eCall Implementation & Standards
Europe

The transfer and applicability of European published standards
Andy Rooke
Project coordinator HeERO
Agenda

» HeERO Project and Standards
» eCall Standards where do they come from?
» What are they for eCall?
» Legality
» Transference
HeERO Objective and Aims

» Extend HeERO to new Member States or associated countries to demonstrate the scalability of the HeERO solution and to widen the acceptance of eCall

Supporting aims:

• To prepare the necessary infrastructure to realise pan-European "eCall".
• To boost Member States investment in PSAP infrastructure & interoperability of the service by 2014 (Roadmap)
• A wider adoption across Member States to test the proposed solution
HeERO prospectus

» January 2011 to December 2014
» 15 Pilot Sites
» €8m EC funding available
» Total budget €16m
» 85 Partners
» 4 additional sites upgrading at their own expense
  › Cyprus, Hungary, Slovenia, - Russia
HeERO Timeline

Implementation

1st Operation phase

Evaluation planning

Evaluation

Project progress to date

HeERO Phase 2

2011

2012

2013

2014

Deployment Enablers

HeERO Phase 2

2nd operation phase

Evaluation

Implementation
HeERO Technical Areas

» eCall new type approved vehicles M1 & N1
» Large Goods Vehicle eCall
» Powered 2 Wheeled vehicles
» Location
» Certification for vehicle and service
» Aftermarket devices
  › Nomadic Devices
  › Insurance based devices (Could be examined)
Legislation and Standards

» eCall not new started in 2002 eMerge & GST
» Some OEM led the way Volvo, PSA & BMW
» eCall lacked mass market penetration
» European Commission Impact Assessment conclusions:
  › Regulated approach favoured
  › Mandated from 2015 for type M1 & N1 vehicles
  › eCall and TPS can co-exist
ITS Directive

» DIRECTIVE 2010/40/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
  › Article 3 Priority Action
  › the harmonised provision for an interoperable EU-wide eCall;

» Major driver across member States for ITS action in a Co-ordinated manner

» Priority action for road safety 20% reduction in Casualties

» Road Network Management 11% saving to GDP
Standards 1

» European Committee for Standardization (CEN) TC 278 Working Group 15
  › ECall minimum set of data
  › eCall- High Level Applications Protocols
  › Pan European eCall operating requirements
  › eCall end to end conformance testing
Standards 2

» European Telecommunications Standards Institute (ETSI)
  » Stage 1 - Service aspects; Service principles
  » Stage 1 - Service aspects; Service principles
  » Mobile radio interface Layer 3 specification; Core network protocols; Stage 3
  » Transferring of emergency call data
  » eCall Data Transfer; In-band modem solution; General description
  » eCall Data Transfer; In-band modem solution; ANSI-C reference code, version 10.0.0
  » eCall Data Transfer; In-band modem solution; Conformance testing
  » eCall Data Transfer; In-band modem solution; characterization report
eCall Harmonisation with ERA-GLONASS

» ERA-GLONASS comparable eCall system with Pan EU eCall in Russia

» Majority of standards between the two systems are now transferable

» Some minor difference but the two systems are now testing inter-operability in a number of Countries
ERA-GLONASS - eCall

- GLONASS GNSS support is the must (*)
  - Combined GNSS receivers (e.g. GLONASS/GPS) are OK
- MSD transmission
  - In-band (primary method – standardized by 3GPP)
  - SMS (back-up mechanism) (**)
- Echo cancellation and noise reduction requirements defined (***)
- Test requirements defined:
  - Test session can be initiated from vehicle, test results can be transmitted to back-end (*)
- Remote IVS configuration
- Remote IVS software upgrade
- Crash acceleration profile record and transmission, (***)
- IVS installation in OEM pre-installed and aftermarket / retrofit configurations (*)
- “Black box” function
- Standardized I/O port and standardized communication protocol to connect additional sensors
eCall regulatory measures

- Regulated under amendment to type approval 2007/46/EC adoption by 2014
- Recommendation to MS for MNO implementation C(2011)6269 Final 8th September 2011
- Part of the ITS Directive, common specification by end of 2012
Legality

» There is no bar to adopting European Published Standards on eCall
» BUT
» Be aware the agreement on the standards has a European perspective
» Requirement for your own legislation to adopt them
» Opportunity to look at the ITS Directive
HeERO Observers

- Open to any interested eCall stakeholders
- « log-in access » allowing:
  - Newsletter
  - Pilot site results
  - Contact details of participating partners
  - Helpdesk session to raise questions on pilot activities
  - Detailed description of pilots sites
  - Contact the pilot sites to use the infrastructure for...

www.HeERO-pilot.eu
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QUESTIONS?