



International Telecommunication Union

eCall: Research to standardisation to implementation

Michael Sharpe
ETSI Radio Competence Centre

"The Fully Networked Car, A Workshop on ICT in Vehicles"
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eCall

- o “Member States shall ensure that (Universal Services Directive 2002/22/EC Art. 26):
 - “all end users ... are able to call the emergency services ... by using ... 112”
 - “public telephone networks ... make caller location information available ... to the extent technically feasible”

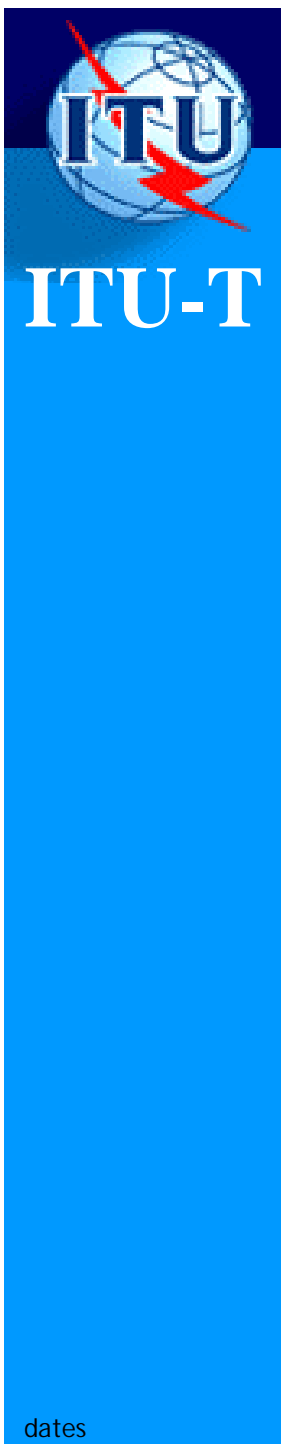


eCall

- o eCall Driving Group status (Feb 2005):
 - “functional architecture and model basically agreed ... roadmap for deployment needed”
 - “necessary technologies available ...
standards are needed”

eCall

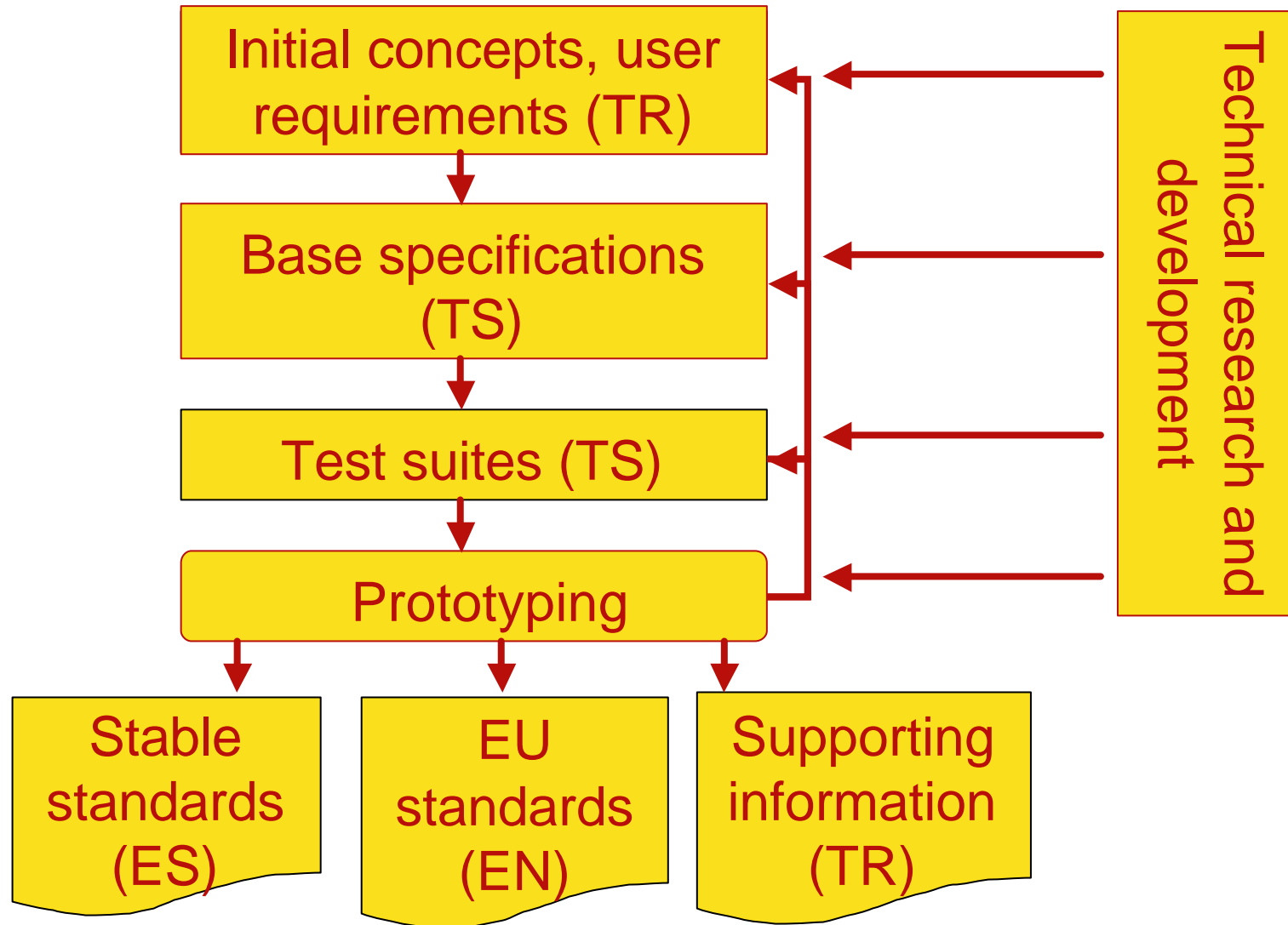
- o eCall Driving Group timescale:
 - ETSI standardization and eCall interface - Dec 2005
 - Finalize in-vehicle eCall functionality system architecture and start system development - June 2006
 - Start of rollout of infrastructure - June 2007
 - Finalise infrastructure, Sept 2009

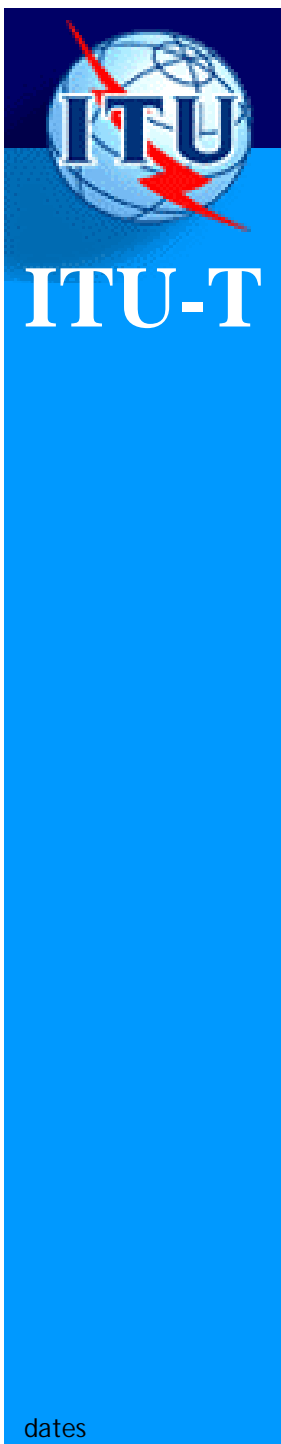


eCall

Request from the European Commission to ETSI (January 2005) to initiate standardisation work on eCall

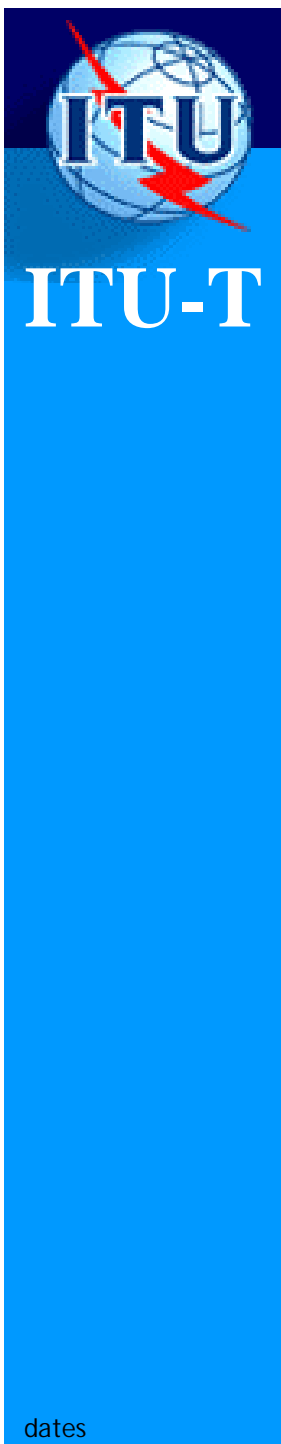
An example standardisation project...





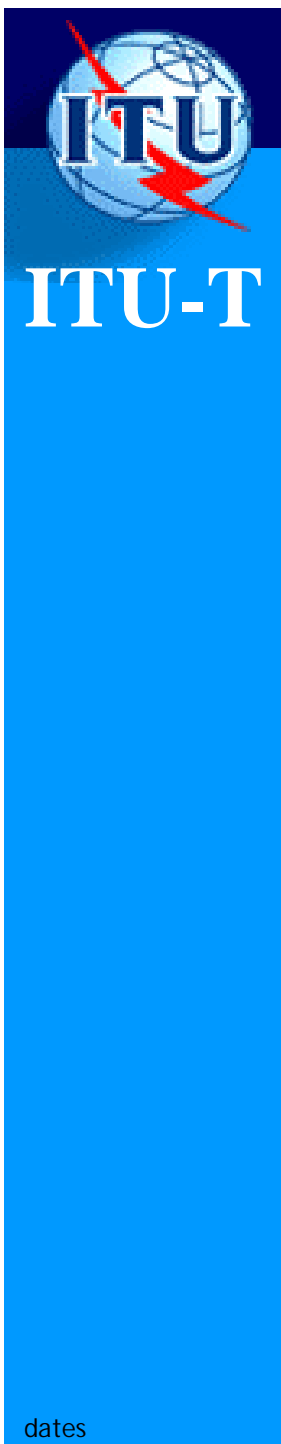
Existing standardisation work in ETSI

- EMTEL (Emergency Telecommunications)
 - Develops user requirements for telecommunications in emergency situations
 - Keeps an overview of work in product committees
- TISPAN (Telecomms and Internet converged Services and Protocols for Advanced Networks):
 - Network signalling, Next Generation Networks



Existing standardisation work in ETSI

- 3GPP (3rd Generation Partnership Project)
 - GSM development
 - GPRS, EDGE
 - UMTS
- MSG (Mobile Standards Group)
 - European specific deliverables based on 3GPP



Existing standardisation work in ETSI

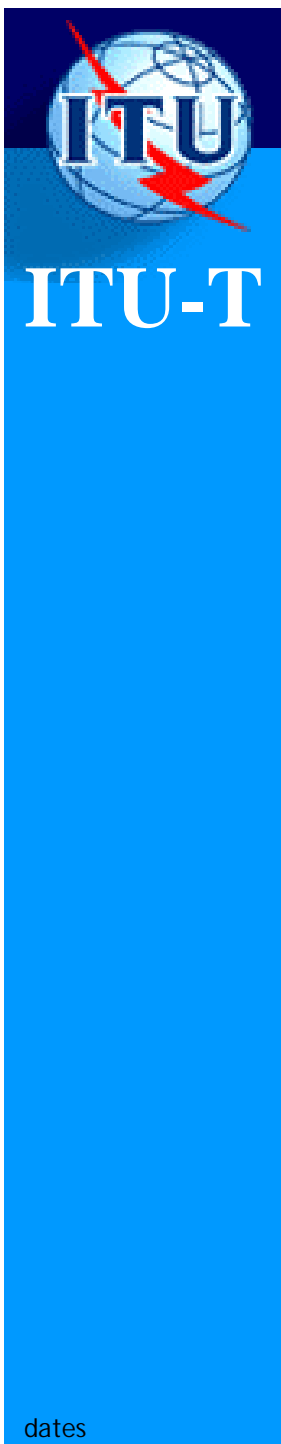
- Automotive EMC (ERM TG04)
- Automotive Radar (ERM TG31b)
 - Anti-collision radar (24 GHz and 79 GHz)
 - Automatic Cruise Control (77 GHz)
- Intelligent Transport Systems (TG37)
 - Conformance testing for Dedicated Short Range Communications
 - Continuous communications e.g.:
 - Vehicle to Roadside (5 GHz)
 - Vehicle to vehicle (66 GHz)
 - Infra Red

Regulation(EU)



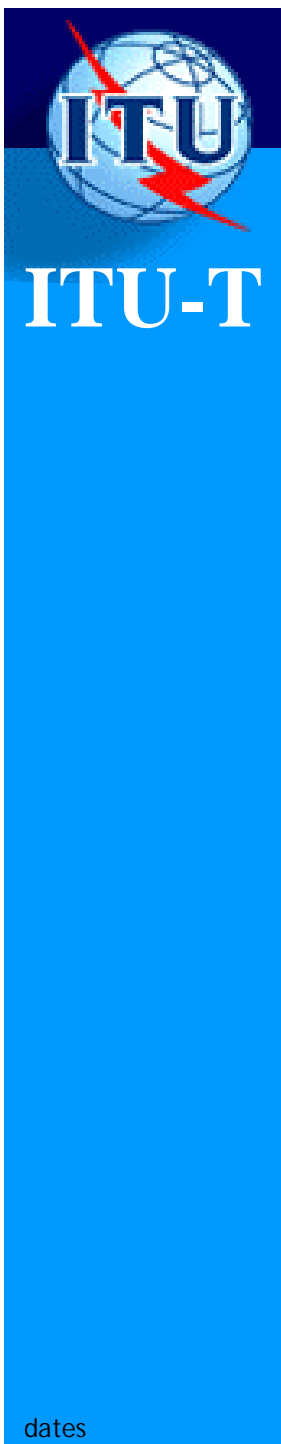
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- Framework Directive (2002/21/EC)
 - Art. 17: list of standards: “Member States shall encourage use of standards [in list] ... to ensure interoperability...”
 - Standards may be made compulsory under certain circumstances
- Radio and Telecommunication Terminal Equipment Directive (1999/5/EC)
 - Art. 3.3e: Requirement may be invoked to ensure access to emergency services



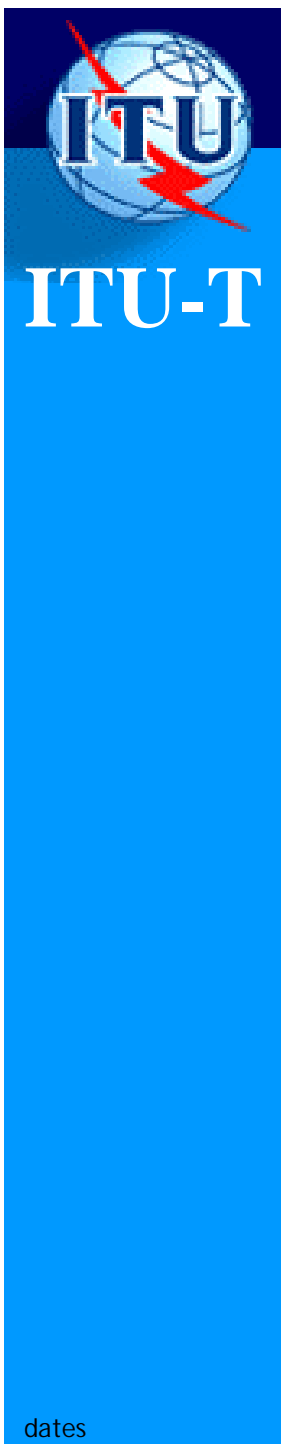
Existing standards / specifications (networks)

- o ETSI SR 002 180 (2003): “Requirements for communication of citizens with authorities/organizations in case of distress (emergency call handling)” - EMTEL



Existing standards / specifications (networks)

- User to User Signalling (UUS) in GSM:
 - ETSI TS 122 087 (2005): UUS Stage 1.
 - ETSI TS 123 087 (2004): UUS Stage 2.
 - ETSI TS 124 087 (2004): UUS Stage 3.
- User to User Signalling (UUS) in ISDN:
 - ETSI ETS 300 284 (1996).
 - ETSI EN 300 286-1 (1998).
 - ETSI EN 300 356-8 (2001).
 - EN 301 102 (1998).



Existing standards / specifications (networks)

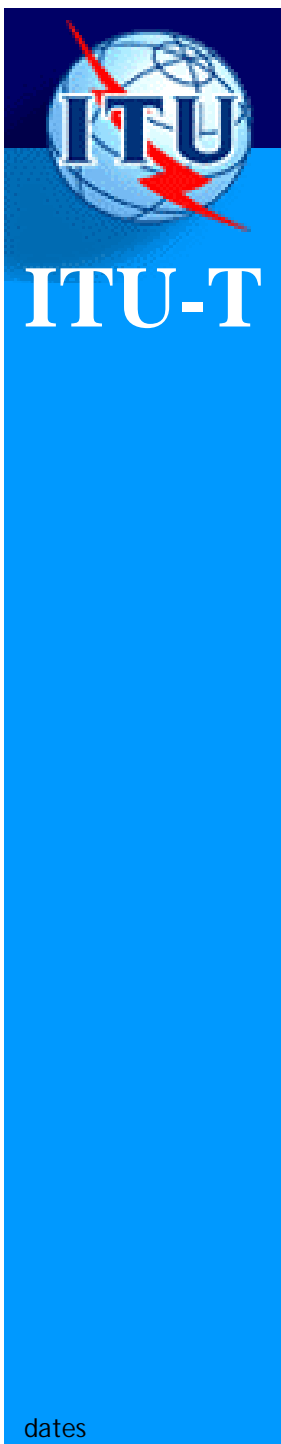
- Unstructured Supplementary Service Data (USSD) in GSM/UMTS:
 - TS 122 090 (2005): USSD stage 1
 - TS 123 090 (2005): USSD stage 2
 - TS 124 090 (2005): USSD stage 3

Standards (terminals)



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- EMC: EN 301 489 series (being modified for new Automotive EMC Directive 2004/104/EC)
- IMT-2000: EN 301 908 series
- Additional standard for access to emergency services?
 - Commission Decision to invoke RTTE art. 3.3e
 - Standardisation mandate



Work to do...

- o Gap analysis
 - Review ECDG requirements against existing requirements for access to emergency services
 - Review existing network standards/specifications to ensure they meet user requirements
 - Additional standards for terminal equipment?
 - Regulatory measures?

And don't forget...



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- Conformance test specifications....
- Plugtest....

- When it starts, it'll happen quickly...
 - eCall facilities will appear in Networks
 - Terminals will provide eCall features

- If you're interested, start to participate...
- QUICKLY!