



ACEA

European
Automobile
Manufacturers
Association

eCALL: AUTOMOTIVE STATUS & PERSPECTIVES

ETSI PLUGTEST WORKSHOP

Brussels

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AGENDA



1. eCall regulation

2. State of play

3. eCall and technology evolution

4. Legal certainty

5. Final considerations

1. WHAT IS ECALL – REGULATED SAFETY OF LIFE

- **Safety first -> eCall :**
 - Safety of life service, fully regulated in EU Type Approval Legislation
 - clear commitment from the automotive sector
- **Wide ecosystem: OEMs, suppliers, MNO, Member States, service providers**
- **Swift cooperation with all parties needed on structural basis**
- **European Commission as facilitator to guide the transition of the switch off 2G/3G**

2. REGULATORY STATE OF PLAY

- Regulation 2015/758 of 29 April 2015
 - Implementing Regulation (EU) 2017/78
 - Delegated Regulation (EU) 2017/79
 - The eCall Regulation refers to CEN technical requirements such as EN 16062:2015 (Intelligent transport systems - eSafety - eCall high level application requirements (HLAP) using GSM/UMTS circuit switched network
 - Hence, the eCall functionality must be provided over GSM/UMTS circuit switched networks (= 2G/3G networks)
- => Implemented in Europe since 2018 and compulsory

3. ECALL AND TECHNOLOGY EVOLUTION

- **European eCall regulations do not contain provisions on forward compatibility, nor on 4G and later**
- **There is a new TS available: CEN TS 17184:2018 about eCall over LTE: “Intelligent transport systems - eSafety - eCall High level application Protocols (HLAP) using IMS packet switched networks”**
- **However, this TS is not yet embedded in an updated regulation:**
 - Needs to be tested first by all partners in the eco-system
 - Depends on VoLTE roll-out across Europe and MNOs (not yet the case) and support for E112 and eCall is not insured yet
 - 5G support of E112 and eCall is not even yet specified and implies so far difficult technical mechanisms (double fall back)

3. ECALL, NG ECALL AND BEYOND

- Even if migration to 4G and higher, legacy equipment on the market still needs to work
- 4G requires new hardware and software in the cars for eCall:
 - Step 1: availability of HEN
 - Step 2: availability of equipment, testing, integration, etc.
 - Step 2: regulatory/legislative update
 - Step 3: integration in cars

Regulatory process => X years

R&D / integration process => 1-2 years

Type approval process => 36 months
- Vehicles with a 2G/3G IVS are on the market since April 2018 and will still be there for another 10 to 15 years
- Until steps above are completed, new cars will be sold every day
- PSAPs will need to manage two types of incoming eCalls
- Given lifetimes of cars, what will happen with 5G eCall? No such WI exists in either 3GPP nor ETSI, thus technology evolution is not granted; nor beyond 5G.

4. THE KEY: LEGAL CERTAINTY

- 2G/3G spectrum: VVA study for DG CNECT recognises need to preserve eCall (mandated function)
- Key for our industry is sufficient lead time (from research to production) -> legal certainty and predictability. Mobile industry working on NG eCall to take into account a reasonable migration path in dialogue with our sector & present plans for 5G
- Switch off 2G or 3G/2G and 3G : default MNO needed with national roaming (cfr Guidelines Dutch Competition authority ACM)

5. FINAL CONSIDERATIONS

- OEMs willing to invest in new technologies
- Investment cycle is not like a smartphone. You do not reboot a vehicle like you do with a smartphone
- Retrofit is not a solution
- Tech neutrality?
- Interoperability?
- Wait with extension to other vehicle categories: carefully assess the current market situation (study DG GROW announced, report to European Parliament before end March 2021)
- Availability of ubiquitous communication networks & services
- Future proof technology matching future proof legislation



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RECAP REGULATORY FRAMEWORK

- Commission Delegated Regulation (EU) No 305/2013 supplementing Directive 2010/40/EU with regard to the harmonised provision for an interoperable EU-wide eCall, setting the specifications for the emergency call centres (aka PSAPs – Public Safety Answering Points)
- Decision No 585/2014/EU on the deployment of the interoperable EU-wide eCall service providing for the deployment by October 2017 of the eCall infrastructure (PSAPs) required for the handling of all eCalls on the EU territory.
- Regulation (EU) 2015/758 concerning type-approval requirements for the deployment of the eCall in-vehicle system based on the 112 service and amending Directive 2007/46/EC provided for the mandatory fitting of 112-based eCall in-vehicle system on all new types of M1 and N1 vehicles from 31 March 2018 onward.
- Commission Delegated Regulation (EU) 2017/79 and Commission Implementing Regulation (EU) 2017/78 laying down detailed technical requirements and test procedures for vehicle approval and administrative provisions for the implementation of Regulation (EU) 2015/758.