

GST - An End-to-End Architecture for Automotive Telematics

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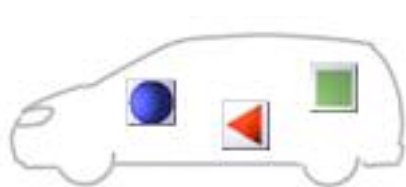
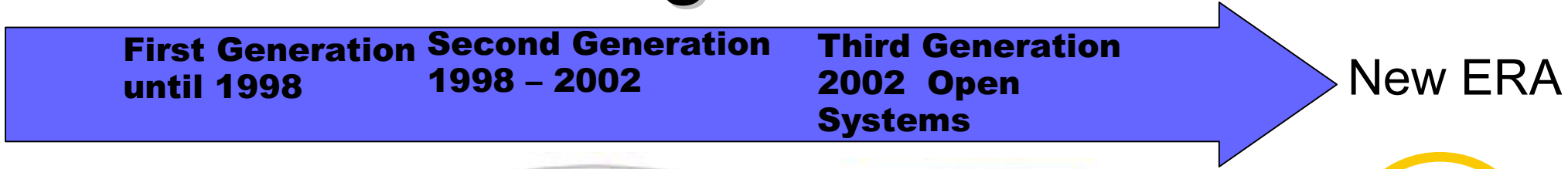


Starting Point

- Telematics = 2-way connectivity between an end-user and a service provider
 - ◆ To perform services
 - Active and passive safety, security
 - Car maintenance
 - Traffic information and management
 - Travel assistance, touristic informations
 - Fleet management, professional services
 - Entertainment and shopping information
 - ◆ To download new services
- GST
 - ◆ Common specification (standards)
 - ◆ Common business model

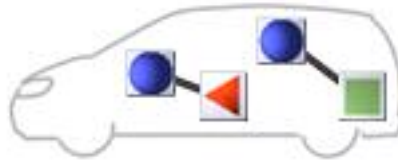


Need for Change



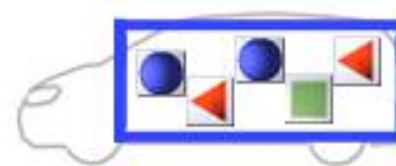
1. Stand alone, noncompatible devices, e.g.

- Radio
- Phone



2. Combined technologies. Functionality linked and limited to proprietary service center, e.g.

- Phone system with GPS



3. Core element of future-proof telecommunication & information systems is the open computer platform. Applications & services are software modules downloaded onto open platform. Driver subscribes to ever growing offering of third party services e.g.

- PC - Internet like approach



4. Open Systems and Markets with Interoperable Components



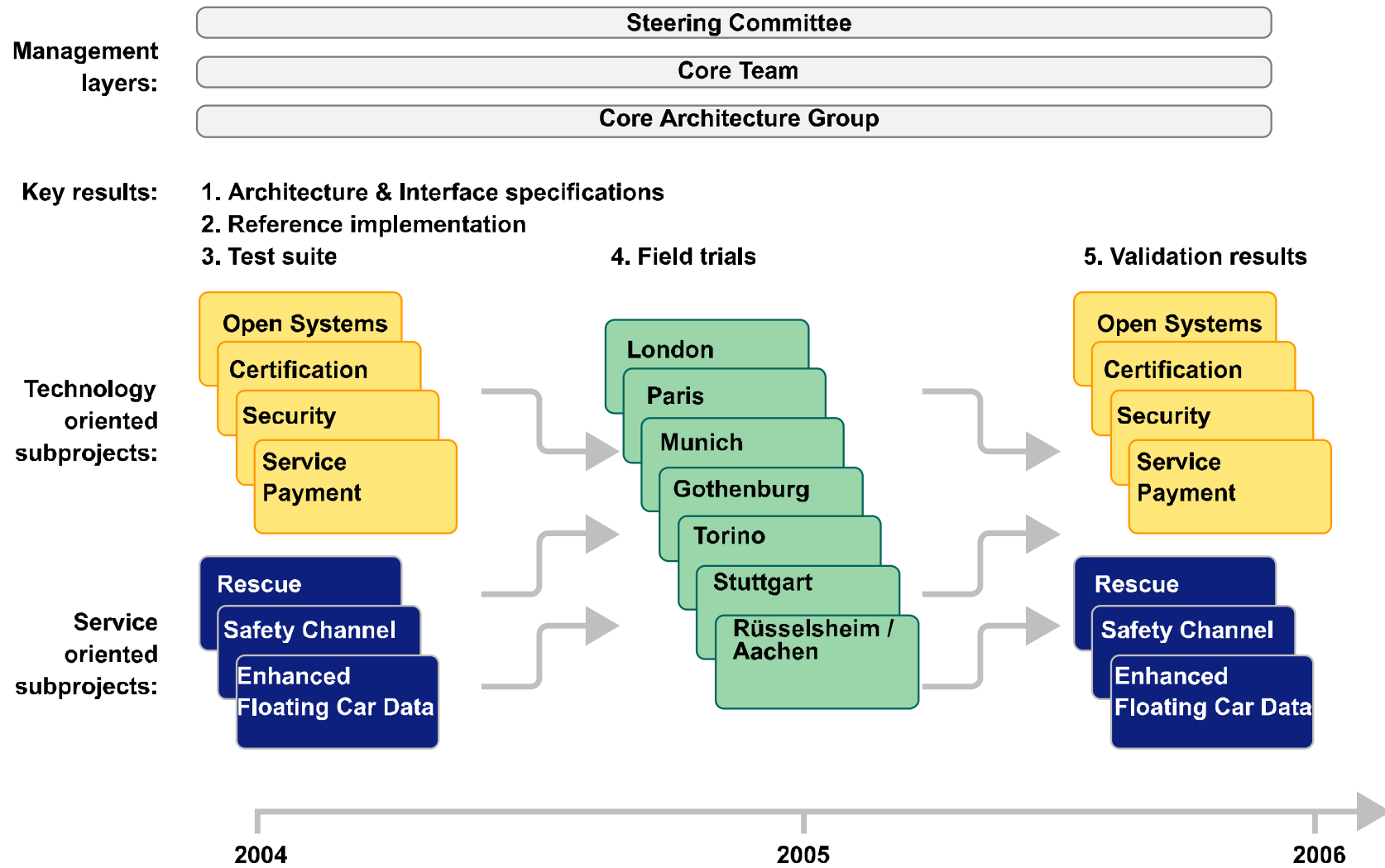
Fact sheet

- Integrated Project
- Goal: Create an open market for telematics services
- Chairman SC: Renault, Vice-chairman SC: BMW, Coordinator/Manager: ERTICO
- Start: March 2004, end: February 2007 (36 months)
- Total budget: 21,5 M€, EC contribution: 11 M€
- 49 partners

ADSE, ALLIANZ, AVE, BMW, BOSCH, DAIMLERCHRYSLER, EBU, ERTICO, FIAT CRF, FORD, FRANCE TELECOM, GATESPACE, GEWI, ISMB, KREIS OFFENBACH, KU LEUVEN, MECEL, MIZAR, MOTOROLA, NAVTECH, OPEL, ORANGE, PENDRAGON, PMI, PROSYST, PTV, Q-FREE, RENAULT, RSA, SES GLOBAL, SIEMENS VDO, SNRA, SUSSEX POLICE, TDF, TUM, TELCORDIA, TELE ATLAS, TELECOM ITALIA, TELEMATICS CLUSTER, TELMACON, TNO, TRIALOG, TRUSTED LOGIC, T-SYSTEMS, TUV, VIALIS, VIKTORIA INSTITUTE, VOLVO, WIRELESS CAR



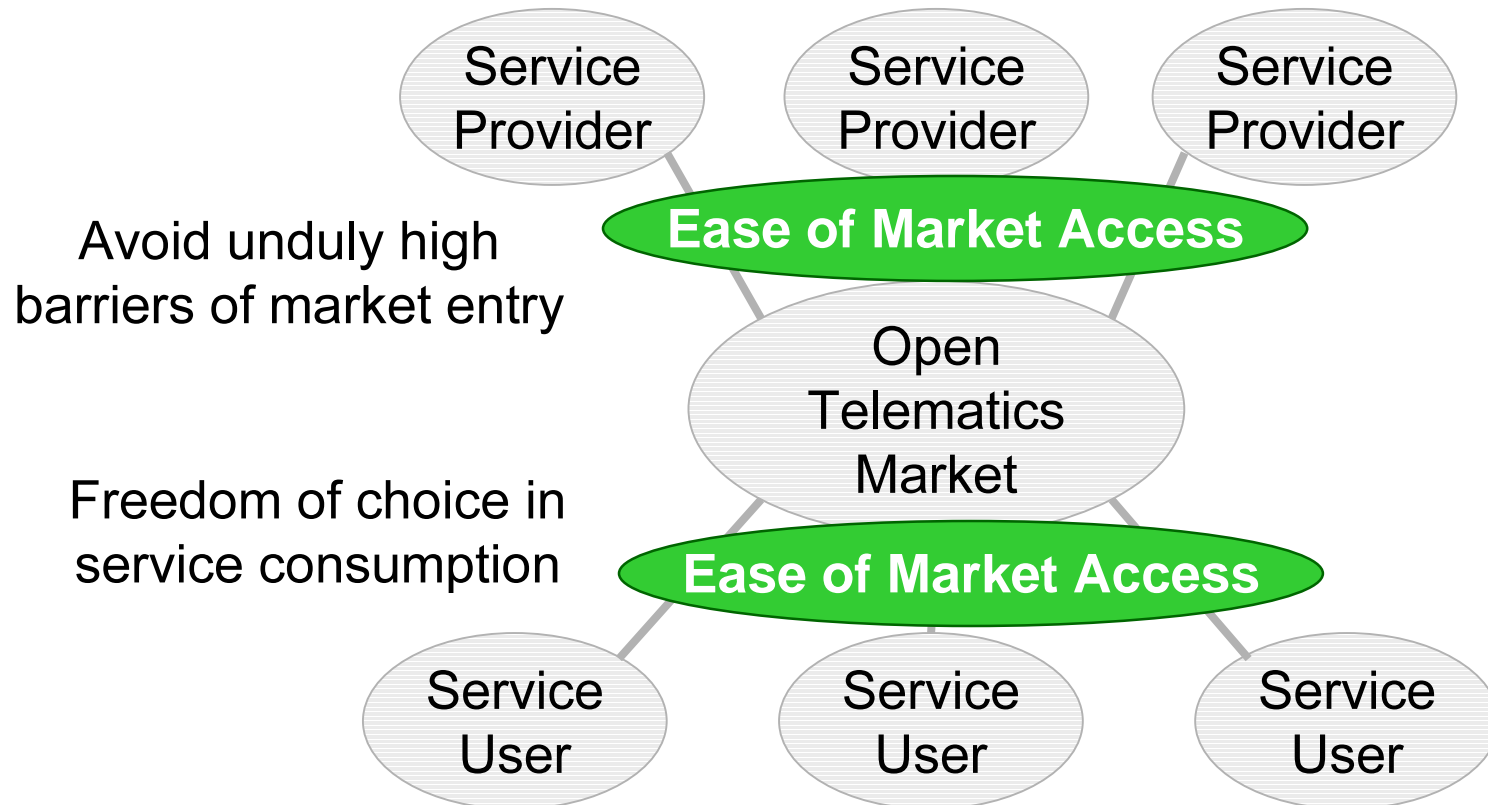
Organisation Structure





Goal

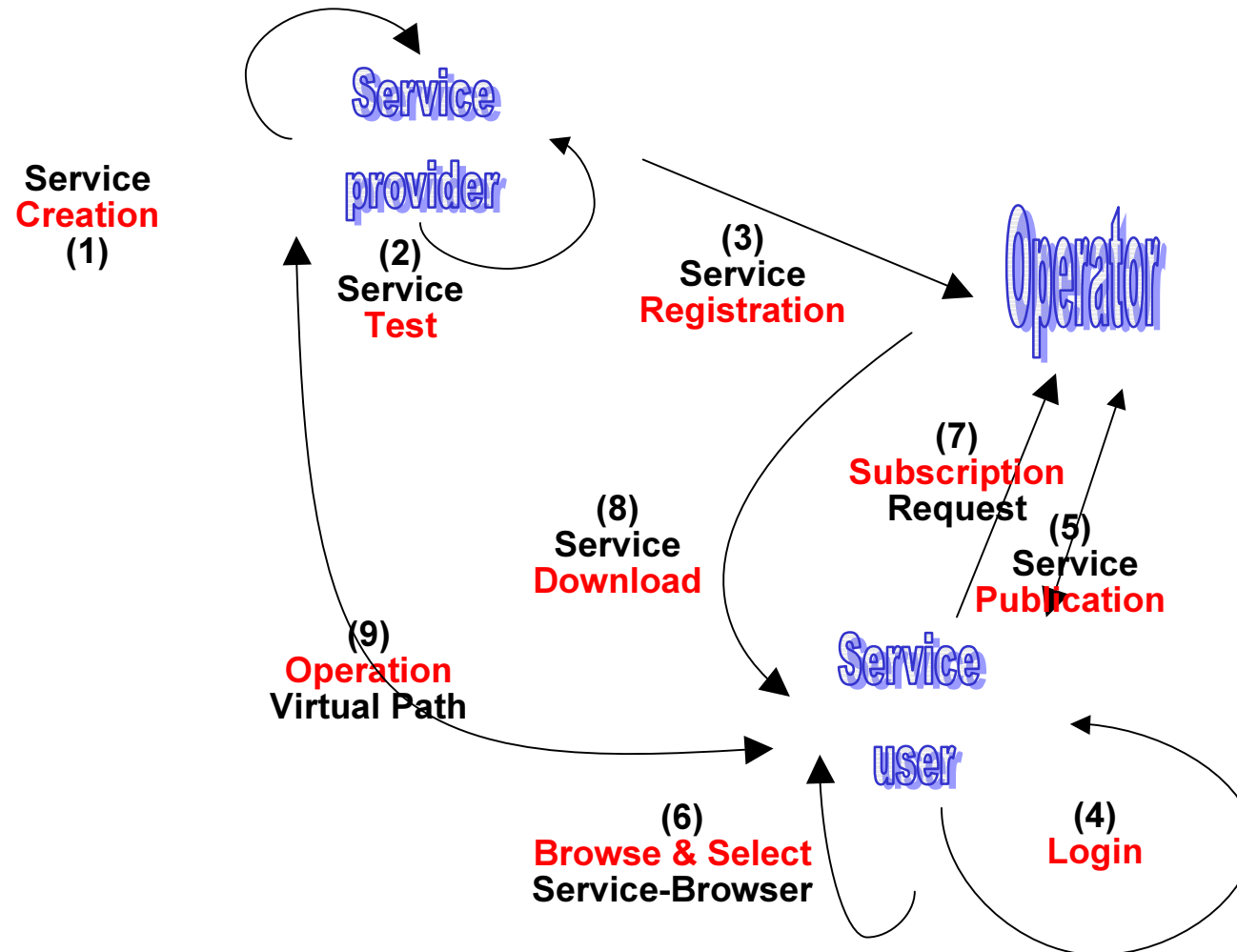
Open Market





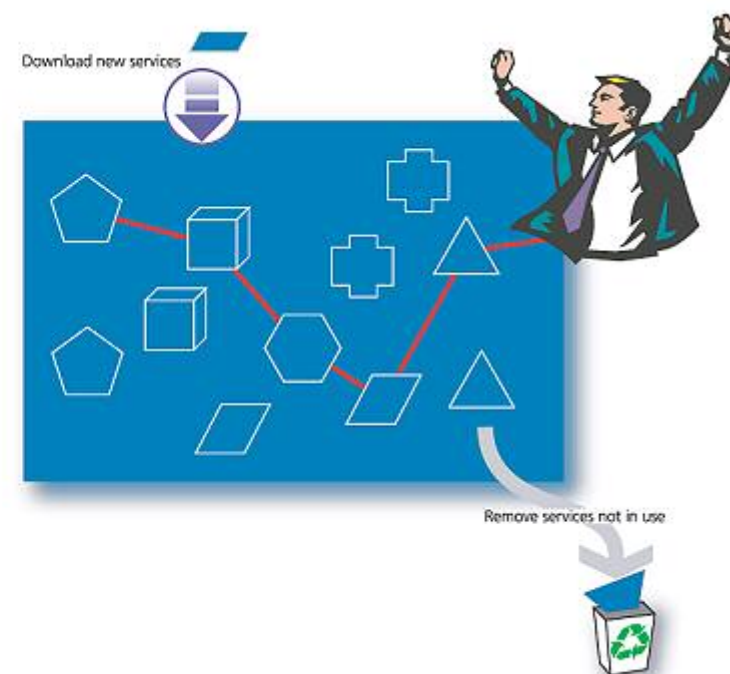
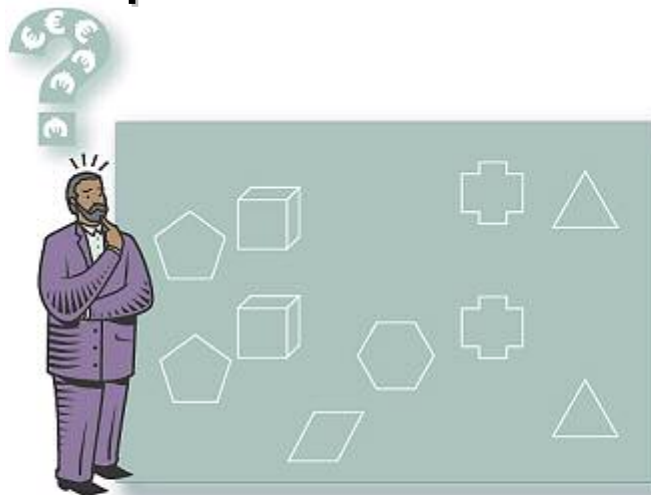
Goal

How it Works



Benefits

- Solution to the lifecycle problem
- Importance of personalised mixes of services
- Support for Europe's regional differences
- Public-private « win-win's »





Main innovation and R&D

Contributions to the state-of-the-art

- Further develop state-of-the-art allowing service providers to rely on common (standardised):
 - ◆ Security mechanisms
 - ◆ Payment and billing mechanisms
 - ◆ Certification mechanisms
 - ◆ Access mechanisms to HMI functionality
 - ◆ Access mechanisms to other devices in the vehicle
 - ◆ Communication protocols

Open question: Exactly how much standardization can/should we mandate?



Main innovation and R&D

Contributions to the state-of-the-art

- Further develop state-of-the-art allowing to successfully deploy some key safety-enhancing service on the market
 - ◆ E-call services
 - ◆ Enhanced Floating Car Data (EFCD) services
 - ◆ Safety warning and information services

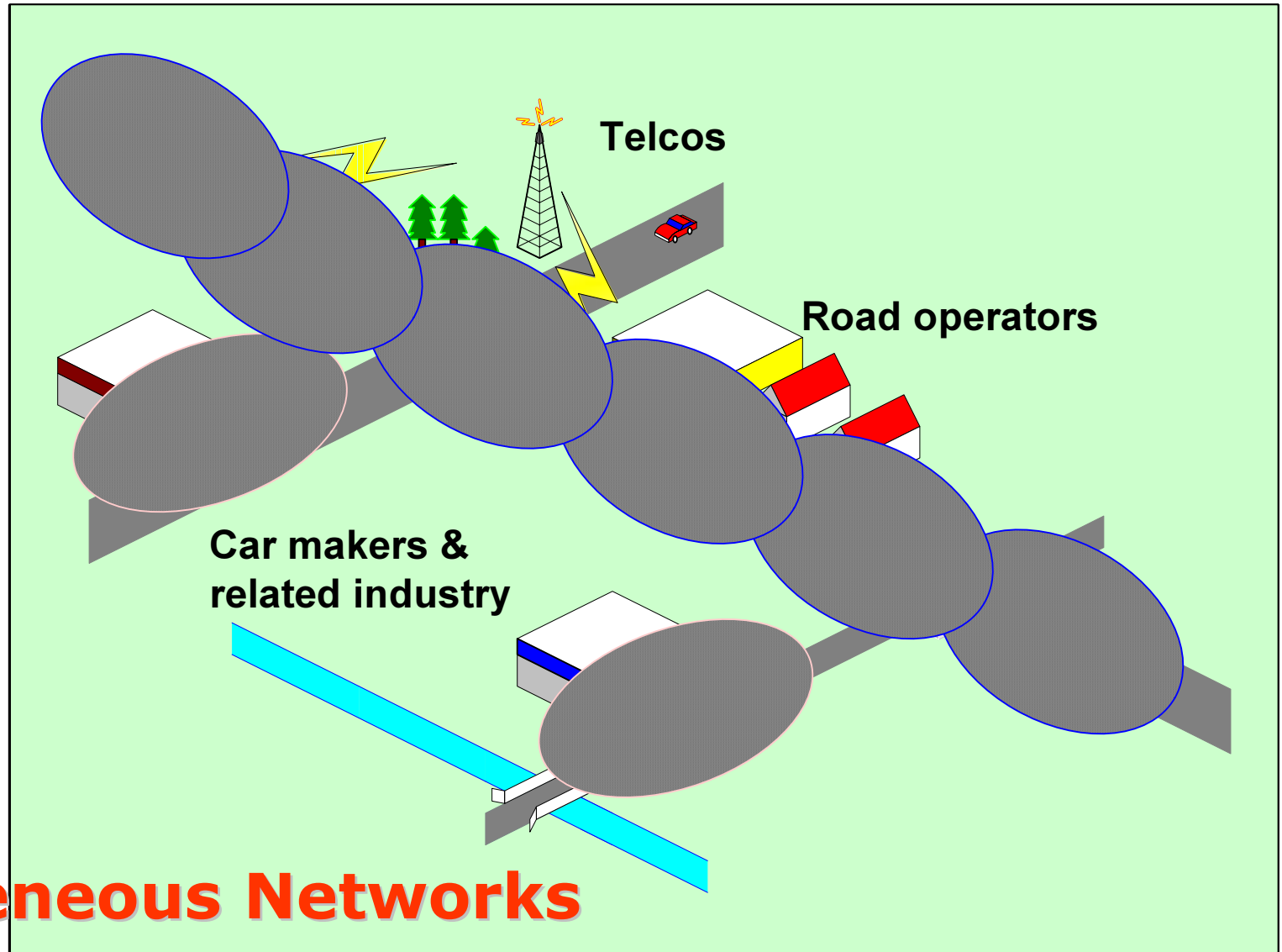
Evolution



GPRS/UMTS

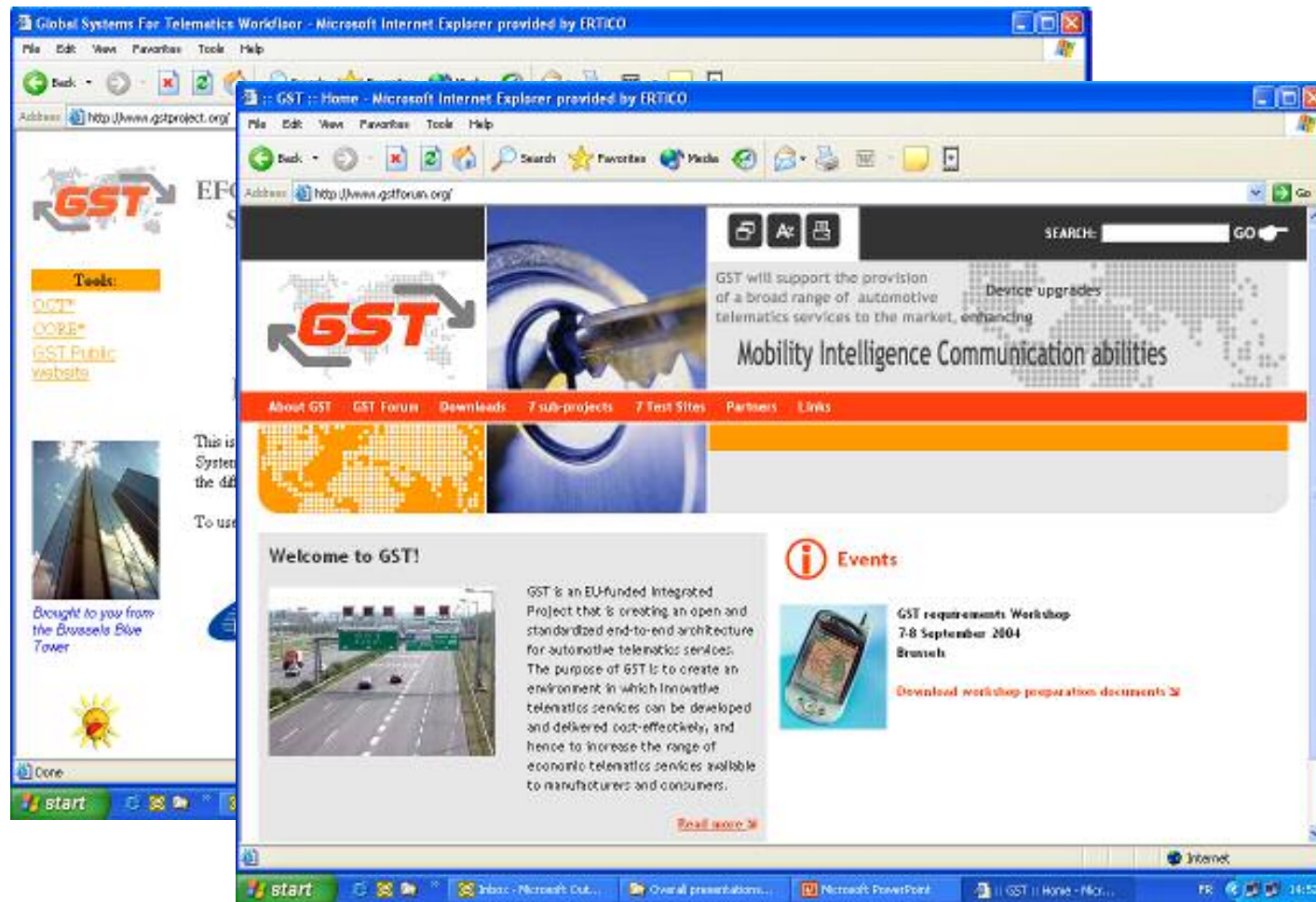
WiFi

WiMax,
Infra Red...



Heterogeneous Networks

Forum Website – www.gstforum.org





Conclusions

- GST provides an open framework to service providers and mobile systems
- Main outcome is the architecture and interface specifications
- The Service Submission Contest will validate the feasibility of such an open telematics framework

Thank You for Your Attention

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