

Mobile and Wireless Communications Technology Platform

Minutes of General Assembly 2

Heidelberg, 14 November 2006

Chair: Fiona Williams, Ericsson
Minutes: Uwe Herzog, Eurescom
Distribution: Public
File: eM-GA#2_14Nov06-minutes-v2.doc

Welcome address and progress by eMobility since GA#1 (Fiona Williams, Ericsson)

- Fiona welcomes the participants and introduces the agenda. The goal of the meeting is to give an overview of the achievements of the last year, to present the plans for the upcoming year, and to get feedback from the members and to enable discussion.
- Fiona gives an overview of the current status of eMobility membership. There are currently 410 members in total (98 industry, 160 academia, 152 SME, 20 other). The Steering Board (SB) has 23 elected members. Other groups are the Expert Group, the Mirror Group, and Executive Group.
- There has been a high level of activity during the last year, including 10 SB meetings, public workshops, exhibition stands, meetings with the commission and with members of European Parliament and a number of other dissemination activities. SRA v5 has been completed and published in August 2006. More recently some Workgroups have been founded: Post-IP, B3G, Broadband for Europe.
- The grand challenge seen by eMobility SB is to “Build on Europe’s strength in connectivity”. It was recommended that > 50% of research funding should be devoted to connectivity and services research. In future more focus is needed on user experience and business aspects to ensure commercial exploitation.
- Future events include: Activities at IST 2006 in Helsinki, Broadband and Post IP workshop in June 2007, GA#3 in Nov 2007 with the next SB election,
- Future activities include input to future versions of the FP7 workprogramme, evaluation of the coverage of the SRA by FP7 projects and following these proposals for future calls to fill the gaps.
- Fiona highlighted the value of eMobility for its members:
 - Influence the workplans and calls for proposals of the public research programmes
 - Build a contact network
 - Build public support for new R & D topics
 - Join on-going influential working groups
 - Contribute to the common efforts to make results of the FP 7 projects visible and to build synergy, leading to new standards and products
 - Membership is free of charge – just apply on the web site!
- Question: Non-technical barriers were mentioned. Was there any effort to coordinate this?
Fiona: Yes, there was one working group chaired by Werner Mohr that worked on non technical barriers e.g. spectrum licensing. These areas were identified, which are not handled already by other bodies.

Launch of FP7 (Rainer Zimmermann, EC)

- Rainer explained on the wider goals and starting points, which influenced the preparation of FP7 and the current Workprogramme.

- The budget for ICT will be 9110 million € for 7 years. Mobile and wireless falls in Challenge 1 “Pervasive and Trusted Network & Service Infrastructures” which has 4 objectives. eMobility mainly falls under objective 1 “The network of the future” (budget 200 Mio € in Call 1).
- The topics Mobile&Wireless and Broadband which were separate in FP6 are now together under Challenge 1. The Work Programme (WP) is based on the assumption that there will be a public Internet kept, optical switching, and Broadband user access. The challenges described in the WP build upon this. The expected impact includes e.g. global standards for Next Generation ubiquitous unlimited capacity networks, reinforced European industrial leadership developing stronger synergies between the various sector actors (!), and new industrial / service opportunities in Europe.
- An FP7 Information day planned for Cologne, 1 February 2007. The expected Call 1 submission deadline is end of April (24), 2007, Call 2 will be four months later.

Overview of SET concept and SRAv5 (Rahim Tafazolli, University of Surrey)

- Rahim gives an overview of SRAv5. Future mobile communications will be power and bandwidth limited, dynamic in nature, one person will have more than 1 device, self organising and healing, with a variety of service delivery modes (uni, multi, broadcast), with strong convergence effects.
- Rahim explain that the current approach for research is not sufficient anymore (e.g. single area or technology focused) as the results were often not satisfying. What is needed is e.g. to focus work on end-to-end solutions, and to ensure joint work on link, system, and networks. The approach is described as SET concept – Simplicity - Efficiency - and Trust. It aims at achieving integrated end-to end solutions. More details on research priorities can be found in the SRA.

The role of eMobility in the implementation of the R&D projects & plans for future work (Juha Saarnio, Nokia)

- Although eMobility is not going to be involved in the preparation and evaluation of FP7 projects, eMobility will do a number of activities to support FP7, e.g. continue SRA developments, provide a platform for projects and for discussing project ideas. FP7 projects are welcome to contribute on the SRA evolution. eMobility Working groups will continue to work on selected topics (e.g. roadmapping, new opportunities). Contributions to eMobility events, demonstrations organised with the annual meetings etc are very welcome.

Q&A session (Brigitte Cardinaël, France Telecom)

- *Sven Zeisberg, GWT-TUD:* What are the concrete steps and how can we use eMobility now in order to organise our involvement in FP7? *Fiona Williams:* The first step should be to put the idea on the Wiki tool and to ask others to contact you. Check how your idea fits with the SET concept, and also with the milestone plan. *Sven Zeisberg:* We have already put our idea there. But once this has progressed, is there some tool support that allows to continue this in a closed group? *Fiona Williams:* The Wiki could be used for this, but it needs to be checked whether the Wiki has the technical capability for this.
- *Sven Zeisberg, GWT-TUD:* Is there any idea for an eMobility label for projects? *Juha Saarnio:* There won't be an eMobility label in order not to interfere with the EC selection process of project proposals. *Rainer Zimmermann:* I can confirm this.
- *Martti Mäntylä (HIIT):* One of the presentations showed a scoping of topics, e.g. putting content out of the scope of eMobility, is this the right approach? *Rahim Tafazolli:* You are right because we can not have a network without the content. However this decision was made on

purpose in order to allow a clear boarder between the various technology platforms (e.g. regarding content with NEM)

- *Younus Farrukh, Eisar*: Are there any limitations for establishing partnerships with partners from outside EU? *Rainer Zimmermann*: There is a list of countries that are eligible for participation. However, the ultimate decision is with the companies in the project consortium.
- *Marco Chiani, University of Bologna*: I want to comment on the possible participation of universities, which are very skilled when it comes to a) solving problems and b) on new directions of research. One of the best places to find people working on this are the universities. I hope that universities will be able to participate in these areas in FP7. *Rainer Zimmermann*: The good and bad news is that in FP7 there is a different funding model for universities (75% of costs or average rates). *Rahim Tafazolli*: In FP6 many universities and good researchers have been involved, and this will continue in FP7. I would suggest to use the Wiki to propose project ideas. Don't wait for ideas being proposed by industry, but propose them yourself.
- *Martti Mäntylä, HIIT*: The current draft of first FP7 Workprogramme is phrased as if made for robots and it is a challenge for humans: *Rainer Zimmermann*: Robots have been organisationally moved from Brussels to Luxemburg. The texts will become more cognition again.

Post IP milestones Working Group report and plans (Rahim Tafazolli, University of Surrey)

- Rahim presents that the 3 phases / generations of the Internet: Research Internet 1967-1989, Industry adoption for commerce 1989-2006, Focus on Wireless Mobile from 2006.
- The current Internet was never designed to be a critical part of an economy's infrastructure. The EIFFEL initiative of the EC is gathering experts for driving the start of work on Post IP. Two meetings have already been held, and a public workshop will be held in Brussels on 15th December 2006, where results from EIFFEL will be presented.
- Global Environment for Network Innovation (GENI/FIND) is an initiative of US NSF on Post IP. The focus is on technology drivers. The assigned budget is 6 Bn US\$. It will piggyback on the US internet dominance. It is assumed that wireless will drive a fundamental transformation of the Internet in the next 15 years. 12 projects have already been approved in the US.
- The eMobility WG on Post IP is open to all eMobility members. A first meeting has been held on 27th October 2006 in Brussels, 35 organisations attended.
- The starting point for Post IP is as follows: > 2 Bn mobile phones worldwide (of which only 20% have Internet capability). In contrast only > 500 Mio fixed devices are connected to the Internet.
- Should the approach be evolutionary or revolutionary? The current approach is evolutionary, numerous new sublayers are added upon existing layers (of the protocol stack) ongoingly. Europe should focus on Mobile Wireless aspects. A number of issues of the current Internet were identified by the WG.
- Next meetings: Today 16:30 (here), 8th December 2006 at the Ericsson office in Brussels. First draft of a whitepaper is due 20th November 2006.

Broadband for Europe using structural funds Working group reports and plans (Werner Mohr, Siemens)

- The EC has proposed in its European cohesion policy 2007-13 a convergence of less developed regions, to improve regional competitiveness and employment. There are 3 funding instruments defined with a total budget of 308 Bn€ between 2007-13.

- The eMobility SB has launched in September 2006 a WG, which is working on a position, in collaboration with other Technology Platforms. This position document is to be sent to European member countries as a basis for discussion including the Commission. A first draft version titled “Promoting Broadband as an economic enabler in Europe using Structural Funds” is available.
- Future plans: Preparation of a position paper by February 2007, Investigation of the various technical solutions for Broadband systems by June 2007, in parallel evaluation of the interests of the member states in interaction with the EC on the use of structural funds for Broadband deployment.

Leading edge applications Working group plans and perspectives (Luis Correia, Technical University of Lisbon)

- The main goals of the WG are to establish links between mobile & wireless and other areas, and to identify new potential applications. A first workshop has been held at Deutsche Telekom in Bonn in May 2006, at which speakers from several areas outside the telecom world (banking, gaming, sports etc.) presented their views on future service needs (presentations available at eMobility web site).
- A workshop on “Low power wireless communications” will be held in Leuven on 13th December 2006.
- The formal launch of the Applications WG is today at this GA. 2 Workshops are planned: January 2007 and June 2007. Everybody interested shall send an email to luis.correia@lx.it.pt. The objective of the January 2007 workshop is to discuss on potential areas with other Technology Platforms. The June workshop shall identify further applications from other areas.

Beyond 3G roadmap Working group report and plans (Didier Bourse, Motorola)

- The activity was launched in September 2006. The goal is to develop a roadmap for the evolution of beyond 3G systems.
- Next steps: The plan is to draft a Whitepaper by January 2007. A meeting is planned for January 2007. An email list has been setup pub-b3g-wg@ist-emobilityssa.org. Self subscription can be done at <http://lists.eurescom.de>.

Joint work with other platforms and with the Mirror Group (Erich Zielinski, Alcatel)

- The representatives / public authorities of the member states form the Mirror Group. In addition, eMobility sets up liaisons with other initiatives or projects. Liaisons exist e.g. with WWRF, EPISTEP (supporting SMEs’ participation in FP6/7), etc.
- A joint Mirror Group meeting inviting Mirror Group members with other ETPs have been in Brussels, 19th May 06. An agreement has been made with EUREKA cluster Celtic on test beds.
- Future plans: Joint Mirror Group meeting in February 2007 (jointly with Celtic event). A second meeting is planned for September/November 2006 after the availability of the Call 1 evaluation results.

Q&A session (Hans Einsiedler, Deutsche Telekom Laboratories)

- *Rahim Tafazolli*: Do you agree that current research is evolutionary, and that we need cross-layer optimisation? *Alex Galis, University College London*: How can optimisation be improved? Your plan looks like an equivalent to the US initiative, I could not see what the

differentiator is. My suggestion is to focus on a few key areas e.g. better control services or end user networks. *Rahim Tafazolli*: The Post IP WG is not defining projects, it is only identifying topics, regulatory/policy issues and standardisation aspects. Anybody can from the Whitepaper pick up topics and prepare a project proposal. I argue that a flat architecture can provide QoS for end-to-end services as a middleware is lacking.

- *Hans Einsiedler*: Will we have layers in the architecture in 15 years? Will we still have the OSI layer model? *Rahim Tafazolli*: Layering is in general a good idea.
- *Hans Einsiedler*: What is the evaluation process for structural funds? *Werner Mohr*: Regions and member states prepare strategic plans on where they intend to invest. This has to be approved by the EC before the distribution of funds takes place. Based on this, detailed programmes will be developed in the countries and then tenders issued to which companies can make offers. Also operators can make proposals in cooperation with public organisations.
- When will the money from structural funds be available? *Werner Mohr*: It should be available beginning next year.
- *Jan Burgmeijer, TNO*: Are other ETPs also working on ICT related areas? Are they interested in cooperation? *Luis Correia*: eMobility has links with some ETPs, links to further platforms including those in the traffic areas will be setup.
- *Hans Einsiedler*: Do you have identified killer applications. *Luis Correia*: No, but there will be one.
- *Hans Einsiedler*: What is the targeted customer group of the B3G Whitepaper? *Didier Bourse*: It will be put on eMobility web site. It can serve as reference for FP7 projects (proposals).
- *Hans Einsiedler*: How does eMobility deal with overlaps? *Erich Zielinski*: The Mirror Group has the goal to identify common or overlapping areas, but not to make sure any overlap is excluded. *Fiona Williams*: By the end of next year we will see that there are projects that cover areas of more than one ETP. I don't think that this should be a concern.
- *Martti Mäntylä (HIIT)*: As Artemis is a JTI and as such having its own budget there is a risk that work is not aligned with the Commission's WP. *Fiona Williams*: The WP is so wide that it does not exclude topics in scope of Artemis. The risk of overlapping work is not estimated being a big problem.
- *Frank-Uwe Andersen, Siemens Networks*: Are there any official channels to exchange views between EC activities and the US initiative GENI? *Erich Zielinski*: This exceeds the current eMobility activities, but could be taken on. Regarding the issue of overlapping work just discussed, in Rainer's presentation we saw platforms and dimensions where several platforms contribute to the Network of the Future. This underlines that a strict separation is not possible, and is also not estimated to be contra-productive. *Rahim Tafazolli*: I asked the same question to Joao da Silva recently, there is a monthly meeting going on to discuss on this in the Commission.

Final remarks (Fiona Williams, Ericsson)

- Fiona briefly reviewed the topics presented during the meeting. She encouraged the meeting participants to join the eMobility Workgroups, and to use the Wiki tool to present the company and project ideas and interests. Slides from today will be available on the eMobility web site. Finally she thanked the speakers and audience.