useful, even if they offer good capabilities. So there is a need of being application bearer independent.

AF - Taking into account UMTS and comparing it with the 2 most severe traffic scenarios. None of the single media is at the moment able to confirm all the requirements. Even with high BW.

RH - Question: *We need to focus on broadening these aspects to particular technologies? For LTE, you need to send it to a central service, maybe it's feasible for TMC, but not for P2P communications. And for positioning? Is the problem remaining?*

RB - Precision < 0.5m. There are ways to bypass GPS/Galileo limitation with landmarks. Double frequency GPS is very costly. If it is a must, it may be delivered at reasonable cost. A broader issue is to have a very precise map attributes from map providers. If a market will be created, it will become reality.

PK - Today Digital Maps are static, embedded in navigation. Tomorrow, there will be a communicating vehicle with dynamic maps. Maps will be available on a server, building local representation. It's a new way of thinking. CVIS is allocating a lot of resources on this. Wireless network positioning is added. There are also commercial issues involved.

AF - There is an additional aspect. There is a need for precision, but also for the reliability of the position. It is ok in one pilot, but not easy to transfer from one pilot to the other. No general solution available. A picture for the future would be the driver getting the local updated map from the road operator with maintenance whenever he/she enters in a new area.

RH - Question: *What about security?*

KE - Security issues are still to be fixed. Security is an issue present in all elements. The project Sevecom has provided input on this but coping with it is a big task, not complete at all.

RH - Question: *How to do that? Should there be a motivation towards certification and liability?*

PK - It may be a way to do it. Still more R&D is needed, maybe building a particular team within a project. We do not have a common concept on cooperative systems. We need to ensure that we will have in the future the communicating car, a brand identity, with the environment around.

RH - Question: *Deployment: one part is about realising FOTs. What's your main requirement there?*

PK - First, you make the system/technology/application work, then you operate at a scale so that it works well. Today we are far from that scale, mainly just at the proof of concept. Second, there is the need to show to the users (drivers, road operators) that it works. Therefore awareness is very important: there is a need of organising large media events.

IK - In addition, there is a lot to learn from the users, that is, how people use them, and what to they think is useful.

RH - Question: *How many tests are needed? And how many vehicles involved?*

AF - COOPERS is planning large inclusion of normal drivers, 400 drivers (in an afternoon) will experience the applications in normal traffic condition. But there is a need it to do it in a longer usage, not an afternoon. The preparation of the test sites is a high task not only from developers, but also for the operators, to prepare quick reaction time. To expand it to the whole network (the high quality info available at a pilot) is a huge task.

KE - FOTs should serve for large scale technology testing. It would be ideal to have the 400 vehicles in the Schumann roundabout in Brussels working at the same time to see the impact. But this is not possible for the moment.

Research in ICT for mobility and transport: ICT for Energy Efficiency

The activities of the European Commission

Mr Juhani Jääskeläinen (JJ), European Commission, presented the activities of the EC.

ICT for Energy Efficiency Task Force

JJ opened his presentation presenting the EC Communication on energy efficiency of October 2002 as the "mother of all papers on the subject". ICT not only a solution but also part of the problem (8% electric energy consumption). Deploying ICT would bring a 15% reduction of emissions (almost enough to reach EC targets). The EC has set up a task force Internal to DG INFSO, and an ad-hoc Advisory group (stakeholder group). The task force is close to deliver a

final report, to be published soon. Either a recommendation or communication will be the next step.

International Cooperation - METI and US DoT

JJ presented the situation of the relations between EU-METI (EU-Japan): a cooperation agreement was endorsed in Tokio on March 2008. An EC-METI task force has been created. As for energy efficiency: the task force is working on a methodology to assess the impact of ICTs for energy efficiency issues and standardisation.

As for EU-US (DoT), the plan was to sign an agreement during the ITS World Congress in New York in November 2008. The implementation agreement covers cooperative systems and environment

JJ reminded that the topic is present in the 7FP, under call 4 and 6 of the ICT part.

Recommendations of the ICT for Clean and Efficient Mobility Working Group

Wolfgang Reinhardt (WR) started his presentation defining the Environmental Challenge: global warming is an accepted fact, CO₂ originated from transport is a contributor, but there are other factors as well. Fuels and alternative fuel is not something that is going to be tackled by ITS.

In 2006, the EC came up with an Action Plan, setting the goal of a 20% reduction in energy consumption by 2020. Consequently, an eSafety Forum Working Group was established with the purpose to promote potential benefits. The WG presented an integrated approach based on several areas: Eco driving, Eco traffic management, Eco information and guidance, Eco mobility services, Eco demand & access management, Eco freight and logistic management, Eco monitoring and modelling.

As for eco driving, WR commented that benefits diminish over time. Constant reminder needed. In vehicle features and driver support are important aspects, as well as eco journey support, enhanced navigation, cooperative eco driving and on board monitoring. As an evidence, eco driving training reduces fuel consumption up to 20%. The European Climate Change Programme could reduce 50 Mtons of CO₂ in Europe by 2010.

Eco driving recommendations include the following points:

- Research is needed into how the "golden rules of eco-driving" might be automated within onboard and off-board services;
- Multi-media campaigns should be launched in a coordinated way to create awareness and acceptance for eco-driving measures;
- Automotive manufacturers should explore the potential for additional optional eco-driving support functions such as eco-driving feedback display, reporting and analysis, on-line coaching etc.;
- On-line services should be promoted that support eco-driving behaviour through comparison with the performance of a driver's peers, through competitions and incentives, etc.

PK then presented eco traffic management, meaning helping traffic to flow more smoothly: avoiding of stopping, information, optimum speed. This can be achieved through improved effectiveness of dynamic urban traffic management, parking guidance, Variable Message Signs, Intelligent Cooperative systems (V2V, V2X).

Eco traffic management recommendations include the following points:

- Research and development is needed into a new generation of urban traffic control systems that can be optimised according to environmental criteria, such as least overall fuel consumption, or that minimise CO₂ or pollutant emissions;
- Those cities where there is not a modern adaptive urban traffic and parking management system should be encouraged and helped to invest accordingly;
- A guidebook should be compiled featuring best practice on energy-efficient traffic management strategies and measures, and distributed widely to urban traffic managers;
- New public-private partnership models for cooperative system deployment should be explored.

Eco information and guidance recommendations include the following points:

- Digital maps should be enhanced to include additional environmental attributes such as road gradient (slope), speed limits, truck-specific restrictions, road charging/ controlled access zone data, accident risk, historic traffic data etc.;
- Public authorities that own such data should offer them to digital map providers;
- Real-time traffic information (RTTI) service providers should offer enhanced information including critical weather conditions and multi-modal journey alternatives;
- Floating car/device data collection, processing and delivery needs to be promoted in a joint stakeholder effort

Eco mobility services recommendations include the following points:

- Research is needed into the public acceptance of eco-mobility services and how to promote a shift towards eco-friendly modes;
- Research is needed on the potential environmental benefits and fuel savings of ride-sharing, car-sharing and multi-modality concepts and end-to-end traveller support services;
- Deployment support and large-scale demonstrations are needed to build stakeholder acceptance of technologies and standards.

As for eco demand of access management, the WG recommended that technologies and the operational framework for demand and access management should be harmonised across Europe, around a core of European standards.

Eco freight & logistics management recommendations include the following points:

- For better decision making, new integrated tools for assessment and modelling of air quality, energy efficiency, CO₂ emissions and traffic need to be developed and tested in a real life environment;
- Research is needed to develop a standards-based open platform offering commercial vehicle fleet operators a range of services to improve fuel economy and reduce environmental impacts;
- Support actions are needed for the demonstration and deployment of Intelligent Cargo concepts;
- A multi-sector forum is needed to agree a common European approach to city logistics.

As for eco monitoring and modelling, the WG recommended that for better decision making, new integrated tools for assessment and modelling of air quality, energy efficiency, CO₂ emissions and traffic need to be developed and tested in a real life environment.

WR concluded that:

- Global warming and the need to preserve the environment must be addressed by the mobility sector, and quickly

- Sustainable energy savings and mobility need the application of Information and Communication Technologies (ICT) - "Green ITS"
- Substantial potential for new Green ITS technologies, applications and services dedicated to reduce environmental impacts or increase the energy efficiency of road transport.
- An integrated approach is needed to achieve sustainable mobility
- New "intelligent" techniques can built on non-ICT measures
- Green ITS needs high quality infrastructure
- For the 7 groups of Green ITS identified by the WG, it is not possible today to form a reliable and quantitative estimate of all impacts

If all potential Green ITS measures would be implemented together and within a concerted European programme supported by all stakeholders, then an overall reduction of fuel consumption and CO₂ emissions in the order of 25% should be achievable.

Forum Debate and Recommendations: Directions of research beyond 2010

Hermann Meyer (HM) thanked the speakers and opened the floor to questions:

Paul van der Kroon (PvdK), Rijkswaterstaat, commented that a number of issues were not addressed, having the WG only being focussing on road transport.

PK answered that annex 4 of the final report is referring to everything that is not ICT. The intention of the WG was to complement applications, such as map-based applications. He clarified that the WG did not ignore other issues.

WR added that chapter 11 of the final report addresses a lot of aspects which were not ICT for clean and efficient energy (not to skip everything, but to focus on ICT). He clarified that the WG was not really competent to talk about the other modes of transport, since the scope would have been too wide.

Michael Egger (ME), CEDR, commented that ICT alone cannot solve emissions problem: actually congestion cannot be solved by ICT. The project Easyway is coping with Europe-wide deployment: the EU pays 100M EUR. However, even if we are now in deployment, there is also a need for further research.

Theo Kamalski (TK), Tom Tom, commented that autonomous driving could solve congestion problems.

PK reminded that call 4 of FP7 for ICT will look at eco-driving innovation. An idea is to have sensors for the surroundings of the vehicle, allowing to have a kind of "learning car".

RH wondered whether the WG is watching at the Right technology. Is this the right focus? On the vehicle side, are there other technologies more promising than ICT? On the infrastructure side, he commented that implementation is vital. Vehicle manufacturers spend an enormous budget on ITS development/ CO₂ reduction. Maybe now ICT for electric vehicles should be addressed through research.

HM asked to the eSafety Forum which are the main research areas after 2010. Electric vehicles are one major issue. Trends are established for internet, electric vehicles, connection to the grid, ICT. But are there new areas in research?

Fulvio Sansone (FS) spotted out that there is a need for interoperability of services, of end-to-end services. Today there is not enough done, and this aspect is partly missing in the recommendations of the WG.

WR reminded that the final report from the WG is ready. The chairs want the Forum endorsement, so that the way can be prepared for deployment being the eSafety Forum mostly a deployment Forum.

JJ commented that there is a lot of work going on the technical aspects. There is a need for solutions not only for future vehicles but also for the existing fleet.

HM concluded the discussion summarising the following main points: integration of transport modes can be done through ICT, traffic management (with the specific aim of flattening traffic, that is, get rid of the peaks) is an important issue for environment, and interoperability of services is of vital importance. The work of all stakeholders has to be integrated to make this happen.

Research in ICT for Mobility and Transport: Field Operational Tests

John Richardson (JR), ESRI, opened the session saying that research has been going on for the last 15 years. Exciting times have come because it is now time to find out whether the technology works.

The Results of FESTA

Gianfranco Burzio (GB), CRF, presented the European initiative on FOTs' objective: validate the effectiveness of ICT based systems and functions, analysing driver behaviour, assessing the impact of ICT-based solutions on real data.

European FOTs are articulated through different steps. The FESTA project has developed the methodology. The FESTA Consortium (OEMs, supplier, Telecom providers, research, infrastructure etc...) has developed a best practice handbook

The FESTA 'V' - FOT life cycle (the FOT chain) covers the full life cycle from planning to completion and even afterwards (data archiving).

The handbook is not a substitute for consulting experts, for setting up a research team, carrying out research into legal and ethical issues etc. The handbook will rather allow: a faster setting up of FOTs, robust impact assessment, obtaining of comparable results, saving effort through avoiding duplication, reusing of tool, equipment, and establishing a common European vision of FOTs.

FOTs under FP7 calls now underway.

European FOTs

EuroFOT

Aria Etemad (AE), Ford, presented the status of the project EuroFOT, whose technical kick-off was taking place in Gothenburg in March 2008. The project has 28 Partners in the Consortium, with the aim of coordinating tests on intelligent vehicle systems. The project applies a common European FOT approach, and creating awareness in public is another major aim of the project.

The Functions being tested are:

- Longitudinal control functions
- Lateral control functions
- Advanced applications

The Project Plan foresees the following steps:

1. Specification and piloting – prep of fleets
2. Execution of FOT – customer driving everyday routes
3. Impact Assessment – data analysis, evaluation and report

Major ongoing activities are:

- Define system specifications (FESTA scheme)
- Define Data Acquisition Systems
- Coordinate and harmonise Vehicle Management Centres

TeleFOT

Tapani Makinen (TM), VTT, presented the status of the project TeleFOT, coping with aftermarket and nomadic devices in the vehicle, assessing positive and negative impact and functions of these devices. Being VTT the coordinator, TeleFOT differs from EuroFOT in the sense that it is a research-institute driven project.

The objectives of the projects are:

- Build and mobilise a Europe-wide user community for testing and assessment of innovative location-based and personalised driver support functions
- Setup and manage a testing process of selected functions
- Investigate the impact of these devices in promoting 'green driving' (future cooperative driving support)
- Awareness raising of benefits/ Potential
- Accelerate the take up of ICT systems for driver support

Tests are carried out in different ways: crash tests, benchmarking, and usability of devices in lab conditions. 3000 recruited drivers are using their own vehicles and own devices or test devices. Data transfer is automatically done (M2M) to a centralised server

Thirteen different driver assistance functions/services tested, a lot safety related, but also green driving, integration of nomadic devices in the vehicle.

Currently, test sites are being set up, and several meetings of SP leaders have taken place. Collaboration with other FOTs possible in some areas.

Co-operation European and National FOTs

Maxime Flament (MF), ERTICO ITS EUROPE, presented the project FOT-Net. Both at national and European level, there is as much money invested on national and international level than on European level. Best practice gained on different levels can be shared.

The project has 6 main partners, contracted by EC, and a number of associated partners, strongly involved and willing to contribute to the network; including stakeholders and experts.

The project will allow to share best practice, discuss, promote the problems and results through regular stakeholder workshops. International workshops are planned (NY Nov 2008, Tokyo Mar 2009). The project will support the implementation of FOTs in Europe, promoting FESTA methodology.

Main current working items are:

- Maintenance of FESTA Glossary
- Legal and ethical issues

Forum Debate and Recommendations: Directions of research beyond 2010

JR opened the debate commenting that FOTs are considered in a multinational context. Therefore questions of ownership and liability can rise. What are the opportunities and challenges?

AE thinks that it's a big work package, very communication intensive - this should be taken into consideration for future meetings.

MF pointed the comparability of test results - different conditions in different European regions.

Questions were raised whether FOTs are only targeting cars and trucks, or whether they will be extended to motorcyclists.

AE confirmed that no extension to motorcycles is planned.

However, AV added that the project Saferider is targeting driving assistance systems for motorcycles. A new call will open in Autumn 2009, to submit new proposals for FOTs, open to proposals for applications for motorcycles as well.

JR- Question: What is the process to feed in the results into new FOTs for cooperative systems?

GB answered that the matter is more difficult for cooperative systems, but it is still possible to evaluate the impact using FESTA methodology. Evaluation is quite similar.

MF affirmed that the same set of performance indicators should be kept.

JR- Question: What about data availability and ownership?

AE confirmed that aggregated data will be made available at the end of the test from EuroFOT.

MF reminded that the FESTA handbook contains a definition of the minimum dataset. As a result, every data logger will have access to the same data.

GB added that the ways of measuring can be completely different - to avoid this problem, it is important to compare all aspects of FOTs.

TM tried to extend the horizon beyond 2010: there is an opportunity for systematic learning from the two FOTs. Still there is room for improving methodology.

MF mentioned the benefits of naturalistic data studies in US and wondered why not do this in Europe.

AE stressed the importance of having a campaign to raise awareness about the results gained from the FOTs. There is a need to raise awareness of systems that are on the market but not very well known.

GB suggested to start with the devices that are already in the vehicle. Results will help the stakeholders to adapt devices and to avoid major modifications (expensive) of devices. Change behaviour of drivers with the help of data gained.

ANNEX 1: AGENDA

The 10th Plenary Meeting of the eSafety Forum "Towards safer and cleaner mobility in Europe: The Future Research Challenges"

AGENDA - Diamant Center, Brussels

Thursday, 6 November 2008 from 09.30 to 17.00

08.30 - 09.30	Registration and Coffee
Chair:	Dr. André Vits, Head of Unit ICT for Transport, Directorate-General Information Society and Media, European Commission
09.30 - 09.40	Opening: Mr Thierry Van der Pyl, Director, Directorate - General Information Society and Media, European Commission
09.40 - 09.55	User Benefits Drive the Market: Deploying eSafety Prof. Risto Kulmala, VTT
10.55 - 10.40	Setting the Scene in Research in ICT for Mobility and Transport - The Strategic Research Agenda for ICT for Mobility Dr. Ulf Palmquist, EUCAR - FP7 Research in ICT for Mobility Mr Fabrizio Minarini, European Commission - International Initiatives Mr. Johan Engström, Volvo
10.40 - 11.00	Coffee Break
11.00 - 12.30	Research in ICT for Mobility and Transport: Co-operative Systems - Moderator: Mr Ralf Herrtwich, Daimler, Director Vehicle IT and Services Research (REI/V) - The European Cooperative Systems Communications Architecture Dr. Ilse Kulp, BMW, COMeSafety Mr. Knut Evensen, Chief Architect, CVIS

	<ul style="list-style-type: none">- Cooperative Systems Applications Mr Roberto Brignolo, CRF, coordinator SAFESPOT, Mr Paul Kompfner, ERTICO, coordinator CVIS, Mr Alexander Frötscher, Austriatech, coordinator COOPERS
	Forum Debate and Recommendations: Directions of research beyond 2010
12.30 - 13.30	Lunch Break
13.30 - 15.00	Research in ICT for Mobility and Transport: ICT for Energy Efficiency - Hermann Meyer , CEO ERTICO
	<ul style="list-style-type: none">- The Recommendations of the ICT for Clean and Efficient Mobility Working Group Dr. Wolfgang Reinhardt, ACEA
	<ul style="list-style-type: none">- The activities of the European Commission:<ul style="list-style-type: none">- ICT for Energy Efficiency Task Force- International Cooperation - METI and US DoTMr Juhani Jääskeläinen, European Commission
	Forum Debate and Recommendations: Directions of research beyond 2010
15.00 - 16.30	Research in ICT for Mobility and Transport: Field Operational Tests - Moderator: John Richardson , Director, ESRI, Loughborough University
	<ul style="list-style-type: none">- The Results of FESTA Mr Gianfranco Burzio, CRF
	<ul style="list-style-type: none">- European FOTs Mr Aria Etemad, Ford, coordinator EuroFOT Mr Tapani Mäkinen, VTT, TeleFOT
	Co-operation European and National FOTs Mr Maxime Flament , ERTICO, Coordinator FOTNET
	Forum Debate and Recommendations: Directions of research beyond 2010
16.30 - 16.45	Conclusions
16.45 - 17.00	Cocktails

**ANNEX 2: LIST OF PARTICIPANTS**

Last Name	First Name	Company
Balistreri	Amélie	eSafety Support
Ballaux	Louis	Honda Motor Europe Ltd
Bellen	Marleen	VIM
Blervaque	Vincent	ERTICO - ITS EUROPE
Boëthuis	Eva	European Commission
Brignolo	Roberto	Centro Ricerche Fiat
Burzio	Gianfranco	Centro Ricerche Fiat
Camolino	Rui	ASECAP
Carrotta	Alessandro	eSafety Support
Ceci	Ruggero	Vagverket/SRA
Curci	Natalino	Autostrade per l'Italia
Coda	Alessandro	EUCAR
Cyran	Yolande	European Commission
Dávila	Emilio	European Commission
Dedene	Nele	Flemish gvt - Traffic Ctr Flanders
De Meyer	Pieter	Federal Public Service Mobility and Transport
De Vleeschouwer	André	IBBT
Egger	Michel	CEDR
Engström	Johan	Volvo Technology
Etemad	Aria	Ford
Evensen	Knut	Q-Free
Ferreira	Francisco	European Commission
Flament	Maxime	ERTICO - ITS EUROPE
Flury-Herard	Bernard	French Ministry (Ministère de l'Ecologie, de l'Energie, du Développement Durable et de l'Aménagement du Territoire)
Fond	Michel	Orange
Franzen	Stig	Chalmers University
Frötscher	Alexander	Austriatech
Gaillet	Jean-Francois	Ygomi
Garcin	Jacques	Orange
Grill	Johann	ADAC



Hagleitner	Walter	ADAS Mgmt - Consulting
Hallström	Bengt	Vagverket/SRA
Haub	Thomas	European Commission
Hedlund	Bjorn	CLEPA
Heiber	Irmgard	European Commission
Henchoz	Michel	DENSO
Herrtwich	Ralf	Daimler
Hoefs	Wolfgang	European Commission
Holmberg	Elina	European Commission
Holt	Anders Godal	Norwegian Public Roads Admin
Huerta	Jaime	ITS Spain
Jääskeläinen	Juhani	European Commission
Jenssen	Johan Arild	Ministry of Transport Norway
Jupp	Mike F	SPMJ Technology Consulting
Kamalski	Theo	TOM-TOM
Kessler	Christoph	Ford
Kompfner	Paul	ERTICO - ITS EUROPE
Kornemann	Horst	Continental
Krekels	Tom	Umicore EOM
Kulmala	Risto	VTT
Kulp	Ilse	BMW Research and Technology
Lykoudi	Paulina	European Commission
Mäkinen	Tapani	VTT
Manfred	Buck	Daimler AG
Martin	Arndt	ETSI
Mauerer	Hans-Juergen	DEKRA Automobil GmbH
Medevielle	Jean-Pierre	INRETS
Meyer	Hermann	ERTICO - ITS EUROPE
Minarini	Fabrizio	European Commission
Mormont	Dominique	Delphi
Oberst	Gerry	HOGAN & HARSTON LLP
Olsen	Sigurd O	Norwegian Public Roads Admin.
Palmquist	Ulf	EUCAR
Pellischek	Gloria	ERPC



Perk	Nico	MAG-Netherlands
Pichl	Martin	Czech Ministry of Transport
Pontani	Giulia	eSafety Support
Potvin	Michel	Renault
Pott	Ansgar	Hyundai Motor Europe TC
Pugh	Shirley Y R	SPMJ Technology Consulting
Rataj	Juergen	DLR
Reinhardt	Wolfgang	ACEA
Richardson	John	ESRI
Rodriguez	Jose	FITSA
Rollmann	Gerhard	GR-Consulting
Rosines Garcia	Francesc	Atos Origin
Ruggiero	Michelangelo	Cobra Automotive Technologies
Rydmeil	Christer	Vagverket/SRA
Sahlqvist	Erika	European Commission
Sánchez Fernández	David	CTAG
Sansone	Fulvio	ORACLE
Schindhelm	Roland	BASf
Schuele	Daniel	BOSCH
Sergeys	Filip	Honda Motor Europe Ltd
Soezen	Kurt	Knibb Gormenzano & Partners
Soria	Maria Luisa	SERNAUTO
Spell	Sabine	Volkswagen AG
van der Kroon	Paul	Rijkswaterstaat
Van der Pyl	Thierry	European Commission
Verdee	Serge	JAMA
Verhoeve	Wim	CLEPA
Vits	Andre	European Commission
Weber	Carsten	DEKRA
Williams	Malcolm	Transport Research Group
Wurzel	Dietmar	DLR / ECTRI
Yamakawa	Takehisa	JAMA Europe



Apologies

Knibb	Brian	Knibb Gormenzano & Partners
Laurell	Anu	Ministry of Transport and Communications, Finland
Lumiaho	Aki	Ramboll Finland
Roumegoux	Jean-Louis	VALEO