

The eMobility Technology Platform – Staying Ahead with Simplicity, Efficiency and Trust

2nd General Assembly

Dr. Fiona Williams

Chairman, eMobility steering board

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Objectives of the meeting eMobility

- Provide you with insight into the key achievements of the year
 - Provide a perspective on the coming year, in particular in relation to the FP
 - Provide an opportunity for members to meet the organisers of activities
 - Provide a forum for discussion on platform activities
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Agenda



1. Welcome address and progress by eMobility since the 1st General Assembly
 - Dr. Fiona Williams, eMobility Chairperson, Ericsson
2. Launch of FP7
 - Dr. Rainer Zimmerman, European Commission
3. The SET concept and SRA Version 5
 - Prof. Rahim Tafazolli, University of Surrey
4. The role of eMobility in the implementation of the R&D projects & plans for future work
 - Dr. Juha Saarnio, eMobility SRA Editor, Nokia
5. Question and answer session
 - Chair: Dr. Brigitte Cardinael, eMobility Vice-Chairperson, France Telecom

Agenda



Afternoon session: 14.00 to 16.30

6. Post-IP Milestones Working Group report and plans

- Prof. Rahim Tafazolli, eMobility Expert Group and WG Chairman, University of Surrey

7. Broadband for Europe using Structural Funds Working Group

- Dr. Werner Mohr, WG Chairman, Siemens

8. Leading-edge applications working group plans and perspectives

- Prof. Luis Correia, WG Chairman, Technical University of Lisbon

9. Beyond 3G Roadmap Working Group report and plans

- Dr. Didier Bourse, WG Chairman, Motorola

10. Sharing work with other European Technology Platforms

- Dr. Erich Zeilinski, eMobility Mirror Group Chairman, Alcatel

11. Discussion

- Chair: Mr. Hans Einsiedler, Deutsche Telekom

12. Concluding remarks Dr. Fiona Williams, eMobility Chairperson

Coffee and chat: 16.30 onwards

Staying Ahead!



- Economics as a context for *e*Mobility
- Expanding membership
- *e*Mobility's vision of the future
- SRA Version 5 published
- Current and newly started working groups in *e*Mobility
- Joint work with other platforms and with the mirror group
- Towards FP 7 – topics and networking

Key objectives of Technology Platforms

- The drawing up of a **Strategic Research Agenda** including long term vision
- Identify technology and non-technology **barriers** to development, deployment and the use of technology
- The achievement of the necessary **critical mass** for research and innovation
- The mobilisation of substantial public and private **funding**
- **Projects** in Framework Programme 7 may be carried out under the umbrella of Technology Platforms

Economics – the global context

Global Activities on Future Systems



North America

- Geni/FIND activities on Post-IP
- Research on systems beyond 3G

Dominated by global IT industry

- IEEE activities in
 - IEEE 802.11a, b, g, h, n
 - IEEE 802.15
 - IEEE 802.16, a, d, e
 - IEEE 802.20
 - IEEE 802.21
- Claims from start-ups and IT companies to provide 4G solutions
 - Flarion (Fast Low Latency Access with Seamless Handoff and OFDM)
 - Arraycomm – advanced antenna technology and SDMA
 - Navini Networks – Advanced beamforming technology for range & coverage
 - IP Wireless – TD-CDMA with IP core network
 - Aperto Networks – Fixed Broadband Wireless Access vendor
 - Redline Communications – Fixed BWA
 - Airspan – Fixed BWA
 - Alvarion – Fixed BWA
 - Intel – Active in 802.16 development and its promotion in WiMAX
- Many activities are on short-range and WLAN enhancements

Europe

- UMTS
- UMTS enhancements
- Research on systems beyond 3G in FP6

China

- 3G licenses not yet granted
- Research on beyond 3G in 863 FuTURE Project
- Joint Research Center Shanghai

Korea

- Reluctant with wide-spread 3G deployment
- WiBro (WiMAX derivative) demonstrated as 4G, August 2006
- Research on systems beyond 3G

CJK – China, Japan, Korea

- Cooperation on government level, one working group on mobile communication
- Cooperation between SDOs

Globally

- ITU-R Framework Recommendation
- WWRF, since 2001

Japan

- 3G deployment (cdma2000, WCDMA)
- Enhancements on systems beyond 3G
- Research on systems beyond 3G
- DoCoMo proposal Super 3G

Rationale for investment

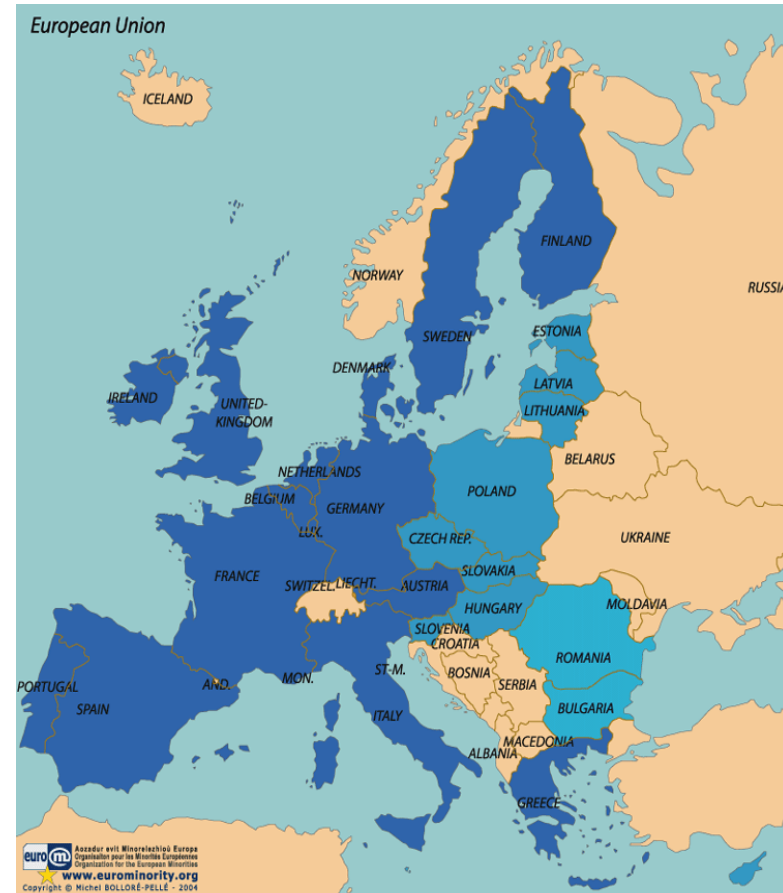


- Mobile & wireless products and services have an **economic impact** greater than the INTERNET
- Public investments in other regions is growing rapidly (**Asia, N. America**)
- Job creation – from 4 Million jobs now to **10 Million** in 2010 (Deutsche Bank)
- Europe should ride the **next wave** of wireless innovation
 - Growth in the wireless/mobile sector
 - Growth in the applications sectors
- Mobile services account for about **3%** **European GDP at present**

eMobility Objectives



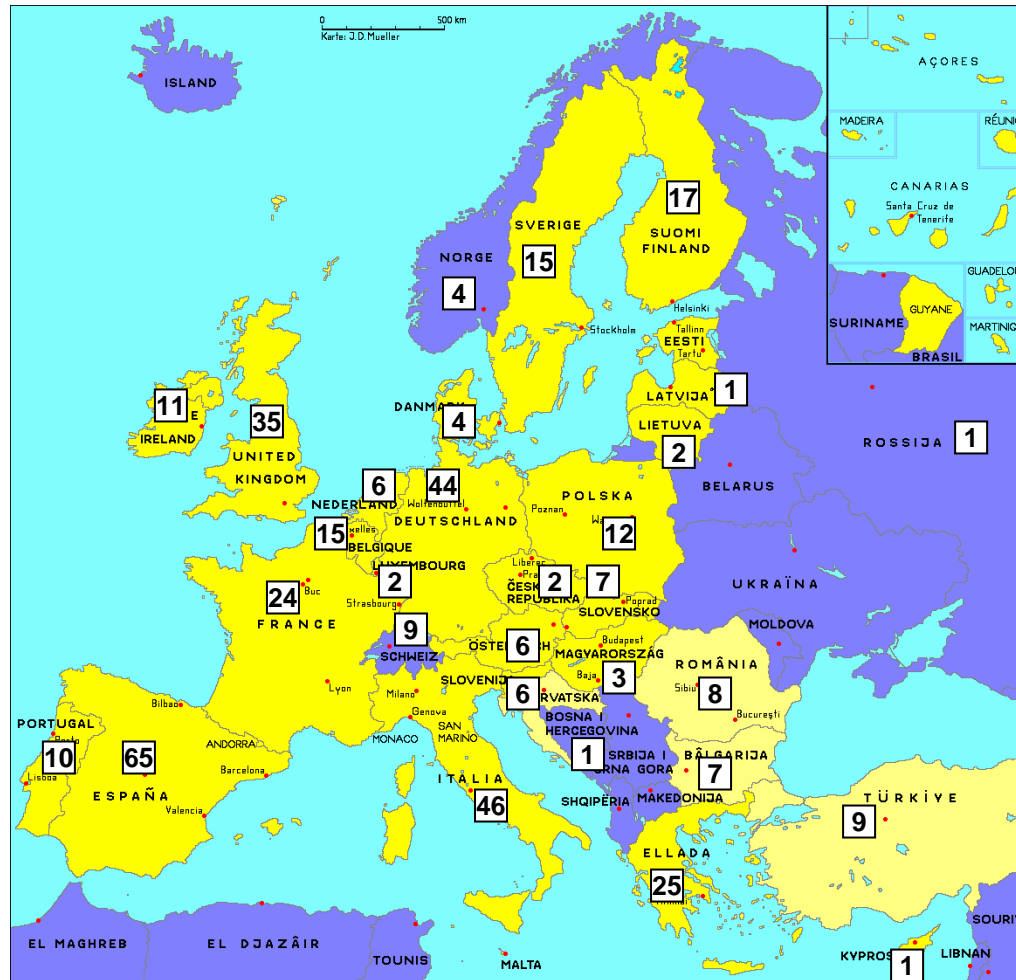
- **Drive future technology developments in mobile and wireless communications** that serve Europe's citizens and the European economy
- Enhance **cooperation** between industry players, the research community and public authorities
- **Mid- to long-term vision (2015+)** to maximise the benefit of mobile and wireless communications, thus enabling economic and social advances in the EU
- Formulation of an **action plan and time-table** for the key developments
- Support the renewed **Lisbon Strategy for a competitive, knowledge-based society**





Expanding membership

eMobility Membership at present



Total number of members **410**

Industry **98**

Research **160**

SME **152**

Other **20**

Steering Board of 23 members (all elected)

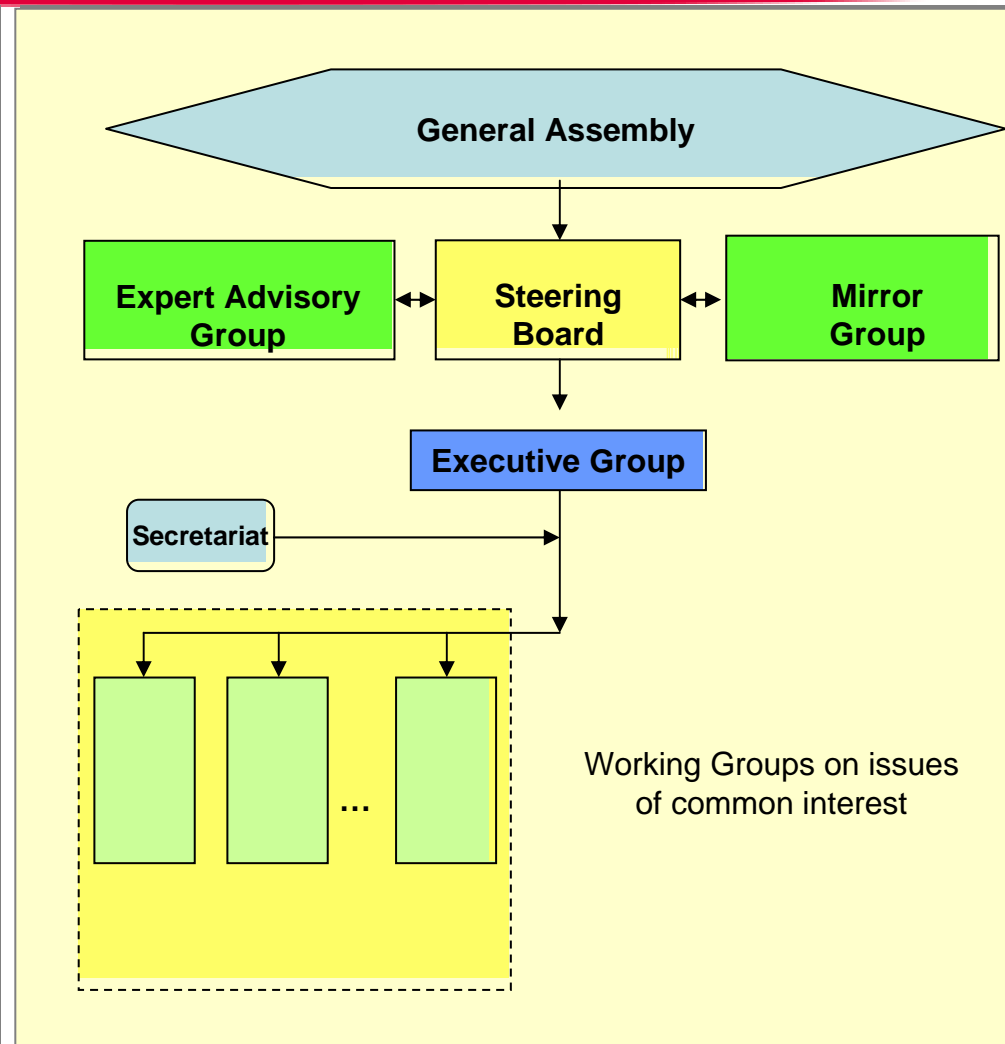
+ Expert Group
Mirror Group
Executive Group

Israel: 14

eMobility organisation



- **Public launch**
 - March 18, 2005 in Brussels
- **General Assemblies**
 - November 23, 2005, in Brussels with first elections of the Steering Board members
 - **November 14, 2006** Heidelberg, Germany, co-located with WWRF meeting
- **Strategic Research Agenda**
 - **Version 5 just published!**
- **Mirror Group Meetings**
 - April 27, 2005 in Brussels
 - October 11, 2005 in Brussels
 - May 19, 2006 in Brussels
- **Cross Technology Platforms Meeting**
 - September 7, 2005 in Brussels
 - February 16, 2006 in Brussels
 - Joint mirror group meeting, June 29, 2006
 - 2 joint press releases



Steering Board work



- Organisational - election of Platform Chair and VC, appointment of Observers
 - Membership issues (membership has grown rapidly)
 - Liaisons with other Technology Platforms and bodies (SME Survey EPISTEP)
 - Preparation of workshop on issues of general interest
 - Dissemination activities, exhibition stands, flyers, brochures
 - Preparation of participation in conferences and workshops
 - Preparation of meeting with Members of the European Parliament and the EU Commission
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- Review of market and technology trends
 - Discussion on roadmaps for the further development of the mobile and wireless communication sector
 - Contributions to the preparation of Framework Program 7
 - Development of the Strategic Research Agenda
 - Prioritisation of research topics
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- Topics beyond research working group
 - Discussion and preparation of working groups
 - Post IP topics
 - Broadband for all and related discussions on Structural Funds
 - Potential research areas for Framework Program 7

Events



- Workshops on SRA & on applications
- 9 Steering Board meetings
- Bi-weekly executive group meetings
- Versions 4 & 5 of SRA
- Presentations at numerous conferences and workshops, exhibition stands
- IST Event Networking Session and Exhibition booth, Helsinki

Challenges as seen by the Steering Board based on SRA V 4



- **The Grand Challenge: *Build on Europe's strength in connectivity***
 - >50% of research funding in FP 7 for the mobile area should be devoted to connectivity and services research, with innovation coming through addressing simplicity, efficiency and trust
 - Shift to more funding for services for the future
 - Address the need to provide simple, efficient and trustworthy systems in future networks and services research
- We need more focus on the user experience and business perspectives in future research to ensure exploitation
- Distribution is intended to reflect resource allocation in research projects
- Research on security and trust should be linked to applications/systems and not stand-alone
- Content and media are no longer in focus in the eMobility SRA as they are key topics of NEM, with whom we need close coordination

SRA Version 5

The Shared Vision

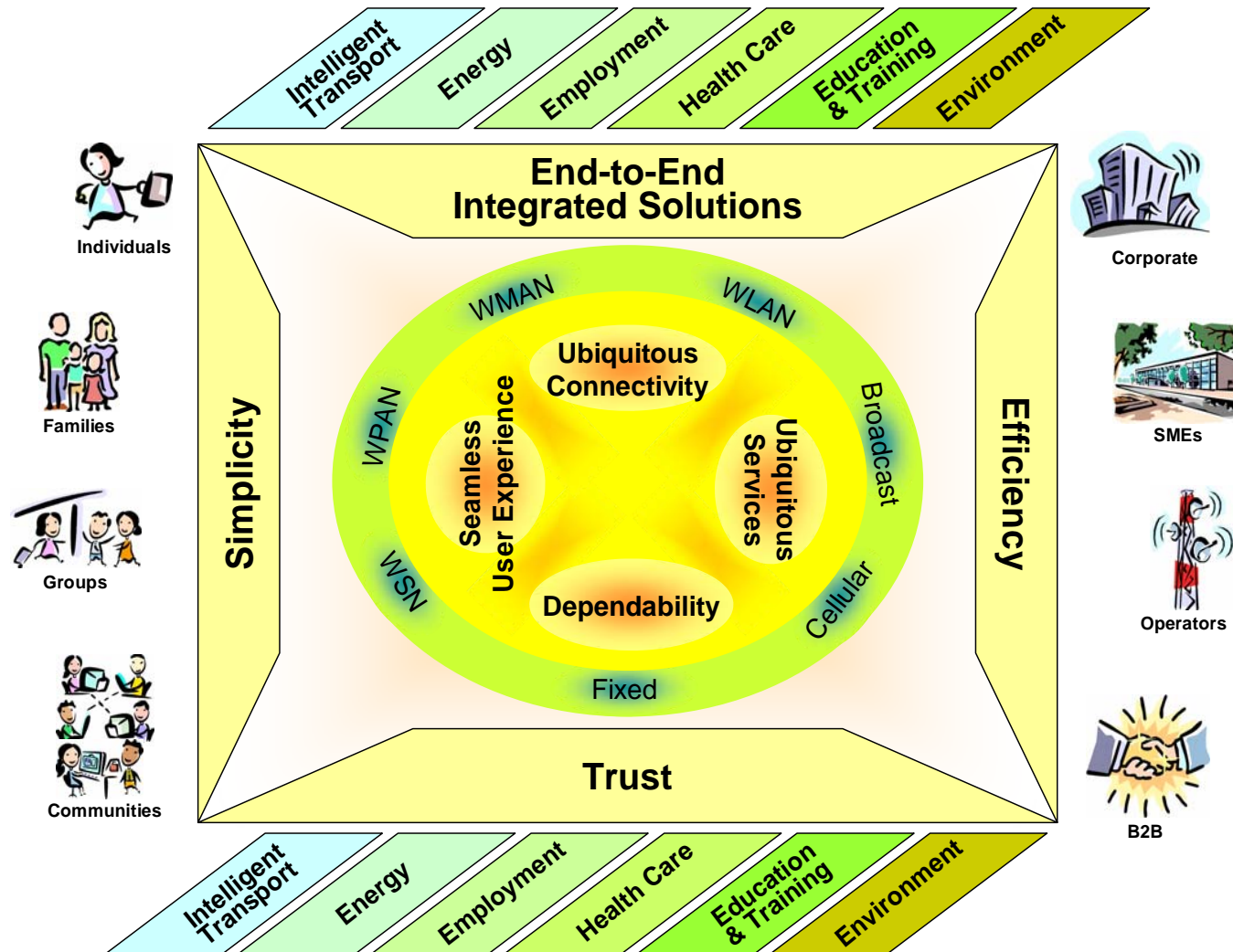


“Improving the **individual’s** quality of life, achieved through the availability of an environment for the instant provision of and access to **meaningful, multi-sensory information and content”**

Simplicity, Efficiency & Trust



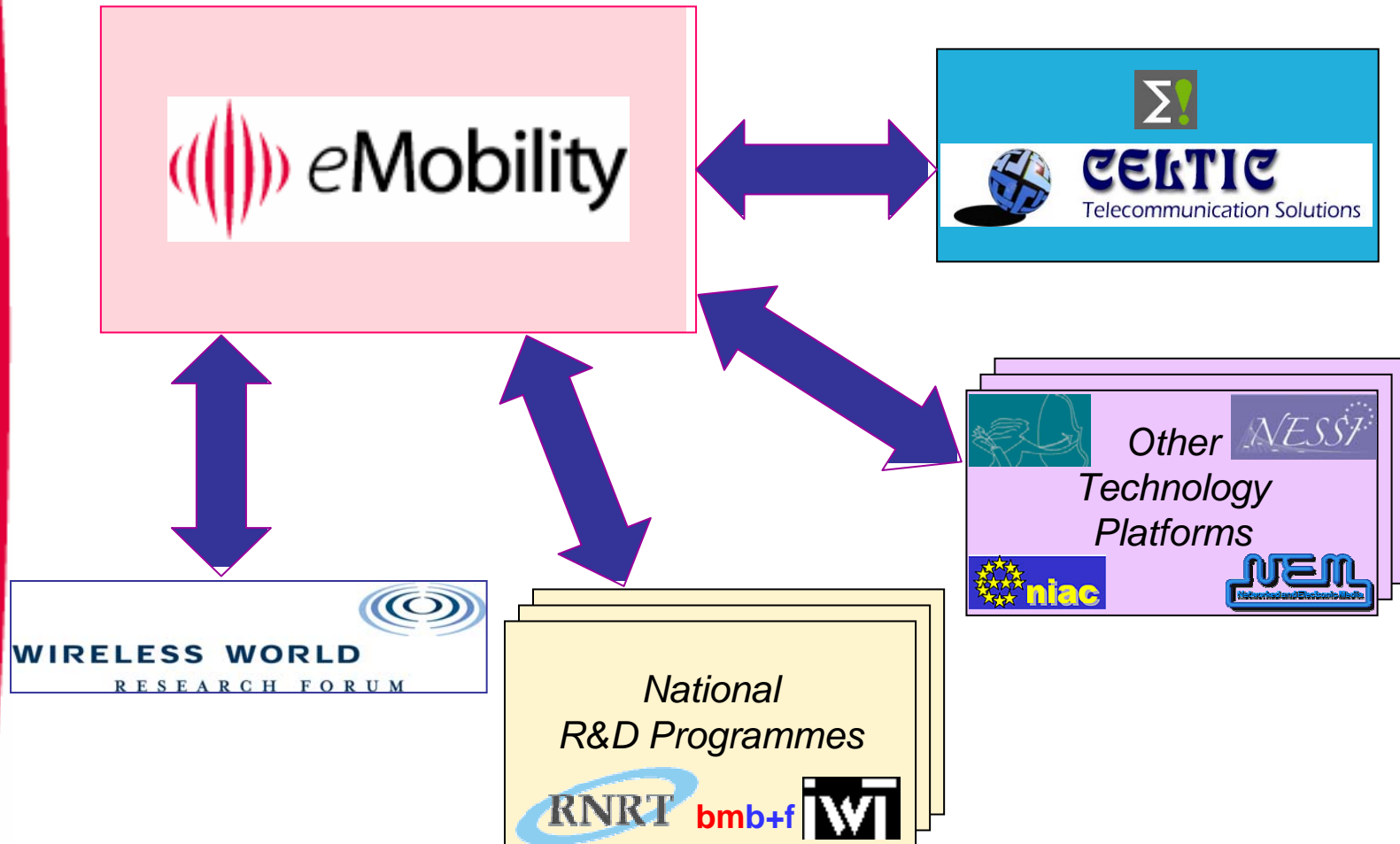
SET in context





External relationships

eMobility Relationships with other Bodies



Working Groups

New activities – Post-IP ! eMobility

- Working group on “**Roadmap for Post-IP R & D**” for members is being set up
 - Objective is to provide a common framework of milestones for proposers preparing project proposals early next year and to structure the activities in the domain on a voluntary basis
 - **Draft milestones** will be open for discussion by members at a 2nd workshop planned for December 8th
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“Broadband in Europe” eMobility

- **Working group** to look into the potential of using **Structural Funds** in combination with FP 7 and other instruments to boost the development of Europe’s broadband networks and services
 - Objective is to enable the synergy effects within Europe of a coordinated introduction of broadband services and infrastructures to form a **European Broadband Infostructure**
 - Working paper in draft form
 - First members meeting on this topic on 13th October, mailing list for the group
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Coming soon ...



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- Beyond 3G Systems Milestones
 - Chair: Dr. Didier Bourse, Motorola

 - Applications Working Group
 - Chair: Prof. Luis Correia, Tech, Univ. of Lisbon, Portugal
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Future Events



- Networking session, panel presentations and exhibition stand at **IST Event** in Helsinki, November 2006
- **Presentations** to conferences and workshops continue in 2007
- **Working Group** activities increasing
- **Networking** Activities increasing
- Planning for **FP 7** activities on-going
- Relationships to **National funding programmes** and Structural Funds growing

Plans for 2007 eMobility

- Post-IP & Broadband workshop tentatively planned for June '07
 - General Assembly November '07 with elections to the Steering Board
 - Expert Group meetings in February and May to edit SRA Version 7
 - Mirror Group meeting in first half of the year
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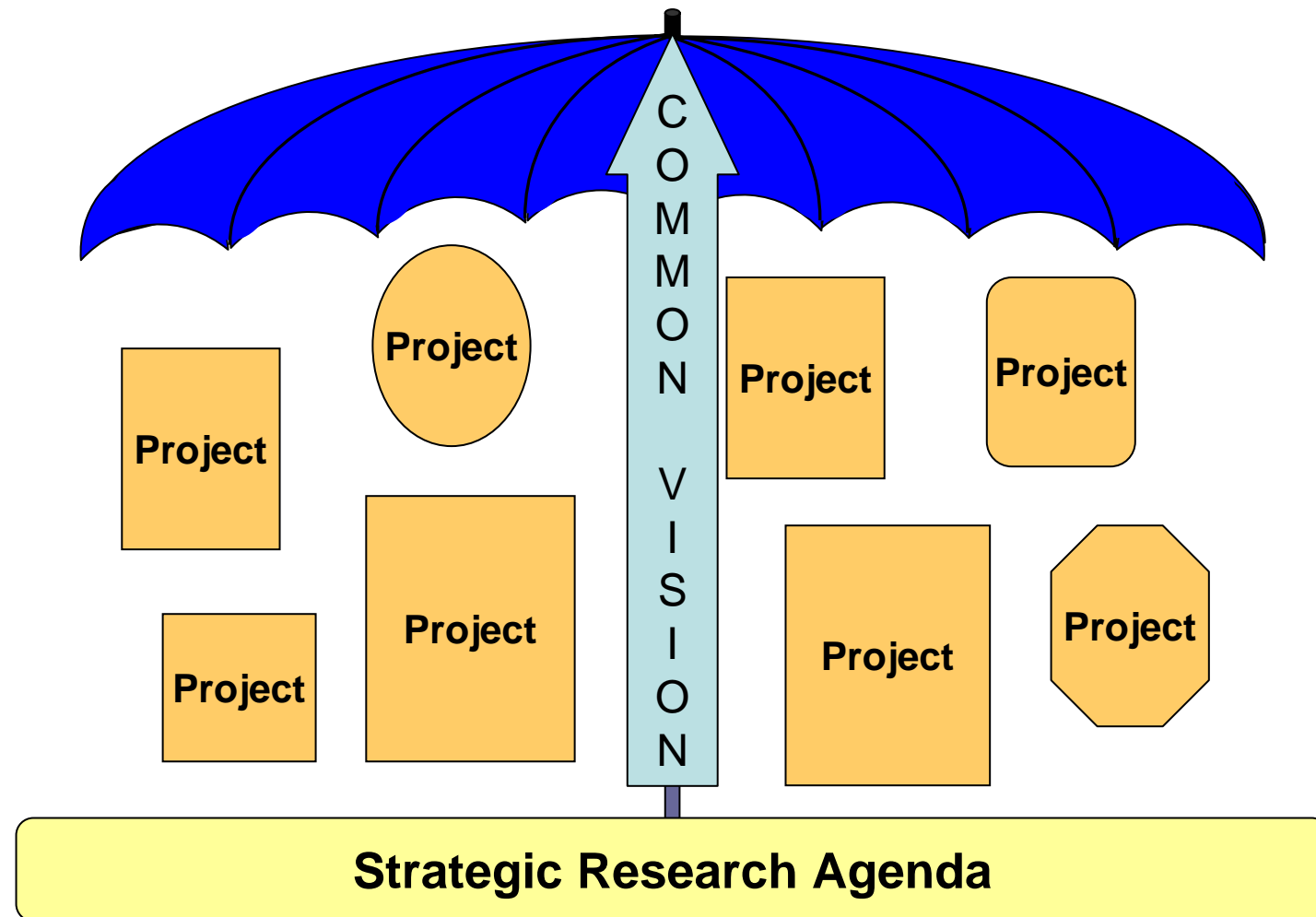
Towards FP 7

Future Activities



- Input to future versions of the FP 7 workprogramme based on revisions of the SRA
- Evaluation of the coverage of the SRA by the contracted projects in FP 7 and other funding sources
- Proposals on how to fill gaps in the research through targeted calls
- Working Group activities
- Joint Platform and liaison activities
- Conferences and dissemination activities

eMobility Projects in the FP7 timeframe



What will it mean to be an eMobility project in FP 7?



- To participate in and contribute to **working groups** of eMobility on issues of common interest, attending at least one working group regularly, and contributing to working papers,
- To submit contributions to **conferences** organised by eMobility,
- To contribute to **co-located demonstrations** organised in association with the annual meetings, when project demonstrators have been developed
- To make **information** on the project available for inclusion in eMobility publications and slide sets.
- Networking for members: <http://wiki.ist-emobility.org>

Value for members!



- **Influence the workplans and calls for proposals** of the public research programmes
- Build a **contact network**
- Build **public support for new 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!



Thank you for listening!

<http://www.emobility.eu.org/>