

**eCall communications equipment;
Conformance to EU vehicle regulations, R&TTE, EMC & LV
Directives, and EU regulations for eCall implementation**



Reference

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Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Mobile Standards Group (MSG).

The present document provides information and guidance relevant to establishing conformance of eCall Network Access Devices (NADs) to the applicable technical standards and regulations, as identified in the present document.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under <http://webapp.etsi.org/key/queryform.asp>

Introduction

Following a decision of the European Parliament, and a request by the European Commission to ETSI, ETSI TC MSG was tasked with managing the technical specification and creation of open standards for the Pan-European eCall emergency service.

An eCall is an emergency voice call, initiated manually or automatically from a vehicle to a Public Safety Answering Point (PSAP), supplemented by up to 140 bytes of incident related data. The Minimum Set of Data (MSD) has been defined by CEN Technical Committee 278 and includes the GNSS derived location and direction of travel of the vehicle, the Vehicle Identification Number (VIN) and other information to enable the emergency response teams to quickly location and provide medical and other life saving assistance to the accident victims.

eCall has been designed to operate over any PLMN that supports emergency voice calls, specifically TeleService 12. Should the MSD not be transmitted or received for any reason, or if the PSAP is not equipped with the necessary eCall equipment (eCall modem / server), the accident victims and PSAP operator may still converse using the In-Vehicle System (IVS) audio equipment.

The 3rd Generation Partnership Project (3GPP) has specified the eCall service telecommunications requirements, data transmission protocols and network signalling aspects for Release 8. The in-band modem used to transfer the MSD from the vehicle to the PSAP, following the establishment of a 112 or other emergency voice call, has been specified by 3GPP TSG SA4.

Once an eCall is invoked - initiated manually by the vehicle occupants or automatically as the result of an accident, -the eCall call set-up and clear-down procedures (RR, CC, and MM) are automatically controlled by the eCall in-vehicle system (IVS) and network access device (NAD). Once initiated the system requires no MMI intervention and does not permit the user to intervene at any stage during call management. It is important, therefore, that the eCall system works autonomously and reliable when faced with a wide range of probable network access events.

An eCall NAD may be used to access other non-emergency subscription services or for the purpose of making emergency calls only. In the latter case the eCall NAD is referred to as an 'eCall only' device and there are specific network access restrictions placed on these devices in order to avoid the generation of large volumes of unnecessary MM signalling, when not engaged in an eCall, test or reconfiguration call TS 122 101 [i.23]. The eCall NAD is permitted to make calls to a non-emergency number for the purpose of testing, or requesting the reconfiguration of the NAD to lift the network access restriction so as to allow the NAD to register on power-up and to access subscribed to commercial services.

Documents TS 102 936-1 [i.1] and TS 102 936-2 [i.25] specify the eCall applicable tests required to ensure eCall NAD conformance when accessing a digital cellular telecommunications system using Phase 2+ and 3G networks. These specifications includes references to existing ETSI technical specifications including TS 151 010 [i.20] and TS 134 123 [i.21] that contain the necessary detailed eCall and generic UE/MS conformance tests.

The eCall in-band modem conformance test protocols are as specified in TS 126 269 [i.24].

The present document, which is produced as an advisory ETSI Technical Report, provides guidance in respect of ensuring compliance to the R&TTE Directive [i.7]; the ETSI series of TS 102 936 [i.1] in respect of conformance tests for the operation of the NAD; the regulatory framework for the implementation of eCall, and the EU framework of regulations for motor vehicles.

The informative annexes of the present document include text from publicly and freely available documents, together with website references of their source which grant or permit that the contents of these documents may be freely used and in some cases provide any conditions or limitations to further reproduction. The texts of these documents, or extracts from these texts, are therefore reproduced verbatim and conform to the editorial policy of the issuer and not the editorial policy of ETSI.

1 Scope

The present document provides information and guidance to establishing conformance of eCall Network Access Devices (NADs) to the relevant technical and regulatory requirements, including:

- eCall network access conformance testing
- EU/ UNECE regulation framework for motor vehicles
- R&TTE Directive
- EMC & LV Directives
- EU regulation framework for eCall implementation

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication ETSI cannot guarantee their long term validity.

2.1 Normative references

The following referenced documents are necessary for the application of the present document.

Not applicable.

2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ETSI TS 102 936: "eCall Network Access Device (NAD) conformance specification".
- [i.2] European Commission ITS Action Plan 2009.
- [i.3] European Commission ITS Implementation Directive 2010.
- [i.4] European Commission Communication on eCall Communication 2009.
- [i.5] European Commission Communication on the implementation of Article 290 the Functioning of the European Union (TFEU) (COM(2009) 673).
- [i.6] Directive 2007/46/EC of the European Parliament And of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles.
- [i.7] Directive 1999/5/EC of the European Parliament And of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity (R&TTE Directive).

- [i.8] Directive 2004/108/EC of the European Parliament and of the Council of 15 December 2004, on the approximation of the Laws of Member States relating to electromagnetic compatibility (EMC Directive).
- [i.9] Council Directive 93/68/EEC of 22 July 1993 amending Directives (...) and 73/23/EEC, electrical equipment designed for use within certain voltage limits (Low Voltage Directive).
- [i.10] UNECE Committee Agreement Economic Commission For Europe Inland Transport: Committee Agreement Concerning The Adoption Of Uniform Technical Prescriptions For Wheeled Vehicles, Equipment And Parts Which Can Be Fitted and/or be used in Wheeled Vehicles and the Conditions for reciprocal recognition of Approvals granted on the basis of these prescriptions. (UTPWV).
- [i.11] UNECE UTPWV Regulation No 10: "Vehicles with regard to electromagnetic compatibility".
- [i.12] UNECE UTPWV Regulation No 21: "Vehicles with regard to their interior fittings".
- [i.13] UNECE UTPWV Regulation No 26: "Vehicles with regard to their external projections".
- [i.14] UNECE UTPWV Regulation No 28: "Audible warning devices and of motor vehicles with regard to their audible signals".
- [i.15] UNECE UTPWV Regulation No 29: "Vehicles with regard to the protection of the occupants of the cab of a commercial vehicle".
- [i.16] UNECE UTPWV Regulation No 34: "Vehicles with regard to the prevention of fire risks".
- [i.17] UNECE Regulations website.

NOTE: Available at <http://www.unece.org/trans/conventn/legalinst.html>

- [i.18] ETSI EN 301 489 (all parts): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services".
- [i.19] ETSI TS 151 010: "Digital cellular telecommunications system (Phase 2+); Mobile Station (MS) conformance specification (3GPP TS 51.010)".
- [i.20] ETSI TS 134 123: "Universal Mobile Telecommunications System (UMTS); User Equipment (UE) conformance specification (3GPP TS 34.123)".
- [i.21] ETSI EN 301 908: "Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third-Generation cellular networks".
- [i.22] ETSI EN 301 511: "Global System for Mobile communications (GSM); Harmonized EN for mobile stations in the GSM 900 and GSM 1800 bands covering essential requirements under article 3.2 of the R&TTE directive (1999/5/EC)".
- [i.23] ETSI TS 122 101: "Universal Mobile Telecommunications System (UMTS); LTE; Service aspects; Service principles (3GPP TS 22.101)".
- [i.24] ETSI TS 126 269: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); eCall data transfer; In-band modem solution; Conformance testing (3GPP TS 26.269)".
- [i.25] ETSI TS 102 936-2: "eCall Network Access Device (NAD) conformance specification; Part 2: Test suites".
- [i.26] Directive 2006/95/EC of the European Parliament and of the Council of 12 December 2006 on the harmonisation of the laws of Member States relating to Electrical Equipment designed for use within certain voltage limits.
- [i.27] Directive EMC 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

- [i.28] Council Directive 73/23/EEC of 19 February 1973 on the harmonisation of the laws of Member States relating to Electrical Equipment designed for use within certain voltage limits - OJ L 77/29 of 1973-03-26.
- [i.29] Decision No 768/2008/EC of the European Parliament and of the Council of 9 July 2008 on a common framework for the marketing of products, and repealing Council Decision 93/465/EEC.
- [i.30] Directive 2002/24/EC of the European Parliament and of the Council of 18 March 2002 relating to the type-approval of two or three-wheel motor vehicles and repealing Council Directive 92/61/EEC.
- [i.31] Directive 2003/37/EC of the European Parliament and of the Council of 26 May 2003 on type-approval of agricultural or forestry tractors, their trailers and interchangeable towed machinery, together with their systems, components and separate technical units and repealing Directive 74/150/EEC.
- [i.32] Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations.
- [i.33] Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers.
- [i.34] Council Directive No 92/53/EEC of 18 June 1992 amending Directive 70/156/EEC on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers.
- [i.35] Council Decision 97/836/EC of 27 November 1997 with a view to accession by the European Community to the Agreement of the United Nations Economic Commission for Europe concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted to and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions ('Revised 1958 Agreement').
- [i.36] Council Decision of 17 July 2006 amending Decision 1999/468/EC laying down the procedures for the exercise of implementing powers conferred on the Commission (2006/512/EC).
- [i.37] COUNCIL DECISION of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission (1999/468/EC).
- [i.38] Directive 2001/95/EC of the European Parliament and of the Council of 3 December 2001 on general product safety.
- [i.39] Council Directive 2006/96/EC of 20 November 2006 adapting certain Directives in the field of free movement of goods, by reason of the accession of Bulgaria and Romania.
- [i.40] Directive 98/13/EC of the European Parliament and of the Council of 12 February 1998 relating to telecommunications terminal equipment and satellite earth station equipment, including the mutual recognition of their conformity.
- [i.41] Directive 98/10/EC of the European Parliament and of the Council of 26 February 1998 on the application of open network provision (ONP) to voice telephony and on universal service for telecommunications in a competitive environment.
- [i.42] Commission Directive 88/301/EEC of 16 May 1988 on competition in the markets in telecommunications terminal equipment.
- [i.43] Council Directive 85/374/EEC of 25 July 1985 on the approximation of the laws, regulations and administrative provisions of the Member States concerning liability for defective products.
- [i.44] Commission Directive 94/46/EC of 13 October 1994 amending Directive 88/301/EEC and Directive 90/388/EEC in particular with regard to satellite communications.
- [i.45] Directive 98/48/EC of the European Parliament and of the Council of 20 July 1998 amending Directive 98/34/EC laying down a procedure for the provision of information in the field of technical standards and regulations.
- [i.46] Council Directive 93/42/EEC of 14 June 1993 concerning medical devices.

- [i.47] Council Directive 90/385/EEC of 20 June 1990 on the approximation of the laws of the Member States relating to active implantable medical devices.
- [i.48] Council Directive 72/245/EEC of 20 June 1972 on the approximation of the laws of the Member States relating to the suppression of radio interference produced by spark-ignition engines fitted to motor vehicles.
- [i.49] Council Directive 92/61/EEC of 30 June 1992 relating to the type-approval of two or three-wheel motor vehicles.
- [i.50] Commission Directive 95/54/EC of 31 October 1995 adapting to technical progress Council Directive 72/245/EEC on the approximation of the laws of the Member States relating to the suppression of radio interference produced by spark-ignition engines fitted to motor vehicles and amending Directive 70/156/EEC on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers.
- [i.51] Council Directive 96/98/EC of 20 December 1996 on marine equipment.
- [i.52] Council Directive 93/65/EEC of 19 July 1993 on the definition and use of compatible technical specifications for the procurement of air-traffic- management equipment and systems.
- [i.53] Council Directive 87/404/EEC of 25 June 1987 on the harmonization of the laws of the Member States relating to simple pressure vessels.
- [i.54] Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data.
- [i.55] Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications).
- [i.56] Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information.
- [i.57] Directive 2004/52/EC of the European Parliament and of the Council of 29 April 2004 on the interoperability of electronic road toll systems in the Community (Text with EEA relevance).
- [i.58] Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE).
- [i.59] Council Decision of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission (1999/468/EC).
- [i.60] Council Decision 93/465/EEC of 22 July 1993 concerning the modules for the various phases of the conformity assessment procedures and the rules for the affixing and use of the CE conformity marking, which are intended to be used in the technical harmonization directives.
- [i.61] CEN 16072: "Intelligent transport systems - ESafety - Pan European eCall- Operating requirements, identifies two requirements in respect of SIM/USIM maintenance and end of life provisions".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

comitology: in the European Union refers to the committee system which oversees the delegated acts implemented by the European Commission

eCall: emergency call generated either automatically via activation of in-vehicle sensors or manually by the vehicle occupants; when activated it provides notification and relevant location information to the most appropriate 'Public Safety Answering Point', by means of mobile wireless communications networks, carries a defined standardised Minimum Set of Data notifying that there has been an incident that requires response from the emergency services, and establishes an audio channel between the occupants of the vehicle and the most appropriate 'Public Safety Answering Point'

MSD: forming the data component of an eCall sent from a vehicle to a Public Safety Answering Point or other designated emergency call centre

NOTE: The MSD has a maximum size of 140 bytes and includes, for example, vehicle identity, location information and time-stamp.

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

AGC	Automatic Gain Control
AGN	Accord Européen sur les Grandes Lignes Internationales de Chemin de Fer
AGR	Accord européen sur les Grandes Routes de trafic international
AGTC	Accord Européen sur les Grandes lignes de Transport international combiné et les installations connexes
CC	Call Control
D of C	Declaration of Conformity
EEC	European Economic Community
EeIP	European eCall Implementation Platform
EMC	ElectroMagnetic Compatibility
GNSS	Global Navigation Satellite System
GSM	Global System for Mobile communications
GTR	Global Technical Regulations
HMI	Human Machine Interface
IVS	In-Vehicle System
LV	Low Voltage
MM	Mobility Management
MMI	Man Machine Interface
MNO	Mobile Network Operators
MoU	Memorandum of Understanding
MS	Mobile Station
MSD	Minimum Set of Data
NAD	Network Access Device
OEM	Original Equipment Manufacturer
OJ	Official Journal of the European Union
PLMN	Public Land Mobile Network
R&TTE	Radio and Telecommunications Terminal Equipment
RR	Radio Resource
SIM	Subscriber Identity Module
TFEU	The Functioning of the European Union
UMTS	Universal Mobile Telecommunications System
UN	United Nations
UNECE	United Nations Economic Commission for Europe
USIM	Universal Subscriber Identity Module

UTPVW	Uniform Technical Prescriptions for Wheeled Vehicles
VAC	Volts Alternating Current
VDC	Volts Direct Current
VIN	Vehicle Identification Number

4 Executive summary and elucidation of arrangement of document

The present document provides information and advice about the regulatory framework within which the eCall Network Access Device (NAD) is installed and operates.

CAVEAT: *While this document provides guidance and references to the European regulatory framework which exists at the time of developing this report in respect of the eCall NAD, and it is designed to provide guidance and assistance to those designing, installing and operating eCall NADs, the onus of responsibility remains with the designer/installer/operator of their devices to ensure that they comply with regulations in force in their country at the time of installation/service provision. Compliance to the aspects described in this Technical Report does not by itself guarantee compliance to all regulatory requirements in all European Countries. This document provides helpful guidance to the general direction and source of regulations and the framework in which they control, and helps give guidance as to which direction to ensure compliance, but it should not be interpreted as covering every aspect of regulation in every country, and of course, over time regulations may change.*

Throughout the present document (but not the annexes) direct quotations from regulations are shown in italics. All text in 'normal' font should therefore be considered as the interpretation and/or opinion of the authors and is offered as hopefully useful interpretation/opinion but is offered without any liability. In making any decisions of consequence, the reader should consult the primary regulation documentation before making any such decision. As a result of using italics for direct quotations, **bold** is used to highlight text that seems particularly relevant. The reproduction of bold in italics should not be taken to imply that bold is used in the original document.

The regulatory environment in which the eCall NAD operates is complex. It is, on the one hand, a device fitted into a vehicle, and must comply with relevant vehicle construction regulations; it is also an electronic device, an emitter of radio signals, and operates within the framework of global telecommunications networks. Each have their own regulations.

One of the complications of identifying regulations that affect the eCall NAD is that the shape, form and properties of the eCall NAD (or any eCall in-vehicle equipment) are not specified, this being left as a commercial market decision – only the service and its communication is specified. The control mechanisms, positioning, and physical operation of the system are not defined. Therefore, for example there is no requirement regarding the voltage/amperage used to power the device, and there are different regulations applicable at different power levels. The guidance given in the present document is therefore generalised, and because of specific design features, other or additional regulation may apply where the specific design features bring the equipment into a different regulatory regime. Designers will therefore need to be able to identify such features and make sure that they are conformant and be aware that they carry the responsibility to ensure that they are conformant.

In order to be an interoperable device, the eCall NAD will need to conform to several standards, and many of these are referenced and/or described in the present document. However, Standards are not the same as regulations, although regulations are often referenced to/ and compliance assessed by conformance to, one or more Standards. The present document is focussed towards the regulatory aspects that will need to be complied with by a designer/installer/operator of an eCall NAD, and provides reference to specific conformance tests for the NAD. As the eCall NAD is a transmitting device, particular emphasis is given to the R&TTE Directive.

The prime regulations that matter to fit an eCall NAD into a vehicle are the European Directives. Some 40 of these have been brought into effect over the half century of the EC, and were enshrined in a single framework directive in 1997. Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 [i.6] establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles.

Relevant extracts from that Directive are provided in Annex A, and assessment provided in clause 6, of the present document.

This Directive provides the requirements of how to go through the type approval procedures for vehicles and equipment in vehicles. It also provides that "*Where the Commission finds that there are sound grounds for granting an exemption pursuant to Article 20, it shall immediately take the necessary steps to adapt the separate directives or regulations concerned to technological development*", and may provide exemptions in the interim. However, at this stage the EC sees no opportunity to use this option.

In this Directive there are no specific requirements directly related to eCall. The eCall NAD and any other eCall equipment in-car will simply have to go through the process exactly the same as for any other component in the vehicle.

However, the Framework Directive does regulate that the UNECE provisions for vehicle are mandatory and given equivalence to EU regulation as part of that regulation.

The UNECE "*Economic Commission For Europe Inland Transport Committee Agreement Concerning The Adoption Of Uniform Technical Prescriptions For Wheeled Vehicles, Equipment And Parts Which Can Be Fitted and/or be used in Wheeled Vehicles and the Conditions for reciprocal recognition of Approvals granted on the basis of these prescriptions*" [i.10] is also a framework agreement, to which some 128 specific regulations have subsequently been issued (see Annex H). Most of these regulations have no relevance to the eCall NAD, but in clause 6 of the present document we identify that two potentially affect the eCall NAD:

- Regulation No 10: "Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility" [i.11];
- Regulation No 21: "Uniform provisions concerning the approval of vehicles with regard to their interior fittings" [i.12]; and
- how they might affect the eCall NAD is discussed in clause 6 of the present document.

In addition to UNECE Regulation No 10 [i.11], the eCall NAD is subject to the R&TTE Directive. – "*Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity*" [i.7]. The eCall NAD is a transmitting device and in order to claim conformance, this Directive is particularly relevant and considerable attention is given to it in the present document. Clause 7 of the present document describes the R&TTE Directive [i.7], and the relevant clauses that impact the eCall NAD.

The eCall NAD is also an emitting device and is therefore also covered by the EMC Directive, "*Council Directive 2004/108/EC of 15 December 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility*" [i.8].

These Directives are designed to ensure that any electric or electronic device will create no more than a limited amount of RF interference so that other apparatus are not affected in their correct functioning (with an emphasis on radio communication (spectrum protection) and to ensure that an electric or electronic device will withstand a certain amount of electromagnetic fields while operating as intended within specifications. Clause 8.1 of the present document describes the EMC Directive [i.8] and the relevant clauses that impact the eCall NAD.

Finally, in terms of general regulatory provisions, where the eCall NAD is a powered device it will most probably also come under the jurisdiction of the LV Directive, "*COUNCIL DIRECTIVE 93/68/EEC [i.9] of 22 July 1993 amending Directives (...) and 73/23/EEC (electrical equipment designed for use within certain voltage limits)*" [i.26]. This LV applies to products with 50 to 1 000 VAC or 75 to 1 500 VDC Input. Its impact on the eCall NAD is described in clause 8.2 of the present document.

So far these regulations are generic (apply to everything in that category), or semi-generic, in that they apply to all vehicles, but are not specific to eCall. The introduction and operation of eCall will require a regulatory regime, whether or not it is implemented in all countries (which is the intention of the EC). The intention to so do is enshrined in the 2009 ITS Action Plan [i.2] and this is described in clause 9.2 of the present document (also see annex I).

But an Action Plan by itself does not provide a Regulatory Regime, and this regime is determined in the ITS Implementation Directive, "*DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport*" [i.3]. The relevant clauses and their impact are discussed in clause 9.3 of the present document.

The regulatory encompassment of eCall, and the eCall NAD does not end here however, because the ITS Implementation Directive will be implemented using so called "*Delegated Powers*" (a Lisbon Treaty provision that replaced and enhanced "Comitology"). The operation of these powers is discussed in clause 9.4 of the present document and the Commission interpretation of its Delegated powers is provided in Annex J. Clause 9.4 of the present document also discusses the way that the EC intends to proceed and regulate eCall, and therefore the eCall NAD.

The present document identifies that the issue of maintenance and end of life provisions for SIM/USIMs used in eCall requires further attention in respect of eCall implementation where the situation of the SIM/USIM is very different than that of a normal mobile phone. The present document draws the attention of EeIP Task Force MNO-Auto to consider if regulation is required.

Finally, as a result of the research into the present document and the associated Technical Specifications defined by ETSI STF399, a number of recommendations for revisions are identified and proposed for updates of ETSI/3GPP deliverables. These are discussed in clause 11 of the present document.

5 Conformance testing

5.1 General Aspects

The eCall service is based on the pan-European harmonised 112 emergency service supplemented by accident related data. An eCall is initiated automatically when a collision of sufficient severity occurs, or is manually initiated by the vehicle occupants. Once initiated the eCall proceeds automatically without the need for any user intervention. As a life saving emergency service the correct operation and reliability of the autonomous eCall system is to be ensured through conformance testing.

The present document provides information and guidance relating to ensuring conformance of the NAD in respect of the communications network, and the communications equipment with respect to the regulatory frameworks and directives within the European Union.

5.2 eCall network access conformance testing

The eCall applicable tests required to ensure eCall NAD conformance when accessing a digital cellular telecommunications system (Phase 2+ or UMTS) mobile network are defined in a series of ETSI Technical Specifications.

The terminal type and eCall applicable tests required to ensure eCall NAD conformance when accessing a digital cellular telecommunications system (Phase 2+) mobile network or a Universal Telecommunication System (UMTS) mobile network are specified in TS 102 936-1 [i.1].

These specifications include references to existing ETSI technical specifications including TS 151 010 [i.19] and TS 134 123 [i.20] that contain the necessary detailed eCall and generic UE/MS conformance tests.

In addition to the eCall network access conformance testing (as specified above), conformance to the R&TTE Directive is required. These requirements are specified in EN 301 511 [i.22] and EN 301 908 [i.21]. These standards refer to TS 151 010 [i.19] (see clause 7).

6 EC/UNECE regulation framework for motor vehicles

6.1 EU regulation for motor vehicles

There are more than 40 EU directives in respect of EU regulation for motor vehicles. EU also complies to UNECE regulations, of which there are some 140. The EU directives are now summarised in "*DIRECTIVE 2007/46/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles*" (Framework Directive) [i.6]. The relevant extracts of that Directive are reproduced in Annex G.

The Directive includes a generic reference to the UNECE Regulations. Most of the UNECE regulations have no relevance to eCall, however, directly or indirectly, some do and so are summarised in Annex H. Clause 6.2 provides a summary of the regulation framework and potentially relevant regulations.

6.1.1 New EU Motor vehicle legislation

No new motor vehicle legislation, specifically for eCall, is planned and it is intended that eCall will be implemented as described in clause 9 of the present document.

6.2 UNECE

The UNECE has established 56 transport agreements and conventions which are negotiated by government representatives and become legally binding for countries which ratify or accede to them. (As stated in previous clauses of the present document, the EU has acceded to these regulations). These agreements and conventions create international safety and environmental standards for transport, harmonize national regulations, make border crossings less complicated, and provide for the development of coherent infrastructure networks for road, rail and inland waterway transport.

In respect of eCall, two categories potentially affect eCall, these are:

- Road Vehicles
- Transport Infrastructures

For those interested, the complete set of regulations, both for vehicles and infrastructure can be directly accessed via the UNECE website: <http://www.unece.org/trans/conventn/legalinst.html> [i.18].

The remainder of this clause provides details of those UNECE regulations that are, or may seem to be at first sight, relevant to eCall.

6.2.1 UNECE Road Vehicles

6.2.1.1 Context

The Agreement Concerning the Adoption of "*Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be fitted and/or be used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions*" [i.10], concluded and was granted on 20 March 1958. In summary, the 1958 Agreement, establishes the uniform requirements to which nearly every component of road-using vehicles should conform. 126 Regulations have been annexed to the Agreement since its entry into force in 1959 (see list of UNECE Vehicle Regulations in Annex B). These Regulations provide for equal safety requirements and set environmental protection and energy saving criteria for Governments and vehicle manufactures in the territories of 46 Contracting Parties to the 1958 Agreement, including also the European Community, Japan, Australia, South Africa, New Zealand, Republic of Korea, Malaysia and Thailand.

The Agreement "*Concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can be fitted and/or be used on Wheeled Vehicles*" [i.10], concluded on 13 November 1998. In summary, the 1998 Agreement, provides Governments with a legal framework and procedures for the adoption of global technical regulations (GTRs) applicable to road vehicles, their equipments and parts, with a view to the improvement of their safety, environmental protection, energy efficiency and anti-theft performance. The Agreement is intended to function in parallel to the 1958 Agreement. To date, Azerbaijan, Canada, China, Cyprus, Finland, France, Germany, Hungary, India, Italy, Japan, Lithuania, Luxembourg, Malaysia, Moldova, Netherlands, Norway, New Zealand, Republic of Korea, Romania, Russian Federation, Slovakia, South Africa, Spain, Sweden, Turkey, United Kingdom, United States, European Community are Contracting Parties to the 1998 Agreement, which entered into force on 25 August 2000. This framework agreement, and list of regulations is reproduced in Annex H.

The Agreement "*Concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles and the Reciprocal Recognition of such Inspections*" [i.10], was first passed in 1958, and concluded on 13 November 1997. In summary the 1997 Agreement, provides the legal framework and procedures for the adoption of uniform rules for carrying out technical inspections of vehicles in use and for the reciprocal recognition of the certificates of such inspections.

At the time of developing the present document there are 126 published regulations. Most of these have no relevance to eCall, and particularly, no relevance to the conformance of the eCall NAD; for example, regulation No 1 is *"Uniform provisions concerning the approval of motor vehicle headlamps emitting an asymmetrical passing beam and/or a driving beam and equipped with filament lamps of category R2"*. Some appear to be relevant, but on inspection turn out not to be, for example: Regulation No 102: *"Uniform provisions concerning the approval of a close-coupling device (ccd) (...)"* would appear to be relevant as the NAD SIM may use a CCD near field connection. However, it turns out on inspection that the regulations definition of a CCD is *"a device which automatically provides sufficient space between the bodies of towing vehicles and trailers (...)"*.

However, it is difficult to see any strategy or consistency in the regulations, which (a) appear to be "scattergun" in their approach and (b) are riddled with typographical errors, some of which are significant. For example, Regulation No 29 is *"Uniform provisions concerning the approval of vehicles with regard to the protection of the occupants of the cab of a commercial vehicle"* [i.15] but there is no equivalent regulation for cars or light goods vehicles, either directly or indirectly in other regulations. And, Regulation 88 which is formally entitled *"Uniform provisions concerning the approval of retroreflective types for two-wheeled vehicles"* is actually about retroreflective **tyres** for two-wheeled vehicles.

It can only be assumed that a regulation is progressed when a UNECE Committee member, or pressure group initiates and progresses the work. Hence while some of the regulations are of obvious international need, others are of limited application, for example regulation 88 cited above.

Of the 126 regulations, 6 appear to affect eCall and the eCall NAD:

- 1) Regulation No 10: "Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility" [i.11].
- 2) Regulation No 21: "Uniform provisions concerning the approval of vehicles with regard to their interior fittings" [i.12].
- 3) Regulation No 26: "Uniform provisions concerning the approval of vehicles with regard to their external projections" [i.13].
- 4) Regulation No 28: "Uniform provisions concerning the approval of audible warning devices and of motor vehicles with regard to their audible signals" [i.14].
- 5) Regulation No 29: "Uniform provisions concerning the approval of vehicles with regard to the protection of the occupants of the cab of a commercial vehicle" [i.15].
- 6) Regulation No 34: "Uniform provisions concerning the approval of vehicles with regard to the prevention of fire risks" [i.16].

6.2.1.2 Regulation No 10 - vehicles with regard to electromagnetic compatibility

The latest revision (Rev.3) is recent (2008), and covers:

- a) "requirements regarding the immunity to radiated and conducted disturbances for functions related to direct control of the vehicle, related to driver, passenger and other road users' protection and related to disturbances, which would cause confusion to the driver or other road users";
- b) "requirements regarding the control of unwanted radiated and conducted emissions to protect the intended use of electrical or electronic equipment at own or adjacent vehicles or nearby, and the control of disturbances from accessories that may be retrofitted to the vehicle".

This regulation is clearly relevant, but needs to be considered together with the EMC Directive [i.8] (see clause 7).

6.2.1.3 Regulation No 21 - vehicles with regard to their interior fittings

Relevant extracts are provided in Annex A.

Despite the all embracing wording of the title, this regulations deals solely with safety provisions in respect of impact between occupants of the vehicle and interior fittings within the vehicle.

The spirit of the whole regulation can be summed up by text in clause 5.1.1 (requirements) "... shall not contain any roughness or sharp edges likely to increase the risk of serious injury to the occupants...", and the 25 pages of the document spell out how this is to be achieved.

As the form of eCall equipment is not determined, nor its location, it is not possible to say whether or not this Regulation will apply, we therefore assess it in the cases that it might apply, and reproduce the possibly relevant extracts in Annex I.

There is particular emphasis on head impacts *"The head-impact zone comprises all the non-glazed surfaces of the interior of a vehicle which are capable of entering into static contact with a spherical head 165 mm in diameter that is an integral part of a measuring apparatus whose dimension from the pivotal point of the hip to the top of the head is continuously adjustable between 736 mm and 840 mm"*.

Our interpretation is that this regulation will apply where the eCall equipment is located within the passenger compartment external to the instrument panel (for example any manual call button etc.). Where the eCall equipment is part of the instrument panel it may apply in certain areas if it is accessible to occupants of the vehicle.

Assuming that the in-vehicle eCall equipment is housed behind the instrument panel or another location not normally accessible to the occupants of the vehicle, the regulation affects eCall only to the extent of such equipment that may be used to alert the occupants that an eCall is in progress, any external microphone/speakers, and in respect of the equipment to trigger a manual eCall, which is by definition accessible to the occupants of the vehicle.

For such equipment clauses 5.1.4 to 5.1.6 may be appropriate *"5.1.4 Switches, pull-knobs and the like, made of rigid material which, measured in accordance with the method prescribed in Annex 6 project from 3.2 mm to 9.5 mm from the panel shall have a cross sectional area of not less than 2 cm² point projecting furthest and shall have rounded edges with a radius of curvature of not less than 2.5 mm"*.

Clause *"5.1.5 If these components project more than 9.5 mm from the surface of the instrument panel, they shall be so designed and constructed as to be able, under the effect of a longitudinal horizontal force of 37.8 daN delivered by a flat-ended ram of not more than 50 mm diameter, either to retract into the surface of the panel until they do not project by more than 9.5 mm or to become detached; in the latter case, no dangerous projections of more than 9.5 mm shall remain; a cross-section of not more than 6.5 mm from the point of maximum projection shall be not less than 6.5 cm² in area"*.

Clause *"5.1.6 In the case of a projection comprising a component made of non-rigid material of less than 50 shore A hardness mounted on a rigid support, the requirements of paragraphs 5.1.4. and 5.1.5. shall apply only to the rigid support"*.

(...)

"If the items referred to in paragraph 5.3.1. above are so placed that occupants of the vehicle can contact them, they shall meet the requirements of paragraphs 5.3.2.1. to 5.3.4. If they can be contacted by a 165 mm diameter sphere and are above the lowest "H" point (see annex 5 of this Regulation) of the front seats and forward of the transverse plane of the torso reference line of the manikin on the rearmost seat, and outside the zones defined in paragraphs 2.3.1. and 2.3.2., these requirements shall be considered to have been fulfilled if:

5.3.2.1 their surface terminates in rounded edges, the radii of curvature being not less than 3.2 mm".

6.2.1.4 Regulation No 26 - vehicles with regard to their external projections

This regulation may appear to be relevant where the eCall NAD is connected to an external antenna. However, the scope states:

"1. SCOPE AND PURPOSE

1.1. This Regulation applies to external projections of passenger cars. It does not apply to exterior rear view mirrors or to accessories such as radio aerials and luggage racks (...)".

On examination, therefore, it is not considered to be relevant in respect of eCall NAD conformance.

6.2.1.5 Regulation No 28 - audible warning devices and of motor vehicles with regard to their audible signals

This Scope of this regulation would appear to imply that it is relevant to any audible warnings issued by the NAD, to the vehicle occupants advising them that an eCall is in progress for example, or that the manual activation of eCall had been activated:

"1. SCOPE

This Regulation applies to:

- I. audible warning devices, operated by direct current or compressed air, which are intended for fitting to motor vehicles with the exception of motor cycles;*
- II. the audible signals of motor vehicles, with the exception of motor cycles".*

The definition of an audible warning signal is provided as:

"1. AUDIBLE WARNING DEVICES

DEFINITIONS

For the purposes of this Regulation, audible warning devices of different "types" shall be understood to mean devices essentially different from one another with respect to such matters as:

- 2.1. trade name or mark;*
- 2.2. principles of operation;*
- 2.3. outer shape of case;*
- 2.4. shape and dimensions of diaphragm;*
- 2.5. shape or kind of sound outlet;*
- 2.6. rated sound frequency;*
- 2.7. rated supply voltage;*
- 2.8. for devices supplied directly from an external compressed air source, rated operating pressure (...)".*

However, when the regulation is studied in detail it is clear that it relates only to audible warnings to those outside of the vehicle to the presence of the vehicles, for example, as provided to an otherwise " silent" electrically powered vehicle.

Confirmation of this can be obtained by studying the test methods in detail:

"6.1.1. The audible warning device shall emit a continuous and uniform sound; its acoustic spectrum shall not vary substantially during its operation".

"6.2.1. The warning device shall be tested in an anechoic chamber or at an open site. 2/ Background noise and wind noise must be at least 10 dB (A) below the sound to be measured. The microphone of the measuring instrument shall be placed in the direction where the subjective sound level is greatest; the distance between the diaphragm of the microphone and the sound outlet of the device shall be 2 metres, the microphone and the warning device being placed at a height of 1. 20 m from the ground.

Note 2: 2/ The site may take the form, for instance, of an open space of 50 metres radius, the central part of which must be practically horizontal over a radius of at least 20 metres, the surface being of concrete, asphalt or a similar material, which must not be covered with powdery snow, tall weeds, or loose soil or cinders. The measurements shall be made on a clear day. No-one other than the observer reading the instrument shall remain near the audible warning device or the microphone, since the presence of spectators may affect the readings of the instrument to a considerable extent, if they are near the audible warning device or the microphone. Any peak which appears to be unrelated to the general sound level shall be disregarded in the reading".

Notwithstanding the case that some cars are in serious need of some housekeeping and cleaning, it is unlikely that "tall weeds" or any quantity of "cinders", or "surface being of concrete, asphalt or a similar material" is likely to pertain in the space between the eCall NAD and the vehicle occupants, given that they remain in the vehicle.

It is therefore becomes obvious that this is simply a matter of poor and imprecise drafting and scoping, and that this regulation does not relate to audible signals generated within the vehicle to alert the occupants of some state or event. It is therefore not relevant to eCall NAD conformance.

6.2.1.6 Regulation No 29 - vehicles with regard to the protection of the occupants of the cab of a commercial vehicle

Although eCall is initially targeted at cars, we cannot exclude the use of eCall in commercial vehicles. Therefore, in such circumstances, the regulation may be at first sight considered to be relevant. The scope statement, however, is unhelpful:

"Scope

This regulation applies to commercial vehicles which are intended for the carriage of goods. It does not apply to agricultural tractors and machinery".

Examination of the text especially related to tests reveal that the regulation is entirely focussed to the structure of the cab, its mounting, and the seats and their mounting. There are no requirements in respect of any in-vehicle equipment. It is therefore considered not to be relevant to eCall NAD conformance.

6.2.1.7 Regulation No 34 - vehicles with regard to the prevention of fire risks

Clearly, as eCall is communicated by electrical and radio equipment which operate within the vehicle, it could be considered that, particularly post accident, with the possibility of ruptured fuel tanks and electrical short circuits, that this regulation may include requirements that relate to the eCall NAD. However, the scope statement makes it clear that this regulation is limited to requirements concerning the fuel tank.

"SCOPE

This Regulation applies to:

1.1 . PART I: the approval of vehicles of categories M, N and O 1/ with regard to the tank(s) for liquid fuel.

1.2 . PART II: the approval of vehicles of categories M1 fitted with tank(s) for liquid fuel which have been approved to Part I of this Regulation with regard to the prevention of fire risks in the event of a frontal and/or lateral and/or rear collision. Part II shall be applied at the request of the manufacturer.

1.3 . At the request of the manufacturer, vehicles other than those above mentioned in paragraph 1.2. may be approved under this Regulation".

As has been seen in other UNECE regulations, the scope statement does not always specify the content of the specifications of the regulation. Examination of the detailed provisions shows only the following potentially relevant text.

The Table of Contents identifies section 8 as:

"8. Description of electrical installation (site attachment, protection, etc.) "

However, the actual text of the document head Section 8 is:

"8. REQUIREMENTS FOR INSTALLATION OF AN APPROVED LIQUID FUEL TANK"

Once again the editorial quality of the UNECE regulations is poor and unreliable. It is not until you get to Section 8.2 that the electrical installation is referred to:

"8.2. Electrical installation"

"8.2.1. Electric wires other than wires accommodated in hollow components shall be attached to the vehicle's structure or walls or partitions near which they lead. The points at which they pass through walls or partitions shall be satisfactorily protected to prevent cutting of the insulation".

"8.2.2. The electrical installation shall be so designed, constructed and fitted that its components are able to resist the corrosion phenomena to which they are exposed".

This could be taken to imply that this relates to the whole wiring looms of the vehicle. However, see below for context.

The Table of Contents also identifies:

"Annex 1"

"19. The following documents, bearing the approval number shown above, are annexed to this communication: drawings and layout diagrams of the fuel tank, the fuel installation, the electrical installation, and other components of importance for the purposes of this Regulation".

However, Section 2 also states in Sections 2.2.3 and 2.2.4:

"2.2.3. a diagram of the entire fuel feed systems, showing the site of each component on the vehicle";

and

"2.2.4. for application pursuant to Part II of this Regulation, a diagram of the electrical installation showing its siting and its mode of attachment to the vehicle".

This therefore clearly implies that 'the electrical installation' refers to an electrical installation relating to the fuel supply system, and not the total electrical system of the vehicle. It is therefore considered that this regulation is not relevant to eCall NAD conformance.

6.2.2 Transport Infrastructures

The development of infrastructures leading to an integrated European transport system is a major priority for the UNECE. The foundations have been laid in three international agreements negotiated in the UNECE and constantly kept under review. The European Agreement on Main International Traffic Arteries (AGR) defines the "E" road network of routes of strategic importance for international traffic flows and sets the standards to which they should conform. The European Agreement on Main International Railway Lines (AGC) identifies rail routes of international importance and their technical characteristics. The encouragement of transport using one type of equipment - container for example - but combining the advantages of road, rail, inland waterway or maritime modes of transport is another priority field of activity for the Committee. The European Agreement on Important International Combined Transport Lines and Related Installations (AGTC) creates a plan for the development of international combined transport infrastructure and services on the basis of an international network and generally accepted infrastructure and operational standards. The European Agreement on Main Inland Waterways of International Importance (AGN) of 1996 is due to complete the range of international instruments dealing with the development of transport infrastructure.

The titles of these regulations are provided in clause B.3. The entire texts can be directly accessed via:

<http://www.unece.org/trans/conventn/legalinst.html>

Examination of these documents in detail shows no direct relevance to eCall, and certainly none in respect of the eCall NAD.

However, if eCall becomes codified into UNECE Regulations, and we are not recommending that this is done, it is likely that it would be added into the Infrastructure regulations, as eCall involves both infrastructure and vehicles. It would most probably be an amendment to the "Convention on Road Signs and Signals, of 8 November 1968 (2006 consolidated version)", where Article 31 of the current version is "Behaviour in the case of an accident", and Annex 5, Chapter 3 is "Technical conditions concerning motor vehicles and trailers". However, there are no provisions about eCall, nor the use of mobile communications in the current regulations.

7 R&TTE Directive

All telecommunications and radio equipment operated within Europe has to comply with the EU R&TTE Directive [1.7]. What then is R&TTE and what does this Directive cover?

7.1 What is R&TTE?

Radio and telecommunications terminal equipment (R&TTE) is equipment and its relevant components that are capable of communication by the emission and / or reception of radio waves i.e. radio equipment, and / or enabling communication by connecting to the interface of public telecommunications networks i.e. telecommunications terminal equipment. Some equipment, e.g. a cellular mobile telephone is both radio equipment and telecommunications terminal equipment.

Importers, or person who brings a product from a third country and places it on the EU market, must take necessary measures to ensure the product is compliant with the applicable directives. Formal assurance in writing, from the manufacturer, that the documents will be made available to do this should be obtained by all introducing such product into the EU market, prior to the placing of the product onto the market.

Distributors and retailers are required to act with due care in order not to place clearly non-compliant products on the EU market and must be able to demonstrate this, e.g. by presenting a declaration of conformity (DoC). An example of the DoC can be found in the European Commission's quick guide for manufacturers .

The regulation that controls this environment is the R&TTE Directive [i.7].

A "CE Mark" is printed onto the item to declare conformance with relevant Directives. The "CE mark" is required on all products within the scope of New Approach directives that are placed on the EU market. The manufacturer, or the person affixing the "CE mark", must ensure that it meets the essential requirements of the applicable directives before placing it on the market.

7.2 What is the R&TTE Directive?

7.2.1 General Overview

The R&TTE Directive is part of the "New Approach" series of European Directives that simplifies the procedures for placing on the market, free circulation and putting into service of R&TTE. It has been adopted into the National Regulations of all Member States of the EU. EN 301 511 [i.22] and EN 301 908 [i.21] detail the relevant legislation for each EU Member State.

Under the European New Approach Directives, manufacturers or those placing the product onto the market must ensure that equipment is designed to meet the essential requirements of the R&TTE Directive [i.7] and keep technical records to demonstrate this. A declaration of conformity must also be produced

Under the European New Approach Directives, anyone or any organisation responsible for placing such equipment on the EU market must declare that it is compliant with the R&TTE Directive [i.7] and any other applicable European directives.

The essential requirements of the R&TTE Directive [i.7] cover the health and safety of the user and others, electromagnetic compatibility and effective use of the radio spectrum. Additional essential requirements may apply to certain types of equipment. Harmonised standards specify how the essential requirements can be met. This is principally (but not necessarily) achieved by compliance to ETSI Standards.

Management of the civilian radio spectrum of any EU Member State remains, however, the responsibility of that Member State, and so the National Regulations must be consulted in addition to the general R&TTE provisions. In respect of Member State regulations for GSM/UMTS (over which the Pan European eCall Application Service is provided) is mercifully consistent. Radio equipment must meet the relevant Member State interface requirements before it can be licensed or exempted from licensing. Article 6.1 of the R&TTE Directive [i.7] prohibits Member States from introducing additional requirements to protect their market, and only reasons such as interference with National Defence equipment or similar are allowed.

Clause D.1 provides a section by section summary of the provisions of the R&TTE Directive [i.7]. Clause D.2 provides relevant verbatim text of the Directive. Those introducing eCall products should refer to the full text in addition to the summary provided in this clause and the section by section summary provided in clause D.1.

7.2.2 R&TTE Directive as it applies to eCall

As detailed in Annex D, three Articles of the Directive may be appropriate to eCall.

Article 3.2 Radio equipment - is relevant for eCall. It has requirements to avoid harmful interference. This includes parameters such as Effective Radiated Power, Frequency Stability and Spurious Emissions. It is implied that frequency can only be used as permitted by National Regulations only the intended application and not for other uses.

Article 5 Harmonised Standards - is most important for eCall communications equipment. This article introduces the concept of using Harmonised Standards to demonstrate compliance. It summarises the procedures to used by the European Commission to amend or withdraw these standards.

Article 7 Putting into service and right to connect - Equipment that complies with the directive must be allowed to be "put into service" and network operators must not refuse connection. There are, however, some safeguards so that if equipment is found to cause "harmful radio interference" or "serious damage to a network" it can be forced to be withdrawn from service. This Article may be very relevant for aftermarket eCall Systems.

Article 8 Free movement of apparatus - Member States should not restrict the free movement of equipment that meets the requirements of this directive and displays the CE mark. This Article may be very relevant for aftermarket eCall Systems, and to ensure the use of all eCall NADs in all Member States of the EU.

7.2.3 R&TTE Directive as it applies to the eCall NAD

The eCall NAD is of course, simply an instantiation of a GSM/UMTS mobile communications device, either specifically adapted to provide only the eCall functionality, or a more generic GSM/UMTS mobile communications device that can provide the eCall functionality as one its range of service applications.

EN 301 511 [i.22] and EN 301 908 [i.21] reference the tests that ensure conformance of GSM/UMTS equipment to the Article 3.2 of the R&TTE Directive [i.7].

Figure 1 of EN 301 511 [i.22], and the text reproduced below, describe the framework architecture of such systems.

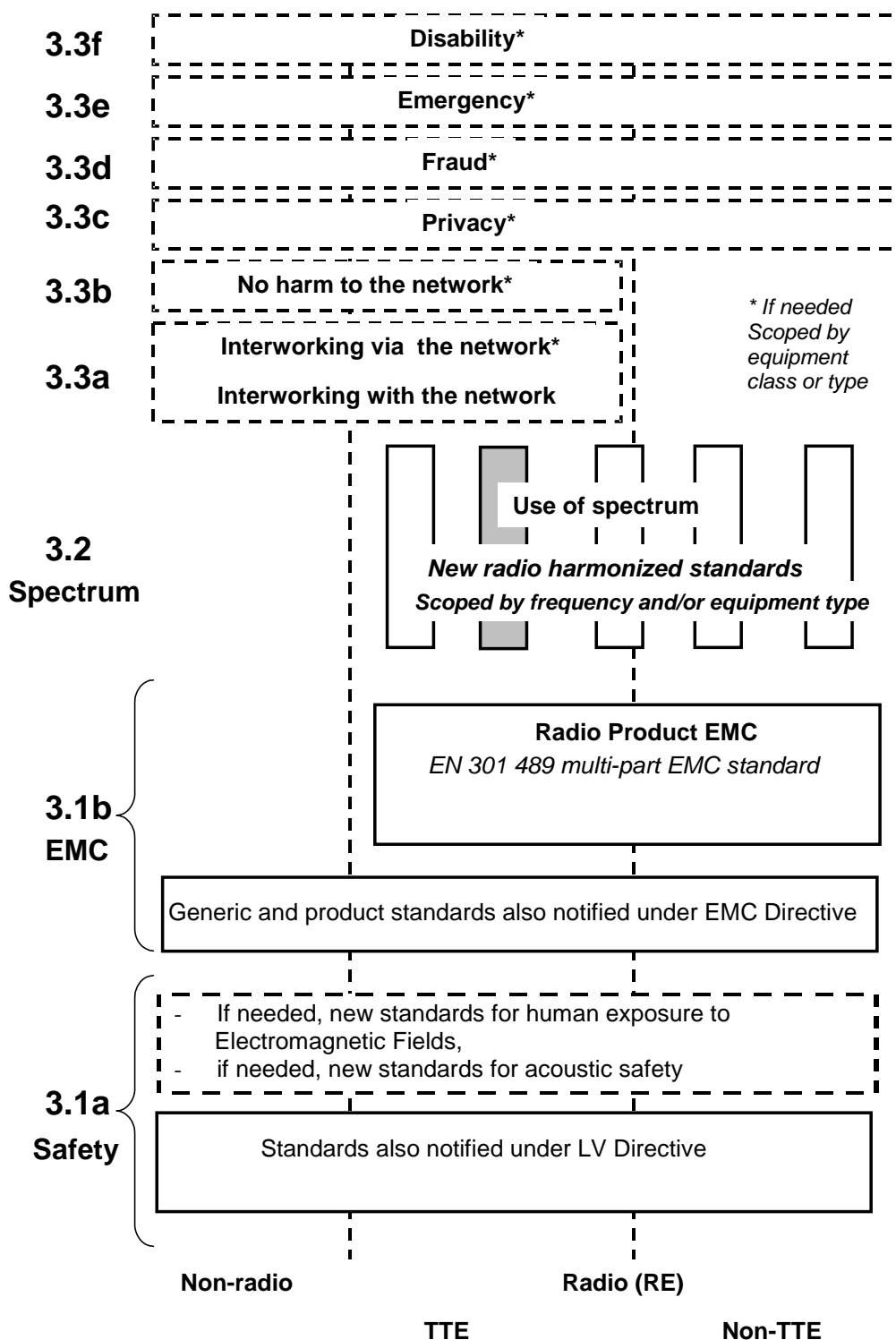


Figure 1: Modular structure for the various standards used under the R&TTE Directive [i.7]

The relevant text of EN 301 511 [i.22] states:

"The left hand edge of the figure 1 shows the different clauses of article 3 of the R&TTE Directive [i.7].

For article 3.3 various horizontal boxes are shown. Dotted lines indicate that at the time of publication of the present document essential requirements in these areas have to be adopted by the Commission. If such essential requirements are adopted, and as far and as long as they are applicable, they will justify individual standards whose scope is likely to be specified by function or interface type.

The vertical boxes show the standards under article 3.2 for the use of the radio spectrum by radio equipment. The scopes of these standards are specified either by frequency (normally in the case where frequency bands are harmonized) or by radio equipment type.

For article 3.1b the diagram shows EN 301 489 [i.18], the multi-part product EMC standard for radio used under the EMC Directive [i.8].

For article 3.1a the diagram shows the existing safety standards currently used under the LV Directive [i.26] and new standards covering human exposure to electromagnetic fields. New standards covering acoustic safety may also be required.

The bottom of the figure shows the relationship of the standards to radio equipment and telecommunications terminal equipment. A particular equipment may be radio equipment, telecommunications terminal equipment or both. A radio spectrum standard will apply if it is radio equipment. An article 3.3 standard will apply as well only if the relevant essential requirement under the R&TTE Directive [i.7] is adopted by the Commission and if the equipment in question is covered by the scope of the corresponding standard. Thus, depending on the nature of the equipment, the essential requirements under the R&TTE Directive [i.7] may be covered in a set of standards.

The modularity principle has been taken because:

it minimizes the number of standards needed. Because equipment may, in fact, have multiple interfaces and functions it is not practicable to produce a single standard for each possible combination of functions that may occur in an equipment;

it provides scope for standards to be added:

- under article 3.2 when new frequency bands are agreed; or
- under article 3.3 should the Commission take the necessary decisions without requiring alteration of standards that are already published;

it clarifies, simplifies and promotes the usage of Harmonized Standards as the relevant means of conformity assessment".

8 EMC & LV Directives

8.1 EMC Directive

EMC is an acronym/abbreviation for ElectroMagnetic Compatibility, a term for the behaviour of an apparatus in terms of electromagnetic interference it generates and the immunity to impeached electromagnetic field on its enclosure and cables. All electric devices or installations influence each other when interconnected or close to each other. The purpose of electromagnetic compatibility (EMC) is to keep all those side effects under reasonable control. EMC designates all the existing and future techniques and technologies for reducing disturbance and enhancing immunity.

The EMC directive is part of the system of EEC New Approach directives, a series of directives that are created to allow manufacturers to trade freely within the EEC territory. This is done by creating the CE mark, a "trade symbol" showing authorities (not the public) that essential requirements for safety and health are met.

These safety requirements are the requirements (called essential requirements) an apparatus has to meet to obtain the "presumption of conformity". In case of the EMC Directive 2004/108/EC [i.8]:

- to ensure that any electric or electronic device will create no more than a limited amount of RF interference so that other apparatus are not affected in their correct functioning, with an emphasis on radio communication (spectrum protection);
- to ensure that an electric or electronic device will withstand a certain amount of Electro Magnetic fields while operating as intended within specifications.

The bandwidth of the EMC Directive [i.8] spans 0 GHz to 400 GHz.

The main objective of the *"Directive 2004/108/EC of the European Parliament and of the Council, of 15 December 2004, on the approximation of the Laws of Member States relating to electromagnetic compatibility (EMC)"* [i.8] is thus to regulate the compatibility of equipment regarding EMC:

- 1) equipment (apparatus and fixed installations) needs to comply with EMC requirements when it is placed on the market and/or taken into service;
- 2) the application of good engineering practice is required for fixed installations, with the possibility for the competent authorities of Member States to impose measures if non-compliance is established.

The EMC Directive [i.8] first limits electromagnetic emissions of equipment in order to ensure that, when used as intended, such equipment does not disturb radio and telecommunication as well as other equipment. The Directive also governs the immunity of such equipment to interference and seeks to ensure that this equipment is not disturbed by radio emissions when used as intended.

For article 3.1b - figure 1 shows EN 301 489 [i.18], the multi-part product EMC standard for radio used under the EMC Directive *"Council Directive 2004/108/EC of 15 December 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility (EMC Directive)"* [i.8].

NOTE 1: Council Directive 89/336/EEC [i.27] of 3 May 1989 has been since been repealed and superseded by "Directive 2004/108/EC of the European Parliament and of the Council, of 15 December 2004, on the approximation of the Laws of Member States relating to electromagnetic compatibility (EMC)" [i.8]. It is recommended that EN 301 511 [i.22] be updated.

For article 3.1a - figure 1 shows the existing safety standards currently used under the LV Directive *"Council Directive 73/23/EEC of 19 February 1973 on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits (LV Directive)"* [i.28] and new standards covering human exposure to electromagnetic fields.

NOTE 2: It is noted that new standards covering acoustic safety may also be required.

Detail of the provisions of the EMC Directive [i.8] is provided in Annex E.

8.2 Low Voltage Directive

This Low Voltage Directive [i.9] also relates to electrical product safety and is thus related to the EMC Directive [i.8]. It applies to products with 50 to 1 000 VAC or 75 to 1 500 VDC input. Products may include computers, information technology equipment, household products, power tools, laboratory equipment, test and measurement equipment and power supplies. Components must comply with the applicable directives, but in most cases should not be CE Marked. The Low Voltage Directive has been in effect since 1973. The Low-Voltage Directive 73/23/EEC was amended by 93/68/EEC [i.9] with the adding of the CE Marking.

Detail of the provisions of the Low Voltage Directive is provided in Annex F.

9 EU regulation framework for eCall implementation

There are three key documents and a decision regarding (potential) EU regulation for eCall.

Until 2009, EC policy had been to encourage voluntary take-up of eCall by Member States and their PSAPs and vehicle manufacturers. This route has proven long and difficult.

The method chosen for this has been to encourage sign-up to a Memorandum of Understanding . This has been encouraged for a considerable period of time, and eventually most EU Member States have signed up. However, some significant countries have not. Vehicle manufacturers have pointed out that they could be placed at competitive disadvantage if they sign up and other OEMs do not, as there is no clear commercial payback for installing eCall.

Eventually, faced with the life saving potential of eCall, the European Commission has become frustrated and in September 2009 issued a communication on the subject, implying that unless there was total voluntary sign up within 2010 they will change to a regulatory approach as most Member States have already signed up (and the post Lisbon Treaty situation provides them with more opportunity to do this).

This communication (*EC Communication on eCall Implementation 2009 [i.4]*) is the first of the three documents to be referred to.

The second document of relevance is the *2009 ITS Action Plan [i.2]*. This is now a rolling document providing strategy and priorities for ITS implementation, and in consequence, requirements for appropriate ITS Standards to enable the consistent implementation and single market interoperability.

The third document is the *ITS Implementation Directive [i.3]*. This Directive was finally approved on 6th July 2010 and "*will support the ITS Action Plan and aims to establish a framework to accelerate and coordinate the deployment and use of ITS for road transport, including the interfaces with other transport modes. The first priorities will be traffic and travel information, the eCall emergency system and intelligent truck parking*". Further detail of the Directive, and the ITS Action Plan [i.2] are provided below and in Annexes H and I .

Under this Directive the Commission has to adopt within the next seven years specifications i.e. functional, technical, organisational or services provisions, to address the compatibility, interoperability and continuity of ITS solutions across Europe. The Commission will also establish an European ITS Advisory Group, which will bring together representatives of relevant ITS stakeholders and advise the Commission on business and technical aspects of the implementation and deployment of ITS in the Union.

According to the Parliament announcement of the approval, the next steps will be:

- After publication in the EU's Official Journal, Member States will have 18 months to transpose the Directive.
- 2010: The European ITS Committee and the European ITS Advisory Group will be set up.
- 2011: The Commission will adopt a working programme and Member States will issue a first report on their national activities.

There was an eCall implementation day, and demonstration, in May 2010 at the EC Berlaymont, and Belgium, Denmark, Luxemburg, Malta and Romania joined the 15 European countries to have already signed the EU's Memorandum of Understanding to implement eCall across Europe, making 20 of the 27 countries of the EU. Only France and UK remain as major countries that have not yet signed the MoU.

9.1 EC Communication on eCall Implementation 2009

This communication "*COM(2009) 434 final*" has been accepted by the Parliament who are very supportive, and is in effect integrated into the new Directive on ITS implementation. The provisions and expectations are unchanged, and the document is fixed and will not be revised further. Implications are in the implementation steps. It is reproduced in full in Annex G. As, unlike the ITS Action Plan [i.2] and ITS Implementation Directive [i.3], which cover a range of ITS subjects) the document is solely concerning eCall implementation, all of it is relevant to eCall, and should be read in its entirety to understand how the EC sees the path forward. That the ITS Action Plan [i.2] and Implementation Directive [i.3] have subsequently been approved, the way forward can be clearly seen and is described further in clause 9.4 below.

In respect of the eCall NAD, the following sections of the EC communication are particularly relevant.

" (...)

The Council of the European Union considered it as a priority to define the measures needed to promote the harmonised introduction of an interoperable EU-wide eCall on the basis of co-operation and appropriate standardisation.

(...)

Progress has, however, been too slow and the roll out of the pan-European eCall is severely delayed. The voluntary approach taken in previous communications and the Commission's efforts to standardise eCall and work with all stakeholders has not been sufficient. Further measures are urgently needed.

This Communication aims to inform the EU Institutions on the progress achieved, and proposes new measures to begin actually deploying the eCall service in Europe. The measures, directed to the stakeholders and the European Commission itself, include the option of setting up a regulatory framework for deploying eCall. These measures will make the pan-European in-vehicle emergency call service a reality, and lead to eCall devices being installed in new type-approved vehicles in Europe.

(...)

*eCall is a pan-European service that will operate in **all European Member States and states associated to the initiative**. It will be available in all vehicles, irrespective of brand, country and actual location of the vehicle. eCall is the only service providing European-wide coverage: no special agreements or additional devices will be needed, eCall will work at your holiday destination and during your business trip as well as at home.*

When a serious accident occurs, in-vehicle sensors will automatically trigger an eCall. When activated, the in-vehicle system establishes a 112-voice connection and at the same time an emergency message, the minimum set of data (MSD) including key information about the accident, such as time, location, driving direction (resulting from accurate satellite-based data such as EGNOS11 and, from 2013 on, Galileo (12) and vehicle description is sent with the voice call. The eCall can also be activated manually.

*The mobile network operator (MNO) identifies that the 112 call is an eCall from the 'eCall flag' inserted by the vehicle's communication module. The MNO handles the eCall like any other 112 call and **routes the call to the most appropriate emergency response centre – Public Safety Answering Point (PSAP) – (13) as defined by the public authorities. The PSAP operator will receive both the voice call and the MSD.***

*The information provided by the MSD will be decoded and displayed in the PSAP operator screen. The **location and driving direction** of the vehicle can be shown in a Geographic Information System. At the same time, the operator will be able to hear what is happening in the vehicle and talk with the occupants of the vehicle if possible. This will help the operator ascertain which emergency services are needed at the accident scene (ambulance, firemen, police) and to rapidly dispatch the alert and all relevant information to the right service.*

Furthermore, the PSAP operator will be able to immediately inform the road/traffic management centres that an incident has occurred in a specific location, facilitating rapid information to other road users and thus preventing secondary accidents, helping to clear the carriageway and therefore reducing congestion".

(...)

"3.1. Progress of standardisation activities

The Commission requested the European Standardisation Organisations (ETSI, CEN) to draft open standards for the eCall operation, based on the recommendations agreed by the stakeholders. This work was accepted by the technical committees ETSI-MSG in collaboration with 3GPP for the standards related to the eCall transmission and CEN TC 278 WG 15 for those related to the MSD structure and the operational requirements of the systems. The main milestones reached are:

- *CEN approval of the structure of **eCall Minimum Set of Data (MSD)**. The MSD includes important information to help send the services to the site of the incident and to speed up the response. The MSD enables the PSAP operator to respond to the eCall even without a voice exchange.*
- *3GPP approval of the **eCall discriminator** (eCall flag), included in Release 8 of the technical specifications with which the mobile telecommunications systems must comply. This discriminator will differentiate between 112 calls from mobile terminals and eCalls, and also between manual and automatically triggered eCalls.*

This will permit Member States to design the eCall response infrastructure in the way that best fits their emergency response infrastructure (i.e. centralised/decentralised, same PSAP that receives the 112 calls, or different PSAP with a filtering function, public organisation or private one recognised by the public authority). Member States must inform mobile network operators operating in the country of the most appropriate PSAP to route eCalls.

- ***ETSI-MSG and 3GPP approval of the core technical specifications defining the protocols for sending the MSD** from the vehicle to the PSAP operator. The solution agreed is that the data will be transmitted via an in-band modem along with the voice call. It is an open standard and there will be no licence fees for using the in-band modem for the eCall service.*
- *CEN approval of the **core operating requirements** for the Pan-European eCall service, defining the general functional and operational principles. The operating requirements are expected to be completed with high-level application protocols by autumn 2009.*

This set of standards will allow the deployment of a harmonised, reliable, interoperable, continuous eCall service in Europe, subject to their application by the stakeholders: vehicle and equipment manufacturers, mobile network operators and Member States. The updated list of standards may be consulted on:

http://ec.europa.eu/information_society/activities/esafety/ecallstandards/

(...)

The automotive manufacturers (ACEA being one of the first signatories of the eCall MoU) confirmed their commitment to eCall and pledged to offer eCall as an option for new type- approved vehicles of certain categories²¹ three years after approval of all relevant standards (communication standards, MSD, operating requirements), provided that Member States update their PSAP infrastructures to handle eCalls. **The automotive manufacturers also took the position that making eCall standard factory-equipped equipment in all vehicles would be possible only through regulation.**

Furthermore, the automotive industry advocates for the coexistence of the pan-European eCall and **proprietary emergency call solutions** developed by some manufacturers. The automotive industry is also interested in using the eCall platform to offer **added-value services** to boost their business.

(...)

Mobile telecommunications operators need to handle eCalls in the same way as they handle 112 calls. **They must activate the eCall indicator in their networks**, so that they can identify eCalls and route them to the most appropriate PSAP defined by national governments. GSM Europe, the association representing European Mobile Network Operators, has established a task force to develop strategies to deploy eCall in Europe, contribute to standardisation and participate in the work of the European eCall Implementation Platform.

(...)

A streamlining and integration of all these applications within a coherent, open-system architecture could yield better efficiency and usability, reduced costs and enhanced extensibility, enabling "plug and play" integration of future new or upgraded applications.

Such modular approach will easily allow the low cost integration of functionalities and applications that address road safety, personal mobility, logistics support or access to multimodal information. The definition of an 'open in-vehicle platform' concept is part of the ITS Action Plan, and the introduction of eCall based on this concept would positively contribute to its momentum.

(...)

Furthermore it is expected that after-market equipment will be developed to provide the eCall service in vehicle models already present on the market. These after-market systems should comply with the standard pan-European eCall operational requirements".

"Coexistence of pan-European eCall and proprietary eCall services

Proprietary in-vehicle emergency call services are offered in Europe and worldwide by different automobile branches and service providers (e.g., Volvo OnCall, GM OnStar, PSA, Fiat, BMW). They are typically bundled with other services, such as breakdown assistance, onboard mobile telephony, dynamic navigation, etc. Emergency calls are received by private call centres that transmit the calls and the accident data to PSAPs in an emergency. Each manufacturer needs to reach an agreement with PSAP authorities in every country in which they want to deploy the service, on a case-by-case basis.

(...)

In Member States where there is an agreement to support proprietary eCall services with a similar quality of service as the pan-European eCall, the vehicle manufacturer would be free to choose the type of system supported (pan-European eCall or proprietary eCall service). For this purpose, CEN is developing standardised operational requirements for third party services providing eCall (TPS-eCall). In other Member States, vehicle manufacturers must implement the pan-European eCall system. If the buyer of a vehicle does not opt for the proprietary eCall solution, the automobile manufacturer must equip the vehicle with the pan-European eCall system.

Regardless of the solution chosen by the vehicle manufacturer, **an in-vehicle emergency call service**, including voice link and provision of at least the eCall MSD, **must be provided in a seamless way in all EU Member States.**

When eCall is fully deployed across Europe, the providers of proprietary eCall services can also migrate to using the pan-European eCall, i.e. in-vehicle emergency calls will call the 112 number while all other services provided stay intact.

(...)

(3) **The regulatory approach** would mean making eCall standard equipment installed in all new vehicles in Europe, starting with certain categories during a transition period, and would provide a framework for handling eCalls in

telecommunications networks and PSAPs, based on existing regulations. This approach would make eCall available to all citizens in Europe, accelerate take-up and unlock the full potential of eCall to save lives and mitigate the severity of injuries. Furthermore it is expected that the certainty created by the regulatory approach will accelerate the introduction of eCall systems by automobile manufacturers, thus fostering the introduction of the service even before it becomes compulsory, and at the same time stimulating the telematics service market in Europe."

"4.2. Proposed action

The measures proposed below aim to make the pan-European eCall service a reality in Europe. Stakeholders should take the following steps:

(1) The Commission, Member States and all other stakeholders will actively support the work of the European eCall Implementation Platform (EeIP) and its Task Forces, to ensure the timely issuing of all definitions, guidelines and good practise for effective and harmonised deployment of the eCall service in Europe.

(2) The Commission, along with the Member States and other stakeholders, will launch coordinated awareness campaigns to increase understanding of and demand for the service.

(3) The Member States, PSAP organisations, automotive and telecommunication industry, along with other stakeholders, will carry out pre-deployment pilots taking into account the standards being approved. The Commission may provide funding to support these pilots through the Competitiveness and Innovation Programme (CIP).

The final aim is to fully roll out the pan-European eCall service and make it standard equipment in all new type-approved vehicles in Europe. The Commission will monitor the effectiveness of the voluntary approach described above. If significant progress is not made by the end of 2009, both in the availability of the eCall device in vehicles, and the necessary investment in PSAP infrastructure, the Commission will plan to take the following regulatory measures in 2010:

(1) A Recommendation to the Member States targeting Mobile Network Operators on the transmission of eCall, including the MSD from the in-vehicle systems to the PSAPs.

The guidelines would be based on the single European emergency number enhanced with location capabilities (E112) and the set of standards related to transmission of the eCall.

(2) A proposal for a regulation under the vehicle type-approval legislation for the mandatory introduction of the in-vehicle part of the eCall service in new type-approved vehicles in Europe starting with certain categories, based on the operating requirements approved by the European Standardisation Organisations.

(3) The assessment of a potential regulatory measure for the necessary upgrading of the PSAP infrastructure required for proper receipt and handling of eCalls, in the framework of the proposed Directive on the deployment of ITS in Europe. The resulting Regulation, that would require Member States to take the necessary action for eCall implementation, would be based on the recommendations of the European eCall Implementation Platform (EeIP).

(...)

It is time now to start deploying the systems in vehicles, communication mobile networks and emergency service infrastructures. In this Communication, the Commission proposes measures to accelerate the introduction of eCall as part of the equipment of all new vehicles in Europe.

(...)

Should the voluntary approach not meet the objective of introducing the eCall service in Europe, the Commission will consider introducing in 2010 new regulatory measures for making the eCall system standard in new type-approved vehicles in Europe, to bring down the cost of the systems and to ensure it is deployed in all European countries".

The full text of the 'Communication on eCall Implementation 2009' [COM(2009) 434 final] [i.4] text is reproduced in Annex G.

9.2 ITS Action plan

This deliverable has existed in the past as an annual plan for prioritisation. It is now a rolling document stating priorities for the next three years, and it, together with a Directive for ITS implementation, will prioritise areas for EC support action for ITS.

On 16 December 2008, the European Commission took a major step towards the deployment and use of Intelligent Transport Systems (ITS) in road transport. The ITS Action Plan 2009 [i.2] adopted suggests a number of targeted measures and a proposal for a Directive laying down the framework for their implementation. The goal is to create the momentum necessary to speed up market penetration of rather mature ITS applications and services in Europe. eSafety, including eCall, is identified as a priority area for implementation and support action.

The initiative is supported by five co-operating Directorates-General: DG Energy and Transport (lead), DG Information Society and Media, DG Research, DG Enterprise and Industry and DG Environment.

The 2009 Action Plan is reproduced in full in Annex I.

Its gamut is the complete scope of ITS so only a part has relevance to eCall, and particularly to the eCall NAD.

The following paragraphs in this clause discuss clauses with relevance to eCall.

The reference document in Annex I is:

***"COMMISSION OF THE EUROPEAN COMMUNITIES | Brussels, 16.12.2008 COM(2008) 886 final
COMMUNICATION FROM THE COMMISSION Action Plan for the Deployment of Intelligent Transport Systems
in Europe"***

For the purposes of context, it is worth considering in full the introduction and scope, and the justification for a European Approach.

"1. INTRODUCTION

The renewed Lisbon agenda on growth and jobs[1] aims at delivering stronger, lasting growth and creating more and better jobs. Furthermore, the mid-term review of the 2001 White Paper[2] stresses the key role of innovation in ensuring sustainable, efficient and competitive mobility in Europe.

Against this background several major challenges have to be overcome for Europe's transport system to play its full role in satisfying the mobility needs of the European economy and society:

- *Road traffic congestion is estimated to affect 10 % of the road network, and yearly costs amount to 0.9-1.5 % of the EU GDP.[3]*
- *Road transport accounts for 72 % of all transport-related CO2 emissions, which increased by 32 % (1990-2005).[4]*
- *Whilst road fatalities are in regression (-24 % since 2000 in EU27) their number (42 953 fatalities in 2006) is still 6 000 above the intended target of a 50 % reduction in fatalities in the period 2001-2010.[5]*

These challenges are even more pressing with forecasted growth rates of 50 % for freight transport and 35 % for passenger transport in the period from 2000 to 2020.[6]

The main policy objectives arising from these challenges are for transport and travel to become:

- *cleaner,*
- *more efficient, including energy efficient [7],*
- *safer and more secure.*

It is however clear, that conventional approaches such as the development of new infrastructure, will not give the necessary results on the timescales required by the magnitude of these challenges. Innovative solutions are clearly needed if we are to achieve the rapid progress demanded by the urgency of the problems at hand. It is high time for Intelligent Transport Systems to play their due role in enabling tangible results to emerge".

(...)

"3. SCOPE

This Action Plan aims to accelerate and coordinate the deployment of Intelligent Transport Systems (ITS) in road transport, including interfaces with other transport modes.

The Action Plan outlines six priority areas for action. For each area a set of specific actions and a clear timetable are identified. Fulfilling them by setting a framework to define procedures and specification will call for the mobilisation of Member States and other stakeholders.

Finally, this Action Plan will help to combine the resources and instruments available to deliver a substantial added value for the European Union.

(...)

4.3. Improving road safety and security

Research and initial deployment have shown the great potential for improving road safety of Driver Assistance Systems such as Electronic Stability Control (ESC), Adaptive Cruise Control (ACC), Lateral Support (lane departure warning and lane change assistant), Collision Warning and Emergency Braking Systems **and other applications such as eCall (emergency call)**, driver hypo-vigilance systems, "speed alert" and "alcohol-lock". **ESC and eCall alone [12] could save up to 6 500 lives per year in the EU if fully deployed.**

Better use should be made of the newest active safety systems and advanced driver assistance systems with proven benefits in terms of in-vehicle safety for the vehicle occupants and other road users (including vulnerable road users). The European Statement of Principles on the Human Machine Interface (HMI)[13] should be extended to allow for the proliferation of nomadic devices.

(...)

4.4. The EU added value in ITS deployment

The potential of ITS can only be realised if its deployment in Europe is transformed from the limited and fragmented implementation that is observed today into an EU-wide one. In this respect, the removal of existing barriers to ITS deployment will be pivotal. The EU has a clear role to play in creating the right framework conditions for accelerated and coordinated deployment of ITS: the policy priorities, the choice of generic ITS components to be shared or re-used, and agreement on a clear timetable.

Common European action can directly contribute to:

- addressing the complexity of ITS deployment, with the large number of stakeholders involved and the need to ensure synchronisation both geographically and between the various partners
- supporting the market penetration of advanced mobility services for the citizens, whilst promoting public transport alternatives to private car use
- enabling the generation of scale-effects for a more cost-effective, faster and less risky deployment of ITS
- accelerating the current pace of ITS deployment in road transport, and assuring the continuity of services throughout the Community
- enhancing the leading role of the European ITS industry in worldwide markets by fostering the supply of innovative products and services to vehicle manufacturers, transport operators, logistics providers and users

To achieve these goals, the EU can make use of several instruments: financial support, standardisation initiatives, legislative and non-legislative measures".

The Action Plan then proceeds to outline the consultation process on which the Action Plan was prepared.

It then identifies six priority areas which are suggested to 'build on input from public and private stakeholders and assume that ITS applications to be deployed in the short-to-medium term should be mature, sufficiently interoperable, and able to create a catalytic effect across Europe'.

These are:

- Action Area 1: Optimal use of road, traffic and travel data
- Action Area 2: Continuity of traffic and freight management ITS services on European transport corridors and in conurbations
- Action Area 3: Road safety and security
- Action Area 4: Integration of the vehicle into the transport infrastructure
- Action Area 5: Data security and protection, and liability issues

- Action Area 6: European ITS cooperation and coordination

While action area 5, is of course important and relevant, it is Action Areas 3 and 4, particularly Action Area 3, that are of direct relevance to eCall.

The relevant extracts from Action area 3 are as follows:

"Action Area 3: Road safety and security

ITS-based road safety and security applications have proved their effectiveness, but the overall benefit for society depends on the scale of their deployment.

(...)

The following actions are proposed:

3.1 Promotion of deployment of advanced driver assistance systems and safety and security-related ITS systems, including their installation in new vehicles (via type approval) and, if relevant, their retrofitting in used ones | 2009 to 2014 |

3.2 Support the Implementation Platform for the harmonised introduction of pan-European eCall[28], including awareness campaigns, upgrading Public Service Access Points' infrastructures and an assessment of the need for regulation. | 2009 |

(...)

3.3 Development of a regulatory framework on a safe on-board Human-Machine-Interface and the integration of nomadic devices, building on the European Statement of Principle[29] on safe and efficient in-vehicle information and communication systems | 2010 |

(...)"

Action Area 4 "**Integration of the vehicle into the transport infrastructure**" is generic and not primarily focussed at current generation eCall, but envisages that in the future eCall will be part of a combined in-vehicle combined platform:

*"The use of ITS components or systems is stipulated in several existing or planned legal acts and voluntary agreements applicable to commercial or private vehicles. **Examples include the provisions on the transport of dangerous goods and live animals, digital tachograph[30], electronic toll collection and eCall.** So far most of these acts and agreements have evolved independently of each other, so there has been little synergy even when needs are the same".*

The Action Plan envisages that:

"A streamlining and integration of these applications within a coherent, open-system architecture could yield better efficiency and usability, reduced costs and enhanced extensibility, enabling a "plug and play" integration of future new or upgraded applications such as those in nomadic devices and those utilising GNSS services for advanced positioning and timing. This open system architecture would be embodied in an open in-vehicle platform, guaranteeing interoperability/interconnection with infrastructure systems and facilities. With this modular approach, additional functionalities could be integrated later for in-vehicle safety and safe HMI, personal mobility, logistics support and access to multimodal information and possibly electronic vehicle identification".

The focus of the remainder of Action Area 4 is focussed to in-vehicle platform architecture and co-operative systems, but point 4.4 is relevant.

"4.4 Definition of a mandate for the European Standardisation Organisations to develop harmonised standards for ITS implementation, in particular regarding cooperative systems. | 2009-2014 |".

Action Area 5, "*Data security and protection, and liability issues*" deals with issues of privacy. WP29, which advises the EC regarding Privacy law, has considered privacy issues and made specific exception for information relating to eCall data, for the purpose of eCall only.

Action Area 6, *"European ITS cooperation and coordination"* is directed more at issues of European level interoperability of data and governance and is therefore only indirectly relevant to eCall. However it is relevant, because it influences the political support for the use of regulation to implement services, such as eCall. And with just a few recalcitrant countries reluctant to sign up, Action Area 6 (and the implication to the provisions of the related ITS Implementation Directive) inclines towards the use of regulation for eCall implementation across the continent. However its linkage to the detail of the conformance issues relating to the eCall NAD is not direct.

"Coordinated deployment of ITS in the EU calls for intensive and effective cooperation between all parties involved at European level, ideally leading to rapprochement on deployment requirements, better synchronisation of deployment activities and avoidance of national and proprietary silo solutions that constitute barriers to European integration.

(...)

Such coordinated deployment of ITS throughout Europe also requires greater involvement of cities and regional authorities, notably at urban and at inter-urban level. Guidance and technical support should be provided to facilitate and underpin consensus building and decision-making processes".

The Action Plan concludes with a summary of its objectives and the linkage to the ITS Implementation Directive.

For the full text of the 2009 ITS Action Plan [i.2], see Annex I.

9.3 ITS Implementation Directive

To implement the Action Plan the EC has developed an ITS Implementation Directive [i.3] and has processed this through the European Parliament. The ITS Implementation Directive [i.3] was approved by the European Parliament on 6th July 2010. It forms the principal regulatory framework that allows the EU to implement ITS across Europe. How the Commission will achieve this is detailed in clause 9.4.

"Directive 2010/.../EU of the European Parliament and of the Council of on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport (Text with EEA relevance)".

The text of this Directive is reproduced in full in Annex H.

As with the 2009 ITS Action Plan, its gamut is the complete scope of ITS so only a part has relevance to eCall, and particularly to the eCall NAD.

The following paragraphs in this section discuss sections with relevance to eCall.

The Directive starts with a description and justification of its need, the most relevant clauses being:

"(...)

(7) To ensure a coordinated and effective deployment of ITS within the Union as a whole, specifications, including, where appropriate, standards, defining further detailed provisions and procedures should be introduced. Before adopting any specifications, the Commission should assess their compliance with certain defined principles set out in Annex II. Priority should be given in the first instance to the four main areas of ITS development and deployment. Within those four areas, priority actions should be established for the development and use of specifications and standards. During further implementation of ITS the existing ITS infrastructure deployed by a particular Member State should be taken into account in terms of technological progress and financial efforts made."

(...)

(9) The specifications should, inter alia take into account and build upon the experience and results already obtained in the field of ITS, notably in the context of the eSafety initiative, launched by the Commission in April 2002. The eSafety Forum was established by the Commission under that initiative to promote and further implement recommendations to support the development, deployment and use of eSafety systems."

(...)

(11) ITS should build on interoperable systems which are based on open and public standards and available on a non-discriminatory basis to all application and service suppliers and users".

Of relevance to conformance for the eCall NAD:

" (...)

(15) In appropriate cases, the specifications should include detailed provisions laying down the procedure governing assessment of conformity or suitability for use of constituents. Those provisions should be based on Decision No 768/2008/EC of the European Parliament and of the Council of 9 July 2008 on a common framework for the marketing of products¹, in particular concerning the modules for the various phases of the conformity assessment procedures. Directive 2007/46/EC² already establishes a framework for the type approval of motor vehicles and their parts or related equipment, and Directive 2002/24/EC³ and Directive 2003/37/EC⁴ lay down rules on the type approval of two or three-wheel motor vehicles, and agricultural or forestry tractors and their parts or related equipment. Therefore it would be a duplication of work to provide for conformity assessment of equipment and applications falling within the scope of those Directives. At the same time, although those Directives apply to ITS-related equipment installed in vehicles, they do not apply to external road infrastructure ITS equipment and software.

In such cases, the specifications could provide for conformity assessment procedures. Such procedures should be limited to what would be necessary in each separate case".

Clause 21 is of specific relevance for the subsequent clause of the present document (proposed regulation of ITS Implementation as it relates to eCall). It provides that:

" (21) The Commission should be empowered to adopt delegated acts in accordance with Article 290 of the TFEU in respect of the adoption of specifications. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level".

This clause is of relevance because the ITS Implementation Directive provides such delegation of powers to the EC.

Clause 23 is of relevance because it states that National Member action under subsidiary is inadequate and that EU level action (i.e. regulation of the EC) is required.

"(23) Since the objective of this Directive, namely to ensure the coordinated and coherent deployment of interoperable Intelligent Transport Systems throughout the Union cannot be sufficiently achieved by the Member States and/or the private sector and can therefore, by reason of its scale and effects, be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality as set out in that Article, this Directive does not go beyond what is necessary in order to achieve that objective".

Article 1 is a general scoping.

"Article 1

Subject matter and scope

- 1. This Directive establishes a framework in support of the coordinated and coherent deployment and use of Intelligent Transport Systems (ITS) within the Union, in particular across the borders between the Member States, and sets out the general conditions necessary for that purpose.*
- 2. This Directive provides for the development of specifications for actions within the priority areas referred to in Article 2, as well as for the development, where appropriate, of necessary standards.*
- 3. This Directive shall apply to ITS applications and services in the field of road transport and to their interfaces with other modes of transport without prejudice to matters concerning national security or necessary in the interest of defence".*

Article 2 sets out the priority areas, of interest to eCall is priority area III

"Article 2

Priority areas

- 1. For the purpose of this Directive the following shall constitute priority areas for the development and use of specifications and standards:*
 - I. Optimal use of road, traffic and travel data;*
 - II. Continuity of traffic and freight management ITS services;*

- III. ITS road safety and security applications;
- IV. Linking the vehicle with the transport infrastructure.

2. The scope of the priority areas is specified in Annex I".

Article 3 sets out priority Actions, of which priority action (d) is of relevance to eCall.

"Article 3

Priority actions

Within the priority areas the following shall constitute priority actions for the development and use of specifications and standards, as set out in Annex I:

(...)

(d) the harmonised provision for an interoperable EU-wide eCall;

(...)"

Article 4 provides definitions, which are reproduced in full as in some cases they are different from other commonly understood definitions of the same or similar terms.

"Article 4

Definitions

For the purposes of this Directive, the following definitions shall apply:

- (1) *"Intelligent Transport Systems" or "ITS" means systems in which information and communication technologies are applied in the field of road transport, including infrastructure, vehicles and users, and in traffic management and mobility management, as well as for interfaces with other modes of transport;*
- (2) *"interoperability" means the capacity of systems and the underlying business processes to exchange data and to share information and knowledge;*
- (3) *"ITS application" means an operational instrument for the application of ITS;*
- (4) *"ITS service" means the provision of an ITS application through a well-defined organisational and operational framework with the aim of contributing to user safety, efficiency, comfort and/or to facilitate or support transport and travel operations;*
- (5) *"ITS service provider" means any provider of an ITS service, whether public or private;*
- (6) *"ITS user" means any user of ITS applications or services including travellers, vulnerable road users, road transport infrastructure users and operators, fleet managers and operators of emergency services;*
- (7) *"Vulnerable road users" means non-motorised road users, such as pedestrians and cyclists as well as motor-cyclists and persons with disabilities or reduced mobility and orientation;*
- (8) *"nomadic device" means a portable communication or information device that can be brought inside the vehicle to support the driving task and/or the transport operations;*
- (9) *"platform" means an on-board or off-board unit enabling the deployment, provision, exploitation and integration of ITS applications and services;*
- (10) *"architecture" means the conceptual design that defines the structure, behaviour and integration of a given system in its surrounding context;*
- (11) *"interface" means a facility between systems which provides the media through which they can connect and interact;*
- (12) *"compatibility" means the general ability of a device or system to work with another device or system without modification;*
- (13) *"continuity of services" means the ability to ensure seamless services on transport networks across the Union;*

- (14) "road data" means data on road infrastructure characteristics, including fixed traffic signs or their regulatory safety attributes;
- (15) "traffic data" means historic and real-time data on road traffic characteristics;
- (16) "travel data" means basic data such as public transport timetables and tariffs, necessary to provide multi-modal travel information before and during the trip to facilitate travel planning, booking and adaptation;
- (17) "specification" means a binding measure laying down provisions containing requirements, procedures or any other relevant rules;
- (18) "standard" means standard as defined in Article 1(6) of Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations¹.

¹ OJ L 204, 21.7.1998, p. 37".

Article 5 refers to the general conditions of employment- that, in general it is not required, but where introduced must be done consistently in accordance with the principles of the Directive. It places an onus on Member States to co-operate in respect of priority areas. eCall is a priority area so there is relevance. Specifically, in respect to the NAD, it may influence Member states requirements to MNO's to implement the eCall flag.

"Article 5

Deployment of ITS

1. Member States shall take the necessary measures to ensure that the specifications adopted by the Commission in accordance with Article 6 are applied to ITS applications and services, when these are deployed, in accordance with the principles in Annex II. This is without prejudice to the right of each Member State to decide on its deployment of such applications and services on its territory. This right is without prejudice to any legislative act adopted under the second subparagraph of Article 6(2).

2. Member States shall also make efforts to co-operate in respect of the priority areas, insofar as no specifications have been adopted".

Article 6 relates to prioritisation for priority areas (of which eCall is one). Much of the clause is about administrative procedures, but clause 3 of Article 6 is relevant because of derogated powers (comitology) and clause 6 is particularly relevant.

"Article 6

Specifications

1. The Commission shall first adopt the specifications necessary to ensure the compatibility, interoperability and continuity for the deployment and operational use of ITS for the priority actions.

2. The Commission shall aim at adopting specifications for one or more of the priority actions by ...*

* Please insert the date: 30 months following the date of entry into force of this Directive.

At the latest 12 months after the adoption of the necessary specifications for a priority action, the Commission shall, where appropriate, after conducting an impact assessment including a cost-benefit analysis, present a proposal to the European Parliament and the Council in accordance with Article 294 of the TFEU on the deployment of that priority action.

3. Once the necessary specifications for the priority actions have been adopted, the Commission shall adopt specifications ensuring compatibility, interoperability and continuity for the deployment and operational use of ITS for other actions in the priority areas.

(...)

6. The specifications shall, where appropriate, be based on any standards referred to in Article 8.

The specifications shall, as appropriate, provide for conformity assessment in accordance with Decision No 768/2008/EC.

The specifications shall comply with the principles set out in Annex II.

7. The Commission shall conduct an impact assessment including a cost-benefit analysis prior to the adoption of the specifications".

Article 7 provides the option to use delegated powers (which will be taken up for eCall).

"Article 7

Delegated acts

1. The Commission may adopt delegated acts in accordance with Article 290 of the TFEU as regards specifications. When adopting such delegated acts the Commission shall act in accordance with the relevant provisions of this Directive, in particular Article 6 and Annex II.

2. A separate delegated act shall be adopted for each of the priority actions.

3. For the delegated acts referred to in this Article, the procedure set out in Articles 12, 13 and 14 shall apply".

Article 8, Standards, is of course relevant.

"Article 8

Standards

1. The necessary standards to provide for interoperability, compatibility and continuity for the deployment and operational use of ITS shall be developed in the priority areas and for the priority actions. To that effect, the Commission, after having consulted the Committee referred to in Article 15, shall request the relevant standardisation bodies in accordance with the procedure laid down in Directive 98/34/EC to make every necessary effort to adopt these standards rapidly.

2. When issuing a mandate to the standardisation bodies, the principles set out in Annex II shall be observed as well as any functional provision included in a specification adopted in accordance with Article 6".

Article 9, Non-binding measures, is strategic and not particularly relevant to the eCall NAD.

Article 10 is about privacy and security, and WP29 has specifically permitted eCall MSD data for the purposes of eCall, so the wording of that Article is not particularly relevant to eCall NAD conformance testing.

Article 11 is administrative concerning EU liability rules, therefore not particularly relevant to eCall NAD conformance testing.

Article 12 provides the EC with delegated powers for the Directive for a period of 7 years, so is relevant.

"Article 12

Exercise of the delegation

1. The power to adopt the delegated acts referred to in Article 7 shall be conferred on the Commission for a period of seven years following ... The Commission shall make a report in respect of the delegated powers no later than six months before the end of a five year period following ...*.*

** OJ: Please insert the date: the date of the entry into force of this Directive.*

2. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

3. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in Articles 13 and 14".

Articles 13 and 14 about revocation of the delegation are administrative.

Article 15 requires the Commission to be assisted by a European ITS Advisory Group, which is to be created according to the requirements of Article 16. There is no direct relevance to the eCall NAD conformance, although advice from such a group could influence the Commission's eCall strategy.

Article 17 is administrative about member states reporting procedures and requirements.

Article 18 is administrative about transposition into National legislation.

Article 19 is administrative about entry into force of the Directive and Article 20 direct the Directive to the EU Member States.

Annex 1 provides detail of the priority areas. In respect of the relevant Priority Area (III), priority action (d) it states:

" – **Priority area III: ITS road safety and security applications**

The specifications and standards for ITS road safety and security applications shall include the following:

1. Specifications for priority action (d)

The definition of the necessary measures for the harmonised provision of an interoperable EU-wide eCall, including:

- *the availability of the required in-vehicle ITS data to be exchanged;*
- *the availability of the necessary equipment in the emergency call response centres receiving the data emitted from the vehicles;*
- *the facilitation of the electronic data exchange between the vehicles and the emergency call response centres".*

"**Annex II**" provides principles for specifications and deployment of ITS, and is relevant, particularly with the cost efficiency/effectiveness of Conformance test requirements.

"ANNEX II

PRINCIPLES FOR SPECIFICATIONS AND DEPLOYMENT OF ITS (as referred to in Articles 5, 6 and 8)

The adoption of specifications, the issuing of mandates for standards and the selection and deployment of ITS applications and services shall be based upon an evaluation of needs involving all relevant stakeholders, and shall comply with the following principles. These measures shall:

(a) Be Effective – make a tangible contribution towards solving the key challenges affecting road transportation in Europe (e.g. reducing congestion, lowering of emissions, improving energy efficiency, attaining higher levels of safety and security including vulnerable road users);

(b) Be Cost-efficient – optimise the ratio of costs in relation to output with regard to meeting objectives;

(c) Be proportionate – provide, where appropriate, for different levels of achievable service quality and deployment, taking into account the local, regional, national and European specificities;

(d) Support continuity of services – ensure seamless services across the Union, in particular on the trans-European network, and where possible at its external borders, when ITS services are deployed. Continuity of services should be ensured at a level adapted to the characteristics of the transport networks linking countries with countries, and where appropriate, regions with regions and cities with rural areas;

(e) Deliver Interoperability – ensure that systems and the underlying business processes have the capacity to exchange data and to share information and knowledge to enable effective ITS service delivery;

(f) Support backward compatibility – ensure, where appropriate, the capability for ITS systems to work with existing systems that share a common purpose, without hindering the development of new technologies;

(g) Respect existing national infrastructure and network characteristics – take into account the inherent differences in the transport network characteristics, in particular in the sizes of the traffic volumes and in road weather conditions;

(h) Promote equality of access – do not impede or discriminate against access to ITS applications and services by vulnerable road users;

(i) Support maturity – demonstrate, after appropriate risk assessment, the robustness of innovative ITS systems, through a sufficient level of technical development and operational exploitation;

(j) Deliver Quality of timing and positioning – use of satellite-based infrastructures, or any technology providing equivalent levels of precision for the purposes of ITS applications and services that require global, continuous, accurate and guaranteed timing and positioning services;

(k) *Facilitate Inter-modality – take into account the coordination of various modes of transport, where appropriate, when deploying ITS;*

(l) *Respect Coherence – take into account existing Union rules, policies and activities which are relevant in the field of ITS, in particular in the field of standardisation".*

9.4 Status of regulation for ITS implementation and next steps (as it relates to eCall)

9.4.1 Summary

The EU Parliament has supported the eCall communication and eCall is included in the new ITS Directive on ITS Deployment (see above and Annex H).

The Directive has 6 priority areas (Safety, Security, real time traffic info, real time travel info, Parking and Info, etc) and eCall is specifically and explicitly nominated as a priority (see preceding clause of the present document).

To ensure interoperability and continuity across the EU, Common Specifications are being developed, and in the case of eCall these will be based on the CEN and ETSI Standards.

The effect of the Directive is that if any Member State wishes to deploy these ITS services, they must conform to the common specifications.

As a further step, if there are still countries that have not signed up to the MoU the EC to prepare and adopt implementation procedures under the co-decision procedures processes following the adoption of the Lisbon Treaty. How this will actually be achieved is not yet finalised but the current position of the Commission is provided below.

Following the approval of the ITS Implementation Directive in July 2010, the Commission interpretation is that no further formal parliamentary regulation is required for any of its provisions, including, and especially, eCall, and these would be handled under Article 290 of the TFEU 'delegated powers', sometimes referred to as 'Comitology'.

The Commission has recently published an interesting "*Communication on the implementation of Article 290 the Functioning of the European Union (TFEU) (COM(2009) 673)*" [i.3] which sets out the Commission's interpretation on the scope of the delegated acts, the framework for delegations of power, the working methods the Commission intends to use for preparing the adoption of delegated acts and, finally, the conditions under which the legislator might exercise control over the way the powers conferred on the Commission are implemented. This is reproduced in full in Annex J. The use of bold in the Annex is the input of the present document to highlight relevant statements.

In summary, Article 290 TFEU allows the EU legislator, the European Parliament and the Council of the European Union, **to give powers to the European Commission to amend or supplement legislative acts** in which these powers are clearly defined:

The European Commission is now entering into discussions with the Parliament and the Council on how to interpret these provisions.

9.4.2 Key relevant provisions included in Article 290 TFEU

"1. A legislative act may delegate to the Commission the power to adopt non-legislative acts of general application to supplement or amend certain non-essential elements of the legislative act. The objectives, content, scope and duration of the delegation of power shall be explicitly defined in the legislative acts. The essential elements of an area shall be reserved for the legislative act and accordingly shall not be the subject of a delegation of power.

2. Legislative acts shall explicitly lay down the conditions to which the delegation is subject; these conditions may be as follows:

(a) the European Parliament or the Council may decide to revoke the delegation;

(b) the delegated act may enter into force only if no objection has been expressed by the European Parliament or the Council within a period set by the legislative act.

For the purposes of (a) and (b), the European Parliament shall act by a majority of its component members, and the Council by a qualified majority.

3. The adjective "delegated" shall be inserted in the title of delegated acts".

Important to note is what the Commission writes in its communication about the importance of this Article 290 (and the following article 291):

*"For it is around Articles 290 and 291 that the legal framework will have to be constructed **to replace the comitology system** established under the Treaty establishing the European Community".* (page 3, editors highlight).

It is also important to note that the Commission interpretation secures its own powers in Article 290. For while the tenor of the legislation is that the Commission can use delegated powers subject to the legislators right to rescind or overrule if it disagrees with the way this is being done, The communication imposes on the legislator that a **"right to revocation"** does only come with **"a duty to explain the reasons"** and the **"right to opposition"** to measures taken by the Commission is only "suspensive" in nature (pages 8 and 9).

This kind of interpretation might seem logical in the first place, but since this is not defined in the Treaties, it implies that the Commission can determine how their right to legislate (i.e. to delegate legislative rights or to take back this delegation) is to be limited.

Finally, the Annex of the Communication lays out a number of possible formulations that could be used when the European legislator wants to use Article 290 in a legislative act.

The most relevant clauses of the Commission position are:

"1. INTRODUCTION

Article 290 of the Treaty on the Functioning of the European Union, as laid down in the Treaty of Lisbon signed on 13 December 2007 (1) (hereinafter "the new Treaty"), allows the legislator to delegate to the Commission the power to adopt non-legislative acts of general application to supplement or amend certain non-essential elements of a legislative act. Legal acts adopted by the Commission in this way are referred to in the terminology used by the new Treaty as "delegated acts" (Article 290(3)).

This provision does not require the adoption of any binding instrument of secondary legislation to ensure its implementation; it is sufficient in itself and contains all the elements required by the legislator for defining, case by case, the scope, content and practical arrangements for delegating power.

2. SCOPE OF DELEGATED ACTS (extracts)

(...)

A delegation of power within the meaning of Article 290 is possible only in a legislative act. However, it makes little difference whether or not the legislative act was adopted jointly by Parliament and the Council, because Article 290 does not distinguish between the ordinary legislative procedure (formerly codecision) and special legislative procedures.

(...)

When it receives the power to adopt delegated acts under Article 290 the Commission is authorised to supplement or amend the work of the legislator.

(...)

Finally, it is important to stress that the fact that the acts adopted by the Commission are of general application is not in itself sufficient to trigger the application of the legal regime of delegated acts rather than that of implementing acts; Article 291 also allows the Commission to adopt implementing measures of general application.

In order to ensure the uniform implementation of a legally binding act of the European Union the Commission may use either individual measures or acts of general application.

(...)

It makes little difference whether the annex contains purely technical measures; as soon as the Commission is empowered to amend an annex containing measures of general application, the regime of delegated acts must be applied.

(...)

When the legislator confers powers on the Commission, it must define the framework within which they are exercised in each legislative act.

(...)

Article 290 contains no provision referring directly or indirectly to the procedure for adopting delegated acts. Using the powers conferred on it by the legislator the Commission adopts the acts necessary to attain the objectives laid down by the basic instrument.

(...)

However, neither of these provisions has anything to say about the procedure by which the Commission adopts a delegated act. Consequently, the Commission enjoys a large measure of autonomy in this matter.

(...)

Except in cases where this preparatory work does not require any new expertise, the Commission intends systematically to consult experts However, it should be made clear that these experts will have a consultative rather than an institutional role in the decision-making procedure. At the end of the consultations, the Commission will inform the experts of the conclusions it believes should be drawn from the discussions, its preliminary reactions and how it intends to proceed.

(...)

the Commission would recommend an alternative approach, which would allow it to adopt and implement immediately a delegated act which would nevertheless be subject to the right of opposition. This act would be notified immediately to the legislator and would apply provided no objection was expressed by Parliament or the Council during a period that might be fixed at six weeks. If objections were expressed, the delegated act would cease to apply".

The consequence is therefore that, once the ITS Implementation Directive [i.3] becomes law (achieved July 2010), the Commission will decide how measures, such as eCall are to be implemented.

So how will the delegated powers be used by the EC to obtain the implementation of eCall?

The exact details of arrangements are still being finalised, and as the use of these delegated powers is quite new (enabled by the Lisbon Treaty which entered into force on the 1st December 2009), will require careful and sensitive attention by the Commission, and most probably will require some fine tuning and revision. The following paragraphs describe the current thinking and probable outcome. The limits of the delegated powers are discussed above, but broadly speaking, as we have seen above, the European Commission has more or less a free range of how it implements eCall and has been given provisionally a seven year period to do so. It should be anyway kept in mind that the Commission does not have legislative powers according to the Treaties, and such delegated powers can be withdrawn at anytime by the European Parliament or the Council, although, as we have seen above, that would require a decision of the full Parliament, so is unlikely in all but the most extreme of circumstances.

As for most EU legislative initiatives, the first stage for eCall implementation will be an 'Impact Assessment'. There have been several studies over the years on eCall, and this final impact assessment (fully conducted by the EC) will be also based on this previous work. Fortunately the last assessment was more realistic than some of the earlier studies, erring if anything towards the pessimistic, and certainly not written with the ardour of an enthusiast, so cannot be accused of being carried away by optimistic belief. The final impact assessment is most likely to conclude that there are substantial benefits in respect of eCall, although those benefits will vary widely across the Member States. The Impact Assessment will also show which policy option is the most cost-efficient and effective for the implementation of eCall (zero action, voluntary approach or regulatory measures). It is expected by the Commission that a public consultation, as part of the Impact Assessment, will open by July, with a commenting period ending in September. The final version of the Impact Assessment is expected to be approved in December 2010 and published in January 2011.

If, as seems likely because some countries have not yet signed the MoU on eCall, the impact assessment shows the need for regulatory measures, then the ITS Directive will be followed by the adoption of a 'Common Specification for eCall'. It is clear that this will be embrace Pan European eCall only and anyway, in respect of the eCall NAD conformance, it is, in any event, only the 'Common Specification for Pan European eCall' that is relevant to the present document. This common specification will be sent for comment, but will be subsequently instructed for implementation.

The 'Common Specification' will make reference to the CEN and ETSI Standards that underpin the possibility for and interoperability of eCall. The finalisation and approval of the two Technical Specifications associated with STF399 are therefore very relevant, as is the deliverable of the proposed CEN Project Team specifying 'End-to-End conformance tests' for eCall (which will also reference the TS's produced by STF399), which between them should complete the suite of Standards required for eCall. The current expectation is that the 'Common Specification' will be a relatively short document, primarily providing the objectives and their achievement by reference to the relevant Standards. Member States (or Associated States) and manufacturers who wish to implement eCall will then be required to do this in a manner consistent with the 'Common Specification'.

The timetable for implementation then needs to be considered. eCall has four diverse primary actors:

- The occupants of the affected vehicle
- The vehicle manufacturer/equipment supplier
- The Mobile Network Operators (MNO)
- The Public Service Assistance Points (PSAP)

The provision of the service to the first of these – the client- the occupants of the vehicle, is dependent on the parallel implementation of ALL three of the other actors.

However the conditions and requirements and impositions on each of the other three actors is significantly different, and will be addressed separately, presumably by the issuing of different legislative actions.

The case for the MNOs will be easiest and quickest to implement. The MNOs have already agreed to the general principles, and in particular, to the introduction of the eCall flag. All that therefore needs to happen is for the Commission to issue a Recommendation requiring them to conform to the relevant standards by date x, and to support the eCall flag by date y (which may be the same or a different date). Specific variations in timing may be made for individual Member States where there are technical difficulties in achieving the common timetable.

In respect of the ability of Administrations/PSAPs to be able to provide the eCall support service, the process will be similar - the Commission to adopt 'Common Specifications' under the framework of the ITS Directive. The Commission to then issue a Recommendation requiring them to conform to the relevant standards by date x, Similarly, specific variations in timing may be made for individual Member States where there are technical difficulties in achieving the common timetable.

The position in respect of vehicle manufacturers and OEMs is for the most part more complex, as the in-vehicle part will be regulated within the type approval regulatory framework, which may require three years until final implementation.

9.4.3 SIM/USIM maintenance and end of life provisions

CEN 16072 [i.61], Intelligent transport systems - ESafety - Pan European eCall- Operating requirements, identifies two requirements in respect of SIM/USIM maintenance and end of life provisions:

"7.1.5 SIM/USIM maintenance

Any SIM/USIM within the IVS shall be maintained by the issuing MNO in accordance with specifications of ETSI/3GPP and/or European Regulation for such maintenance, or in the absence of such specifications/ regulations, in accordance with a declared procedure determined and practiced by the MNO.

7.1.6 SIM/USIM end of life

At the end of the life of the Vehicle any SIM/USIM shall be taken out of service in accordance with specifications of ETSI/3GPP and/or European Regulation for such end of life provisions, or in the absence of such specifications/regulations, in accordance with a declared procedure determined and practiced by the MNO

ETSI/3GPP Standards in respect of SIM maintenance and end of life provisions are left to the decision of the issuing MNO".

The present document identifies that this issue may require further attention in respect of eCall implementation where the situation of the SIM/USIM is very different than that of a normal mobile phone. The present document draws the attention of EeIP Task Force MNO-Auto to consider if regulation is required.

9.4.4 Implementation timetable

The deployment of Pan-European eCall is therefore expected by the end of 2014.

It is expected that the Common Specifications will be adopted by the end of 2010.

10 EC liaisons for eCall

10.1 PSAP expert group

This group has been, in effect, superseded by the eCall Implementation Platform, although it keeps its independence stand-by and can be consulted/called for meeting on issues specific to PSAPs if needed. No further meetings are planned at present.

10.2 European eCall Implementation Platform

The European eCall Implementation Platform is the coordination body bringing together all relevant stakeholders interested in the quick implementation of the pan-European eCall.

eCall is an eSafety technology that is promoted by the European Commission. The technology intends to bring rapid assistance to motorists involved in a collision anywhere in the European Union. Many organisations are involved with the wide-deployment of this technology across Europe, focusing on different aspects of eCall including in-vehicle systems, wireless data delivery, and Public Safety Answering Points (PSAPs).

To harmonise the work of various stakeholders, the e-Call Implementation Platform was set up in February 2009 at the initiative of the European Commission. It brings together all major stakeholders to synchronise the activities accelerating the deployment of eCall at national and European level. Participants include the European Commission, the Member States, industry and other associations. The Platform is co-chaired by ERTICO – ITS Europe and a Member State (Finland until beginning of 2010, new vice-chair under nomination).

The European e-call Implementation Platform will build on the previous work done by the eCall Driving Group, PSAPs Expert Group and the European Standardisation Organisations

Objectives:

The European e-call Implementation Platform aims to guide, coordinate and monitor the progress of the implementation of the eCall service across Europe to ensure a timely, effective and harmonised deployment of the eCall service in Europe.

The Platform has set up a number of Task Forces which look into different open issues which need to be addressed to enable the quick deployment of the service at European level.

Partners:

The eCall Implementation Platform brings together representatives of the relevant stakeholders associations and of the National Platforms supporting the implementation of a pan-European in-vehicle emergency call in Europe.

(Source ERTICO)

Next meeting planned for March 2011.

11 Recommendations for updates of ETSI/3GPP deliverables

In accordance with the requirements for eCall terminals specified in TS 122 101 [i.23], eCall 'only' terminals are restricted by their subscription to making only emergency calls. Following power-up an eCall 'only' terminal performs a self-test and a background scan to identify potential access networks, without registering on a mobile network. It then enters the MM IDLE eCALL INACTIVE substate. There is a need to verify that, when in the MM IDLE eCALL INACTIVE sub-state, an eCall 'only' terminal conforms to the unwanted emissions limits in accordance with the Directive 1999/5/EC [i.7], article 3.2. This may be covered by existing tests.

11.1 EN 301 511

It is recommended that unwanted emission test requirements for eCall 'only' terminals be covered in EN 301 511 [i.22] GSM:

1. Conducted spurious emissions - MS in idle mode substate eCALL INACTIVE
2. Radiated spurious emissions - MS in idle mode substate eCALL INACTIVE

The detailed test protocols are further specified in TS 151 010 [i.19].

11.2 EN 301 908

It is recommended that unwanted emission test requirements for eCall 'only' terminals be covered EN 301 908 [i.21] (UMTS):

1. Conducted spurious emissions - UE in idle mode substate eCALL INACTIVE
2. Radiated spurious emissions - UE in idle mode substate eCALL INACTIVE

The detailed test protocols are also specified in EN 301 908 [i.21].

11.3 Protocol test specifications for eCall Network Access Devices

Further protocol tests for eCall capable terminals, configured for both restricted and unrestricted operation, are being developed by ETSI STF 399 and will be specified in the following:

TS 102 936 [i.1] Part 1: "eCall Network Access Device (NAD) conformance specification; Protocol test specification"; and Part 2: "eCall Network Access Device (NAD) conformance specification; Test Suites".

Annex A: Framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles Directive (Relevant Extracts from)

The informative annexes of the present document include text from publicly and freely available documents, together with website references of their source which grant or permit that the contents of those documents may be freely used and in some cases provide any conditions or limitations to further reproduction. The texts of these documents, or extracts from these texts, are therefore reproduced verbatim and conform to the editorial policy of the issuer and not the editorial policy of ETSI.

The following text is the verbatim text of relevant extracts from the Directive. It is reprinted in "normal" font but the original format styles have been retained.

NOTE: Where text has been omitted it is denoted by "(...)" between lines. All subject /chapter headings are included. The entire text may be obtained via the following link:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:263:0001:0001:EN:PDF>

A.1 Relevant extracts

Text with EEA relevance, that may also be of relevance to eCall and, specifically, the eCall NAD.

Extracts from:

DIRECTIVE 2007/46/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (Framework Directive).

Whereas:

(1) Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers (3), has been substantially amended several times. Since further amendments are to be made, it should be recast in the interests of clarity.

(...)

(3) The technical requirements applicable to systems, components, separate technical units and vehicles should be harmonised and specified in regulatory acts. Those regulatory acts should primarily seek to ensure a high level of road safety, health protection, environmental protection, energy efficiency and protection against unauthorised use.

(4) Council Directive 92/53/EEC of 18 June 1992 amending Directive 70/156/EEC on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers (4) limited application of the Community whole vehicle type-approval procedure to the vehicle category M1. However, in order to complete the internal market and to ensure that it functions properly, the scope of the present Directive should cover all categories of vehicles, enabling manufacturers to benefit from the advantages of the internal market by means of the Community type-approval.

(5) In order to enable manufacturers to adapt to the new harmonised procedures, a sufficient lead-time should be allowed before Community vehicle type-approval becomes compulsory for vehicles belonging to categories other than M1 that are built in one stage. A longer lead-time is required for vehicles of categories other than M1 that require a multi-stage approval, since that procedure will involve body-builders, who will need to gain sufficient experience in that field so that the necessary procedures can be implemented properly. However, due to the importance of safety for vehicles of category M2 and M3, during the transitional period when national type approval is still valid in order to allow manufacturers to get experience with EU vehicle type approval, it is necessary that those vehicles comply with the technical requirements of the harmonised directives.

(EC) No 715/2007 of the European Parliament and of the Council

(OJ L 171, 29.6.2007, p. 1).

(1) OJ C 108, 30.4.2004, p. 29.

(2) Opinion of the European Parliament of 11 February 2004 (OJ C 97 E, 22.4.2004, p. 370), Council Common Position of 11 December 2006 (OJ C 64 E, 20.3.2007, p. 1), Position of the European Parliament of 10 May 2007 (not yet published in the Official Journal) and Council Decision of 23 July 2007.

(3) OJ L 42, 23.2.1970, p. 1. Directive as last amended by Regulation

(4) OJ L 225, 10.8.1992, p. 1.

(...)

(11) By Council Decision 97/836/EC (2), the Community acceded to the Agreement of the United Nations Economic Commission for Europe concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted to and/or used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions (Revised 1958 Agreement).

Consequently, United Nations Economic Commission for Europe (UNECE) Regulations to which the Community accedes, in application of that Decision, and amendments to UNECE Regulations to which the Community has already acceded should be incorporated within the Community type-approval procedure either as requirements for EU vehicle type-approval, or as alternatives to existing Community law. In particular, where the Community decides, by means of a Council decision, that a UNECE Regulation shall become part of the EU vehicle type-approval procedure and replace existing Community law,

(1) OJ L 184, 17.7.1999, p. 23. Decision as amended by Decision 2006/512/EC (OJ L 200, 22.7.2006, p. 11).

(2) OJ L 346, 17.12.1997, p. 78.

(...)

(14) The main objective of the legislation on the approval of vehicles is to ensure that new vehicles, components and separate technical units put on the market provide a high level of safety and environmental protection. This aim should not be impaired by the fitting of certain parts or equipment after vehicles have been placed on the market or have entered service. Thus, appropriate measures should be taken in order to make sure that parts or equipment which can be fitted to vehicles and which are capable of significantly impairing the functioning of systems that are essential in terms of safety or environmental protection, are subject to a prior control by an approval authority before they are offered for sale. These measures should consist of technical provisions concerning the requirements that those parts or equipment have to comply with.

(15) These measures should only apply to a limited number of parts or equipment. The list of such parts or equipment and subsequent requirements should be established after having consulted stakeholders. In establishing the list, the Commission should consult stakeholders on the basis of a report and strive for a fair balance between the requirements of improving road safety and environmental protection, as well as the interests of consumers, manufacturers and distributors in preserving competition in the aftermarket.

(16) The list of parts and equipment, the essential systems concerned as well as the testing and implementation measures should be determined in accordance with Decision 1999/468/EC. Since those measures are of general scope and are designed to amend non-essential elements of this Directive or to supplement it by the addition of new non-essential elements, they should be adopted in accordance with the regulatory procedure with scrutiny provided for in Article 5a of that Decision.

(17) This Directive constitutes a set of specific safety requirements within the meaning of Article 1(2) of Directive 2001/95/EC of the European Parliament and of the Council of 3 December 2001 on general product safety (1), laying down specific requirements for protecting the health and safety of consumers. Therefore, it is important to establish provisions to ensure that, in case a vehicle presents a serious risk for consumers resulting from the application of this Directive or of the regulatory acts listed in Annex IV, the manufacturer has taken effective protective measures, including the recall of vehicles. Approval authorities should therefore be able to assess whether the proposed measures are sufficient or not.

(18) It is important that manufacturers supply relevant information to vehicle owners in order to prevent misuse of safety devices. It is appropriate to include provisions thereon in this Directive.

(19) It is also important for equipment manufacturers to have access to certain information that is available only from the vehicle manufacturer, that is to say, the technical information, including drawings, required for the development of parts for the aftermarket.

(20) It is equally important that manufacturers make information readily available to independent operators to ensure the repairing and maintenance of vehicles in a fully competitive market. These information requirements have so far been incorporated in Community legislation, and in particular in Regulation (EC) No 715/2007 of the European Parliament and of the Council of 20 June 2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and 6) and on access to vehicle repair and maintenance information (2), on the basis that the Commission will present a report, no later than four years after the date of entry into force of that Regulation, on the operation of the system of access to vehicle repair and maintenance information and will consider whether it would be appropriate to consolidate all provisions governing access to such information within a revised framework directive on type approval.

(...)

(22) Experience shows that appropriate measures may have to be taken without delay with a view to ensuring a better protection of road users where shortcomings have been identified in the existing legislation. For such urgent cases, the necessary amendments to the separate directives or regulations should be adopted in accordance with Decision 1999/468/EC. Since those measures are of general scope and are designed to amend non-essential elements of the separate directives or regulations or to supplement them by the addition of new non-essential elements, they should be adopted in accordance with the regulatory procedure with scrutiny provided for in Article 5a of that Decision.

(...)

HAVE ADOPTED THIS DIRECTIVE:

CHAPTER I GENERAL PROVISIONS

Article 1 Subject matter

This Directive establishes a harmonised framework containing the administrative provisions and general technical requirements for approval of all new vehicles within its scope and of the systems, components and separate technical units intended for those vehicles, with a view to facilitating their registration, sale and entry into service within the Community.

This Directive also establishes the provisions for the sale and entry into service of parts and equipment intended for vehicles approved in accordance with this Directive.

(...)

Article 2 Scope

1. This Directive applies to the type-approval of vehicles designed and constructed in one or more stages for use on the road, and of systems, components and separate technical units designed and constructed for such vehicles.

It also applies to the individual approval of such vehicles.

This Directive also applies to parts and equipment intended for vehicles covered by this Directive.

(1) OJ L 171, 9.7.2003, p. 1. Directive as last amended by Council Directive 2006/96/EC (OJ L 363, 20.12.2006, p. 81).

(2) OJ L 124, 9.5.2002, p. 1. Directive as last amended by Council Directive 2006/96/EC.

(3) OJ L 157, 9.6.2006, p. 24.

Article 3 Definitions

For the purposes of this Directive and of the regulatory acts listed in Annex IV, save as otherwise provided therein:

1. 'regulatory act' means a separate directive or regulation or a UNECE Regulation annexed to the Revised 1958 Agreement;

2. 'separate directive or regulation' means a directive or regulation listed in Part I of Annex IV. This term includes also their implementing acts;

3. 'type-approval' means the procedure whereby a Member State certifies that a type of vehicle, system, component or separate technical unit satisfies the relevant administrative provisions and technical requirements;
4. 'national type-approval' means a type-approval procedure laid down by the national law of a Member State, the validity of such approval being restricted to the territory of that Member State;
5. 'EU type-approval' means the procedure whereby a Member State certifies that a type of vehicle, system, component or separate technical unit satisfies the relevant administrative provisions and technical requirements of this Directive and of the regulatory acts listed in Annex IV or XI;
6. 'individual approval' means the procedure whereby a Member State certifies that a particular vehicle, whether unique or not, satisfies the relevant administrative provisions and technical requirements;
7. 'multi-stage type-approval' means the procedure whereby one or more Member States certify that, depending on the state of completion, an incomplete or completed type of vehicle satisfies the relevant administrative provisions and technical requirements of this Directive;
8. 'step-by-step type-approval' means a vehicle approval procedure consisting in the step-by-step collection of the whole set of EU type-approval certificates for the systems, components and separate technical units relating to the vehicle, and which leads, at the final stage, to the approval of the whole vehicle;
9. 'single-step type-approval' means a procedure consisting in the approval of a vehicle as a whole by means of a single operation;
10. 'mixed type-approval' means a step-by-step type-approval procedure for which one or more system approvals are achieved during the final stage of the approval of the whole vehicle, without it being necessary to issue the EU type-approval certificates for those systems;
11. 'motor vehicle' means any power-driven vehicle which is moved by its own means, having at least four wheels, being complete, completed or incomplete, with a maximum design speed exceeding 25 km/h;
12. 'trailer' means any non-self-propelled vehicle on wheels which is designed and constructed to be towed by a motor vehicle;
13. 'vehicle' means any motor vehicle or its trailer as defined in points (11) and (12);
14. 'hybrid motor vehicle' means a vehicle with at least two different energy converters and two different energy storage systems (on-vehicle) for the purpose of vehicle propulsion;
15. 'hybrid electric vehicle' means a hybrid vehicle that, for the purpose of mechanical propulsion, draws energy from both of the following on-vehicle sources of stored energy/power:
 - a consumable fuel,
 - an electrical energy/power storage device (e.g. battery, capacitor, flywheel/generator, etc.);
16. 'mobile machinery' means any self-propelled vehicle which is designed and constructed specifically to perform work which, because of its construction characteristics, is not suitable for carrying passengers or for transporting goods. Machinery mounted on a motor vehicle chassis shall not be considered as mobile machinery;
17. 'type of vehicle' means vehicles of a particular category which do not differ in at least the essential respects specified in Section B of Annex II. A type of vehicle may contain variants and versions as defined in Section B of Annex II;
18. 'base vehicle' means any vehicle which is used at the initial stage of a multi-stage type-approval process;
19. 'incomplete vehicle' means any vehicle which must undergo at least one further stage of completion in order to meet the relevant technical requirements of this Directive;
20. 'completed vehicle' means a vehicle, resulting from the process of multi-stage type-approval, which meets the relevant technical requirements of this Directive;
21. 'complete vehicle' means any vehicle which need not be completed in order to meet the relevant technical requirements of this Directive;

22. 'end-of-series vehicle' means any vehicle that is part of a stock which cannot be registered or sold or entered into service owing to the entry into force of new technical requirements against which it has not been approved;
23. 'system' means an assembly of devices combined to perform one or more specific functions in a vehicle and which is subject to the requirements of any of the regulatory acts;
24. 'component' means a device subject to the requirements of a regulatory act and intended to be part of a vehicle, which may be type-approved independently of a vehicle where the regulatory act makes express provisions for so doing;
25. 'separate technical unit' means a device subject to the requirements of a regulatory act and intended to be part of a vehicle, which may be type-approved separately, but only in relation to one or more specified types of vehicle where the regulatory act makes express provisions for so doing;
26. 'original parts or equipment' means parts or equipment which are manufactured according to the specifications and production standards provided by the vehicle manufacturer for the production of parts or equipment for the assembly of the vehicle in question. This includes parts or equipment which are manufactured on the same production line as these parts or equipment. It is presumed unless the contrary is proven, that parts constitute original parts if the part manufacturer certifies that the parts match the quality of the components used for the assembly of the vehicle in question and have been manufactured according to the specifications and production standards of the vehicle manufacturer;
27. 'manufacturer' means the person or body who is responsible to the approval authority for all aspects of the type-approval or authorisation process and for ensuring conformity of production. It is not essential that the person or body be directly involved in all stages of the construction of the vehicle, system, component or separate technical unit which is the subject of the approval process;
28. 'manufacturer's representative' means any natural or legal person established in the Community who is duly appointed by the manufacturer to represent him before the approval authority and to act on his behalf in matters covered by this Directive, and where reference is made to the term 'manufacturer', it is to be understood as indicating either the manufacturer or his representative;
29. 'approval authority' means the authority of a Member State with competence for all aspects of the approval of a type of vehicle, system, component or separate technical unit or of the individual approval of a vehicle; for the authorisation process, for issuing and, if appropriate, withdrawing approval certificates; for acting as the contact point for the approval authorities of other Member States; for designating the technical services and for ensuring that the manufacturer meets his obligations regarding the conformity of production;
30. 'competent authority' in Article 42 means either the approval authority or a designated authority, or an accreditation body acting on their behalf;
31. 'technical service' means an organisation or body designated by the approval authority of a Member State as a testing laboratory to carry out tests, or as a conformity assessment body to carry out the initial assessment and other tests or inspections, on behalf of the approval authority, it being possible for the approval authority itself to carry out those functions;
32. 'virtual testing method' means computer simulations including calculations which demonstrate whether a vehicle, a system, a component or a separate technical unit fulfils the technical requirements of a regulatory act. For testing purposes, a virtual method does not require the use of a physical vehicle, system, component or separate technical unit;
33. 'type-approval certificate' means the document whereby the approval authority officially certifies that a type of vehicle, system, component or separate technical unit is approved;
34. 'EU type-approval certificate' means the certificate set out in Annex VI or in the corresponding annex to a separate directive or regulation, the communication form set out in the relevant Annex to one of the UNECE Regulations listed in Part I or Part II of Annex IV to this Directive, being deemed to be equivalent thereto;
35. 'individual approval certificate' means the document whereby the approval authority officially certifies that a particular vehicle is approved;
36. 'certificate of conformity' means the document set out in Annex IX, issued by the manufacturer and certifying that a vehicle belonging to the series of the type approved in accordance with this Directive complied with all regulatory acts at the time of its production;

37. 'information document' means the document set out in Annex I or Annex III, or in the corresponding Annex to a separate directive, or regulation, that prescribes the information to be supplied by an applicant, it being permissible to supply the information document in the form of an electronic file;

38. 'information folder' means the complete folder, including the information document, file, data, drawings, photographs, and so on, supplied by the applicant, it being permissible to supply the information folder in the form of an electronic file;

39. 'information package' means the information folder accompanied by the test reports and all other documents added by the technical service or by the approval authority to the information folder in the course of carrying out their functions, it being permissible to supply the information package in the form of an electronic file;

40. 'index to the information package' means the document listing the contents of the information package, suitably numbered or otherwise marked so as to identify clearly all the pages, the format of that document being such as to present a record of the successive steps in the management of the EU type-approval, in particular the dates of the revisions and updating.

CHAPTER II GENERAL OBLIGATIONS

Article 4 Obligations of Member States

1. Member States shall ensure that manufacturers applying for approval comply with their obligations under this Directive.
2. Member States shall approve only such vehicles, systems, components or separate technical units as satisfy the requirements of this Directive.
3. Member States shall register or permit the sale or entry into service only of such vehicles, components and separate technical units as satisfy the requirements of this Directive.

(...)

Article 5 Obligations of manufacturers

1. The manufacturer is responsible to the approval authority for all aspects of the approval process and for ensuring conformity of production, whether or not the manufacturer is directly involved in all stages of the construction of a vehicle, system, component or separate technical unit.
2. In the case of multi-stage type-approval, each manufacturer is responsible for the approval and conformity of production of the systems, components or separate technical units added at the stage of vehicle completion handled by him.

The manufacturer who modifies components or systems already approved at earlier stages shall be responsible for the approval and conformity of production of those components and systems.

3. For the purposes of this Directive, a manufacturer established outside the Community shall appoint a representative established in the Community to represent him before the approval authority.

CHAPTER III EC TYPE-APPROVAL PROCEDURES

Article 6 Procedures to be followed for the EC type-approval of vehicles

1. The manufacturer may choose one of the following procedures:
(a) step-by-step type-approval; (b) single-step type-approval; (c) mixed type-approval.

(...)

6. The manufacturer shall submit the application to the approval authority. Only one application may be submitted in respect of a particular type of vehicle and it may be submitted in only one Member State.

A separate application shall be submitted for each type to be approved.

(...)

Article 7 Procedure to be followed for the EC type-approval of systems, components or separate technical units

1. The manufacturer shall submit the application to the approval authority. Only one application may be submitted in respect of a particular type of system, component or separate technical unit and it may be submitted in only one Member State. A separate application shall be submitted for each type to be approved.

(...)

4. The manufacturer shall make available to the approval authority as many vehicles, components or separate technical units as are required under the relevant separate directives or regulations for the performance of the required tests.

(...)

CHAPTER IV CONDUCT OF EC TYPE-APPROVAL PROCEDURES**Article 8 General provisions**

(...)

3. If a Member State finds that a type of vehicle, system, component or separate technical unit, albeit in conformity with the required provisions, presents a serious risk to road safety or seriously harms the environment or seriously harms public health, it may refuse to grant EC type-approval. In this case, it shall immediately send the other Member States and the Commission a detailed file explaining the reasons for its decision and setting out the evidence for its findings.

(...)

Article 9 Specific provisions concerning vehicles

(...)

Article 10 Specific provisions concerning systems, components or separate technical units

(...)

2. Member States shall grant a component or separate technical unit EC type-approval in respect of a component or separate technical unit which conforms to the particulars in the information folder and which meets the technical requirements laid down in the relevant separate directive or regulation, as prescribed in Annex IV.

3. Where components or separate technical units, whether or not intended for repair, servicing or maintenance, are also covered by a system type-approval with respect to a vehicle, no additional component or separate technical unit approval shall be required unless provided for under the relevant regulatory act.

4. Where a component or separate technical unit fulfils its function or offers a specific feature only in conjunction with other parts of the vehicle, thereby making it possible to verify compliance with the requirements only when the component or separate technical unit is operating in conjunction with those other vehicle parts, the scope of the EC type-approval of the component or the separate technical unit shall be restricted accordingly. In such cases, the EC type-approval certificate shall specify any restriction on its use and shall indicate the special conditions for its mounting. When such a component or separate technical unit is fitted by the vehicle manufacturer, compliance with any applicable restrictions on use or conditions for mounting shall be verified at the time when the vehicle is approved.

Article 11 Tests required for EC type-approval

1. Compliance with the technical prescriptions laid down in this Directive and in the regulatory acts listed in Annex IV shall be demonstrated by means of appropriate tests performed by designated technical services.

The test procedures, the specific equipment and tools necessary to perform those tests shall be described in each of the regulatory acts.

2. The required tests shall be performed on vehicles, components and separate technical units which are representative of the type to be approved.

However, the manufacturer may select, in agreement with the approval authority, a vehicle, a system, a component or a separate technical unit which, while not representative of the type to be approved, combines a number of the most unfavourable features with regard to the required level of performance. Virtual testing methods may be used to aid decision-making during the selection process.

3. As alternatives to the test procedures referred to in paragraph 1 and with the agreement of the approval authority, virtual testing methods may be used at the request of the manufacturer with respect to the regulatory acts listed in Annex XVI.

4. The general conditions which virtual testing methods must fulfil are set out in Appendix 1 to Annex XVI.

For each of the regulatory acts listed in Annex XVI, the specific testing conditions and the administrative provisions related thereto shall be laid down in Appendix 2 to that Annex.

5. The Commission shall establish the list of the regulatory acts for which virtual testing methods are permitted, the specific conditions and the administrative provisions related thereto. These measures, designed to amend non-essential elements of this Directive, inter alia by supplementing it, shall be established and updated in accordance with the regulatory procedure with scrutiny referred to in Article 40(2).

Article 12 Conformity of production arrangements

(...)

CHAPTER V AMENDMENTS TO EC TYPE-APPROVALS

Article 13 General provisions

1. The manufacturer shall inform without delay the Member State that granted the EC type-approval of any change in the particulars recorded in the information package. That Member State shall decide, in accordance with the rules laid down in this Chapter, which procedure is to be followed. Where necessary, the Member State may decide, in consultation with the manufacturer, that a new EC type-approval is to be granted.

2. An application for the amendment of an EC type-approval shall be submitted exclusively to the Member State that granted the original EC type-approval.

3. If the Member State finds that, for the purposes of making an amendment, fresh inspections or fresh tests are necessary, it shall inform the manufacturer accordingly. The procedures referred to in Articles 14 and 15 shall apply only after the requisite fresh inspections or fresh tests have been successfully carried out.

Article 14 Specific provisions concerning vehicles

(...)

Article 15 Specific provisions concerning systems, components or separate technical units

1. If particulars recorded in the information package have changed, the amendment shall be designated a 'revision'.

In such cases, the approval authority shall issue the revised pages of the information package as necessary, marking each revised page to show clearly the nature of the change and the date of re-issue. A consolidated, updated version of the information package, accompanied by a detailed description of the changes, shall be deemed to meet this requirement.

2. The revision shall be designated an 'extension' if, in addition to the provisions of paragraph 1:

(a) further inspections or fresh tests are required;

(b) any information on the EC type-approval certificate, with the exception of its attachments, has changed;

(c) new requirements under any of the regulatory acts applicable to the approved system, component or separate technical unit enter into force.

In such cases, the approval authority shall issue a revised EC type-approval certificate denoted by an extension number, incremented in accordance with the number of successive extensions already granted. In cases where the amendment is necessitated by the application of paragraph 2(c), the third section of the approval number shall be updated.

The approval certificate shall show clearly the reason for the extension and the date of re-issue.

3. Whenever amended pages or a consolidated, updated version are issued, the index to the information package attached to the approval certificate shall be amended accordingly to show the date of the most recent extension or revision, or the date of the most recent consolidation of the updated version.

(...)

Article 16 Issue and notification of amendments

(...)

CHAPTER VI VALIDITY OF AN EC TYPE-APPROVAL OF VEHICLES**Article 17 Termination of validity**

(...)

CHAPTER VII CERTIFICATE OF CONFORMITY AND MARKINGS**Article 18 Certificate of conformity**

(...)

Article 19 EC type-approval mark

1. The manufacturer of a component or separate technical unit, whether or not it is part of a system, shall affix to each component or unit manufactured in conformity with the approved type the EC type-approval mark, required by the relevant separate directive or regulation.

2. Where no EC type-approval mark is required, the manufacturer shall affix at least his trade name or trade mark, and the type number and/or an identification number.

3. The EC type-approval mark shall be in accordance with the Appendix to Annex VII.

CHAPTER VIII NEW TECHNOLOGIES OR CONCEPTS INCOMPATIBLE WITH SEPARATE DIRECTIVES**Article 20 Exemptions for new technologies or new concepts**

1. Member States may, on application by the manufacturer, grant an EC type-approval in respect of a type of system, component or separate technical unit that incorporates technologies or concepts which are incompatible with one or more regulatory acts listed in Part I of Annex IV, subject to authorisation being granted by the Commission in accordance with the procedure referred to in Article 40(3).

2. Pending the decision as to whether or not authorisation is granted, the Member State may grant a provisional approval, valid only in its territory, in respect of a type of vehicle covered by the exemption sought, provided that it informs the Commission and the other Member States thereof without delay by means of a file containing the following elements:

(a) the reasons why the technologies or concepts in question make the system, component or separate technical unit incompatible with the requirements;

(b) a description of the safety and environmental considerations concerned and the measures taken;

(c) a description of the tests, including their results, demonstrating that, by comparison with the requirements from which exemption is sought, at least an equivalent level of safety and environmental protection is ensured.

3. Other Member States may decide to accept the provisional approval referred to in paragraph 2 on their territory.

4. The Commission shall decide, in accordance with the procedure referred to in Article 40(3), whether or not to allow the Member State to grant an EC type-approval in respect of that type of vehicle.

Where appropriate, the decision shall also specify whether its validity is subject to any restrictions, such as time-limits. In all cases, the validity of the approval shall not be less than 36 months.

If the Commission decides to refuse authorisation, the Member State shall immediately give notice to the holder of the provisional type-approval referred to in paragraph 2 of this Article that the provisional approval will be revoked six months after the date of the Commission's decision. However, vehicles manufactured in conformity with the provisional approval before it was revoked shall be permitted to be registered, sold or enter service in any Member State that accepted the provisional approval.

5. This Article does not apply where a system, component or separate technical unit complies with a UNECE Regulation to which the Community has acceded.

Article 21 Action required

1. Where the Commission finds that there are sound grounds for granting an exemption pursuant to Article 20, it shall immediately take the necessary steps to adapt the separate directives or regulations concerned to technological developments. These measures, designed to amend non-essential elements of the separate directives or regulations listed in Part I of Annex IV shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 40(2).

Where the exemption pursuant to Article 20 relates to a UNECE Regulation, the Commission shall propose an amendment to the relevant UNECE Regulation in accordance with the procedure applicable under the Revised 1958 Agreement.

2. As soon as the relevant regulatory acts have been amended, any restriction attaching to the exemption shall be lifted immediately.

If the necessary steps to adapt the regulatory acts have not been taken, the validity of an exemption may be extended, at the request of the Member State which granted the approval, by another decision adopted in accordance with the procedure referred to in Article 40(3).

CHAPTER IX VEHICLES PRODUCED IN SMALL SERIES**Article 22 EC type-approval of small series**

(...)

CHAPTER X INDIVIDUAL APPROVALS**Article 24 Individual approvals**

(...)

Article 25 Specific provisions

(...)

CHAPTER XI REGISTRATION, SALE AND ENTRY INTO SERVICE**Article 26 Registration, sale and entry into service of vehicles**

(...)

Article 27 Registration, sale and entry into service of end-of-series vehicles

(...)

Article 28 Sale and entry into service of components and separate technical units

1. Member States shall permit the sale or entry into service of components or separate technical units if and only if they comply with the requirements of the relevant regulatory acts and are properly marked in accordance with Article 19.

(...)

3. By way of derogation from paragraph 1, Member States may permit the sale and entry into service of components or separate technical units that have been exempted from one or more provisions of a regulatory act in application of Article 20 or are intended for mounting on vehicles covered by approvals granted under Articles 22, 23 or 24 that concern the component or separate technical unit in question.

4. By way of derogation from paragraph 1, and unless otherwise provided for in a regulatory act, Member States may permit the sale and entry into service of components or separate technical units that are intended for mounting on vehicles which, at the time of their entry into service, were not required, by this Directive or by Directive 70/156/EEC to be EC type-approved.

CHAPTER XII SAFEGUARD CLAUSES

Article 29 Vehicles, systems, components or separate technical units in compliance with this Directive

1. If a Member State finds that new vehicles, systems, components or separate technical units, albeit in compliance with the applicable requirements or properly marked, present a serious risk to road safety, or seriously harm the environment or public health, that Member State may, for a maximum period of six months, refuse to register such vehicles or to permit the sale or entry into service in its territory of such vehicles, components or separate technical units.

In such cases, the Member State concerned shall immediately notify the manufacturer, the other Member States and the Commission accordingly, stating the reasons on which its decision is based and, in particular, whether it is the result of:

- shortcomings in the relevant regulatory acts, or
- incorrect application of the relevant requirements.

2. The Commission shall consult the parties concerned as soon as possible and, in particular, the approval authority that granted the type-approval in order to prepare the decision.

3. Where the measures referred to in paragraph 1 are attributed to shortcomings in the relevant regulatory acts, the appropriate measures shall be taken as follows:

- where separate directives or regulations listed in Part I of Annex IV are concerned, the Commission shall amend them in accordance with the regulatory procedure with scrutiny referred to in Article 40(2),
- where UNECE Regulations are concerned, the Commission shall propose the necessary draft amendments to the relevant UNECE Regulations in accordance with the procedure applicable under the Revised 1958 Agreement.

4. Where the measures referred to in paragraph 1 are attributed to incorrect application of the relevant requirements, the Commission shall take the appropriate measures to ensure compliance with such requirements.

Article 30 Vehicles, systems, components or separate technical units not in conformity with the approved type

1. If a Member State which has granted an EC type-approval finds that new vehicles, systems, components or separate technical units accompanied by a certificate of conformity or bearing an approval mark do not conform to the type it has approved, it shall take the necessary measures, including, where necessary, the withdrawal of type-approval, to ensure that production vehicles, systems, components or separate technical units, as the case may be, are brought into conformity with the approved type. The approval authority of that Member State shall advise the approval authorities of the other Member States of the measures taken.

2. For the purposes of paragraph 1, deviations from the particulars in the EC type-approval certificate or the information package shall be deemed to constitute failure to conform to the approved type.

A vehicle shall not be deemed to deviate from the approved type where tolerances are permitted by the relevant regulatory acts and those tolerances are respected.

3. If a Member State demonstrates that new vehicles, components or separate technical units accompanied by a certificate of conformity or bearing an approval mark do not conform to the approved type, it may ask the Member State which granted the EC type-approval to verify that vehicles, systems, components or separate technical units in production continue to conform to the approved type. On receipt of such a request, the Member State concerned shall take the requisite action as soon as possible and in any case within six months of the date of the request.

4. The approval authority shall request the Member State which granted the system, component, separate technical unit or incomplete vehicle type-approval to take the necessary action to ensure that vehicles in production are brought back into conformity with the approved type in the following cases:

(a) in relation to an EC vehicle type-approval, where the non-conformity of a vehicle is attributable exclusively to the non-conformity of a system, component or separate technical unit;

(b) in relation to a multi-stage type-approval, where the non-conformity of a completed vehicle is attributable exclusively to the non-conformity of a system, component or separate technical unit being part of the incomplete vehicle, or of the incomplete vehicle itself.

On receipt of such a request, the Member State concerned shall take the requisite action, if necessary in conjunction with the Member State making the request, as soon as possible and in any case within six months of the date of the request. Where a failure to conform is established, the approval authority of the Member State which granted the system, component or separate technical unit EC type-approval or the approval of the incomplete vehicle shall take the measures set out in paragraph 1

(...)

Article 31 Sale and entry into service of parts or equipment which are capable of posing a significant risk to the correct functioning of essential systems

1. Member States shall permit the sale, the offer for sale or entry into service of parts or equipment which are capable of posing a significant risk to the correct functioning of systems that are essential for the safety of the vehicle or for its environmental performance, only if those parts or equipment have been authorised by an approval authority in accordance with paragraphs 5 to 10.

2. Parts or equipment subject to authorisation in accordance with paragraph 1 shall be inserted in the list to be established in Annex XIII. Such a decision shall be preceded by an evaluation resulting in a report and strive for a fair balance between the following elements:

(a) the existence of a serious risk to the safety or environmental performance of vehicles fitted with the parts or equipment under consideration; and

(b) the effect on consumers and manufacturers in the after-market of the imposition under this Article of a possible authorisation requirement on the parts or equipment under consideration.

3. Paragraph 1 shall not apply to original parts or equipment which are covered by a system type-approval with respect to a vehicle and to parts or equipment which are type-approved in accordance with the provisions of one of the regulatory acts listed in Annex IV, except where those approvals relate to aspects other than those covered in paragraph 1. Paragraph 1 shall not apply to parts or equipment exclusively produced for racing vehicles not intended for use on public roads. If parts or equipment included in Annex XIII have a dual use for racing and on the road, these parts or equipment may not be sold or offered for sale to the general public for use in on-road vehicles unless they comply with the requirements of this Article.

Article 32 Recall of vehicles

(...)

Article 33 Notification of decisions and remedies available

(...)

CHAPTER XIII INTERNATIONAL REGULATIONS

Article 34 UNECE Regulations required for EC type-approval

1. UNECE regulations to which the Community has acceded and which are listed in Part I of Annex IV and in Annex XI are part of the EC type-approval of a vehicle in the same way as the separate directives or regulations. They shall apply to the categories of vehicles listed in the relevant columns in the table of Part I of Annex IV and Annex XI.

(...)

Article 35 Equivalence of UNECE Regulations with directives or regulations

1. The UNECE Regulations listed in Part II of Annex IV are recognised as being equivalent to the corresponding separate directives or regulations in as much as they share the same scope and subject matter.

(...)

Article 36 Equivalence with other regulations

The Council may, acting by qualified majority on a proposal from the Commission, recognise the equivalence between the conditions or provisions for EC type-approval of systems, components and separate technical units established by this Directive and the procedures established by international regulations or regulations of third countries, in the framework of multilateral or bilateral agreements between the Community and third countries.

CHAPTER XIV PROVISION OF TECHNICAL INFORMATION

Article 37 Information intended for users

1. The manufacturer may not supply any technical information related to the particulars provided for in this Directive or in the regulatory acts listed in Annex IV which diverges from the particulars approved by the approval authority.
2. Where a regulatory act makes specific provisions for so doing, the manufacturer shall make available to users all relevant information and necessary instructions describing any special conditions or restrictions attaching to the use of a vehicle, a component or a separate technical unit.

That information shall be supplied in the official languages of the Community. It shall be provided, in agreement with the approval authority, in an appropriate supporting document, such as the owner's manual or the maintenance book.

LIST OF ANNEXES

Annex I Complete list of information for the purpose of EC type-approval of vehicles

Annex II Definition of vehicle categories and vehicle types

Annex III Information document for the purpose of EC type-approval of vehicles

Annex IV List of requirements for the purpose of EC type-approval of vehicles

Appendix: List of requirements for EC type-approval of vehicles belonging to category M1, produced in small series

Annex V Procedures to be followed during EC type-approval of vehicles

Appendix 1: Standards with which the entities referred to in Article 41 have to comply

Appendix 2: Procedure for the assessment of the technical services

Annex VI EC type-approval certificate

Appendix: List of the regulatory acts to which the type of vehicle complies

Annex VII EC type-approval certificate numbering system

Appendix: EC component and separate technical unit type-approval mark

Annex VIII Test results

Annex IX EC Certificate of conformity

Annex X Conformity of production procedures

Annex XI Nature of and provisions for special purpose vehicles

Appendix 1: Motor-caravans, ambulances and hearses

Appendix 2: Armoured vehicles

Appendix 3: Wheel-chair accessible vehicles

Appendix 4: Other special purpose vehicles (including trailer caravans)

Appendix 5: Mobile cranes

Annex XII Small series and end-of-series limits

Annex XIII List of parts or equipment which are capable of posing a significant risk to the correct functioning of systems

that are essential for the safety of the vehicle or its environmental performance, their performance requirements, appropriate test procedures, marking and packaging provisions

Annex XIV List of EC type-approvals issued pursuant to regulatory acts

Annex XV List of the regulatory acts for which a manufacturer may be designated as technical service

Annex XVI List of the regulatory acts for which virtual testing methods may be used by a manufacturer or a technical service

Appendix 1: General conditions required from virtual testing methods

Appendix 2: Specific conditions concerning virtual testing methods

Annex XVII Procedures to be followed during multi-stage EC type-approval

Appendix: Model of the manufacturer's additional plate

Annex XVIII Certificate of origin of the vehicle - Manufacturer's declaration of base/incomplete vehicle which is not provided with a Certificate of Conformity

Annex XIX Timetable for the enforcement of this Directive in respect of type-approval

Annex XX Time-limits for the transposition of repealed directives into national law

Annex XXI Correlation table

Annex B: UN ECE Regulations

The following text is the verbatim text of relevant extracts from the Regulations. It is reprinted in "normal" font but the original format styles have been retained.

NOTE: Where text has been omitted it is denoted by '(...)' between lines. All subject /chapter headings are included.

B.1 UN ECE AGREEMENT

E/ECE/324 E/ECE/TRANS/505

5 October 1995

ENGLISH

Original: ENGLISH and FRENCH

ECONOMIC COMMISSION FOR EUROPE INLAND TRANSPORT COMMITTEE

AGREEMENT CONCERNING THE ADOPTION OF UNIFORM TECHNICAL PRESCRIPTIONS FOR WHEELED VEHICLES, EQUIPMENT AND PARTS WHICH CAN BE FITTED AND/OR BE USED ON WHEELED VEHICLES AND THE CONDITIONS FOR RECIPROCAL RECOGNITION OF APPROVALS GRANTED ON THE BASIS OF THESE PRESCRIPTIONS */

Revision 2

(Including the amendments entered into force on 16 October 1995)

UNITED NATIONS

*/ Former title of the Agreement:

Agreement Concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, done at Geneva on 20 March 1958.

**AGREEMENT CONCERNING THE ADOPTION OF UNIFORM TECHNICAL PRESCRIPTIONS
FOR WHEELED VEHICLES, EQUIPMENT AND PARTS WHICH CAN BE FITTED AND/OR BE USED
ON WHEELED VEHICLES AND THE CONDITIONS FOR RECIPROCAL RECOGNITION OF
APPROVALS GRANTED ON THE BASIS OF THESE PRESCRIPTIONS. */**

Preamble

THE CONTRACTING PARTIES, HAVING DECIDED to amend the Agreement Concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, done at Geneva on 20 March 1958, and

DESIRING to define uniform technical prescriptions that it will suffice for certain wheeled vehicles, equipment and parts to fulfil in order to be used in their countries,

DESIRING to adopt these prescriptions whenever possible in their countries, and,

DESIRING to facilitate the use in their countries of the vehicles, equipment and parts, where approved according to these prescriptions by the competent authorities of another Contracting Party,

HAVE AGREED as follows:

Article 1

1. The Contracting Parties shall establish through an Administrative Committee made up of all the Contracting Parties in conformity with the rules of procedure set out in Appendix 1 and on the basis of the following articles and paragraphs, Regulations for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles. Where necessary the technical requirements will include alternatives and when possible they will be performance oriented and include test methods. Conditions for granting type approvals and their reciprocal recognition will be included for use by Contracting Parties who choose to implement Regulations through type approval.

For the purposes of this Agreement:

The term "wheeled vehicles, equipment and parts" shall include any wheeled vehicles, equipment and parts whose characteristics have a bearing on road safety, protection of the environment and energy saving;

Agreement Concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, done at Geneva on 20 March 1958.

The term "type approval pursuant to a Regulation" indicates an administrative procedure by which the competent authorities of one Contracting Party declare, after carrying out the required verifications, that a vehicle, equipment or parts submitted by the manufacturer conform to the requirements of the given Regulation. Afterwards the manufacturer certifies that each vehicle, equipment or parts put on the market were produced to be identical with the approved product.

For the application of the Regulations there could be various administrative procedures alternative to type approval. The only alternative procedure generally known and applied in certain Member States of the Economic Commission for Europe is the self-certification by which the manufacturer certifies, without any preliminary administrative control, that each product put on the market conforms to the given Regulation; the competent administrative authorities may verify by random sampling on the market that the self-certified products comply with the requirements of the given Regulation.

2. The Administrative Committee shall be composed of all the Contracting Parties in accordance with the rules of procedure set out in Appendix 1.

A Regulation, after having been established in accordance with the procedure indicated in Appendix 1, shall be communicated by the Administrative Committee to the Secretary-General of the United Nations, hereinafter called "Secretary-General". As soon as possible thereafter the Secretary-General shall give notification of this Regulation to the Contracting Parties.

The Regulation will be considered as adopted unless, within a period of six months from its notification by the Secretary-General, more than one-third of the Contracting Parties at the time of notification have informed the Secretary-General of their disagreement with the Regulation.

The Regulation shall cover the following:

- (a) Wheeled vehicles, equipment or parts concerned;
- (b) Technical requirements, which if necessary may include alternatives;
- (c) Test methods by which any performance requirements are to be demonstrated;
- (d) Conditions for granting type approval and their reciprocal recognition including any approval markings and conditions for ensuring conformity of production.
- (e) The date(s) on which the Regulation enters into force.

The Regulation may, if needed, include references to the laboratories accredited by the competent authorities where acceptance tests of the types of wheeled vehicles, equipment or parts submitted for approval must be carried out.

3. When a Regulation has been adopted the Secretary-General shall so notify as soon as possible all the Contracting Parties, specifying which Contracting Parties have objected and in respect of which the Regulation shall not enter into force.

4. The adopted Regulation shall enter into force on the date(s) specified therein as a Regulation annexed to this Agreement for all Contracting Parties which did not notify their disagreement.

5. When depositing its instrument of accession, any new Contracting Party may declare that it is not bound by certain Regulations then annexed to this Agreement or that it is not bound by any of them. If, at that time, the procedure laid down in paragraphs 2, 3, and 4 of this Article is in progress for a draft or adopted Regulation, the Secretary-General shall communicate such draft or adopted Regulation to the new Contracting Party and it shall enter into force as a Regulation for the new Contracting Party only under the conditions specified in paragraph 4 of this Article. The Secretary-General shall notify all the Contracting Parties of the date of such entry into force. The Secretary-General shall also communicate to them all declarations concerning the non-application of certain Regulations that any Contracting Party may make in accordance with the terms of this paragraph.

6. Any Contracting Party applying a Regulation may at any time notify the Secretary-General, subject to one year's notice, that its administration intends to cease applying it. Such notification shall be communicated by the Secretary-General to the other Contracting Parties.

Approvals granted shall remain valid until their withdrawal;

If a Contracting Party ceases to issue approvals to a Regulation it shall: Maintain proper supervision on conformity of production of products for which it previously granted type approval;

Take the necessary steps set out in Article 4 when advised of non-conformity by a Contracting Party that continues to apply the Regulation;

Continue to notify the competent authorities of other Contracting Parties of withdrawal of approvals as set out in Article 5; Continue to grant extensions to existing approvals.

7. Any Contracting Party not applying a Regulation may at any time notify the Secretary-General that it intends henceforth to apply it, and the Regulation will then enter into force for this Party on the sixtieth day after this notification. The Secretary-General shall notify all the Contracting Parties of every entry into force of a Regulation for a new Contracting Party effected in accordance with the terms of this paragraph.

8. The Contracting Parties for which a Regulation is in force shall hereinafter be referred to as "the Contracting Parties applying a Regulation".

Article 2

Each Contracting Party applying Regulations largely through type approval shall grant the type approvals and approval markings described in any Regulation for the types of wheeled vehicles, equipment or parts covered by the Regulation, provided that it has the technical competence and is satisfied with the arrangements for ensuring conformity of the product with the approved type as set out in Appendix 2. Each Contracting Party applying a Regulation through type approval shall refuse the type approvals and approval markings covered by the Regulation if the above-mentioned conditions are not complied with.

Article 3

Wheeled vehicles, equipment or parts for which type approvals have been issued by a Contracting Party in accordance with Article 2 of this Agreement and manufactured either in the territory of a Contracting Party applying the Regulation concerned, or in such other country as is designated by the Contracting Party which has duly approved the types of wheeled vehicles, equipment or parts concerned shall be held to be in conformity with the legislation of all the Contracting Parties applying the said Regulation through type approval.

Article 4

Should the competent authorities of a Contracting Party applying a Regulation through type approval find that certain wheeled vehicles, equipment or parts bearing approval markings issued under the said Regulation by one of the Contracting Parties, do not conform to the approved types, they shall advise the competent authorities of the Contracting Party which issued the approval. That Contracting Party shall take the necessary steps to bring the products of those manufacturers into conformity with the approved types and shall advise the other Contracting Parties applying the Regulation through type approval of the steps it has taken, which may include, if necessary, the withdrawal of approval. Where there might be a threat to road safety or to the environment, the Contracting Party which issued the approval and after receiving the information about the non-conformity to the approved type(s) shall inform thereof all other Contracting Parties about the situation. Contracting Parties may prohibit the sale and use of such wheeled vehicles, equipment or parts in their territory.

Article 5

The competent authorities of each Contracting Party applying Regulations through type approval shall send monthly to the competent authorities of the other Contracting Parties a list of the wheeled vehicle, equipment or parts, approvals of which it has refused to grant or has withdrawn during that month; in addition, on receiving a request from the competent authority of another Contracting Party applying a Regulation through type approval, it shall send forthwith to that competent authority a copy of all relevant information on which it based its decision to grant, refuse to grant, or to withdraw an approval of a wheeled vehicle, equipment or parts to that Regulation.

Article 6

1. Countries members of the Economic Commission for Europe, countries admitted to the Commission in a consultative capacity in accordance with paragraph 8 of the Commission's Terms of Reference, and regional economic integration organizations set up by countries members of the Economic Commission for Europe to which their Member States have transferred powers in the fields covered by this Agreement, including the power to make binding decisions on their Member States, may become Contracting Parties to this Agreement.

For the determination of the number of votes referred to in Article 1, paragraph 2 and in Article 12, paragraph 2, regional economic integration organizations vote with the number of votes of their Member States being members of the Economic Commission for Europe.

2. Countries Members of the United Nations as may participate in certain activities of the Economic Commission for Europe in accordance with Paragraph 11 of the Commission's Terms of Reference and regional economic

integration organizations of such countries to which their Member States have transferred powers in the fields covered by this Agreement including power to make binding decisions on their Member States may become Contracting Parties to this Agreement.

For the determination of the number of votes referred to in Article 1, paragraph 2 and in Article 12, paragraph 2, regional economic integration organizations vote with the number of votes of their Member States being Members of the United Nations.

3. Accession to the amended Agreement by new Contracting Parties which are not Parties to the 1958 Agreement shall be effected by the deposit of an instrument with the Secretary-General, after the entry into force of the amended Agreement.

Article 7

1. The amended Agreement shall be deemed to enter into force nine months after the date of its transmission by the Secretary-General to all the Contracting Parties to the 1958 Agreement.

2. The amended Agreement shall be deemed not to enter into force if any objection from the Contracting Parties to the 1958 Agreement is expressed within a period of six months following the date of its transmission to them by the Secretary-General.

3. For any new Contracting Party acceding to this amended Agreement, this amended Agreement shall enter into force on the sixtieth day after the deposit of the instrument of accession.

Article 8

1. Any Contracting Party may denounce this Agreement by notifying the Secretary-General.

2. Denunciation shall take effect twelve months after the date of receipt by the Secretary-General of such notification.

Article 9

1. Any new Contracting Party as defined in Article 6 of this Agreement may, at the time of accession or at any time thereafter, declare by notification addressed to the Secretary-General that this Agreement shall extend to all or any of the territories for whose international relations it is responsible. The Agreement shall extend to the territory or territories named in the notification as from the sixtieth day after its receipt by the Secretary-General.

2. Any new Contracting Party as defined in Article 6 of this Agreement which has made a declaration in accordance with paragraph 1 of this Article extending this Agreement to any territory for whose international relations it is responsible may denounce the Agreement separately in respect of that territory, in accordance with the provisions of Article 8.

Article 10

1. Any dispute between two or more Contracting Parties concerning the interpretation or application of this Agreement shall, so far as possible, be settled by negotiation between them.
2. Any dispute which is not settled by negotiation shall be submitted to arbitration if any one of the Contracting Parties in dispute so requests and shall be referred accordingly to one or more arbitrators selected by agreement between the Parties in dispute. If within three months from the date of the request for arbitration the Parties in dispute are unable to agree on the selection of an arbitrator or arbitrators, any of those Parties may request the Secretary-General to nominate a single arbitrator to whom the dispute shall be referred for decision.
3. The decision of the arbitrator or arbitrators appointed in accordance with paragraph 2 of this Article shall be binding on the Contracting Parties in dispute.

Article 11

1. Each new Contracting Party may, at the time of acceding to this Agreement, declare that it does not consider itself bound by Article 10 of the Agreement. Other Contracting Parties shall not be bound by Article 10 in respect of any new Contracting Party which has entered such a reservation.
2. Any Contracting Party having entered a reservation as provided for in paragraph 1 of this Article may at any time withdraw such reservation by notifying the Secretary-General.
3. No other reservation to this Agreement or to the Regulations annexed thereto shall be permitted; but any Contracting Party may, in accordance with the terms of Article 1, declare that it does not propose to apply certain of the Regulations or that it does not propose to apply any of them.

Article 12

The Regulations annexed to this Agreement may be amended in accordance with the following procedure:

1. Amendments to Regulations shall be established by the Administrative Committee as described in Article 1, paragraph 2 and in accordance with the procedure indicated in Appendix 1. Where necessary an amendment may include the existing requirements as an alternative. Contracting Parties shall specify which alternatives within the Regulations they will apply. Contracting Parties applying alternative(s) within a Regulation shall not be obliged to accept approvals to preceding alternative(s) within the same Regulation. Contracting Parties applying only the most recent amendments shall not be obliged to accept approvals to preceding amendments or to unamended Regulations. Contracting Parties applying an earlier series of amendments or the unamended Regulation shall accept approvals granted to a later amendment series. An amendment to the Regulation, after having been established, shall be communicated by the Administrative Committee to the Secretary-General. As soon as possible thereafter the Secretary-General shall give notification of this amendment to the Contracting Parties applying the Regulation.
2. An amendment to a Regulation will be considered to be adopted unless, within a period of six months from its notification by the Secretary-General, more than one-third of the Contracting Parties applying the Regulation at the time of notification have informed the Secretary-General of their disagreement with the amendment. If, after this period, the Secretary-General has not received declarations of disagreement of more than one-third of the Contracting Parties applying the Regulation, the Secretary-General shall as soon as possible declare the amendment as adopted and binding upon those Contracting Parties applying the Regulation who did not declare themselves opposed to it. When a Regulation is amended and at least one-fifth of the Contracting Parties applying the unamended Regulation subsequently declare that they wish to continue to apply the unamended Regulation, the unamended Regulation will be regarded as an alternative to the amended Regulation and will be incorporated formally as such into the Regulation with effect from the date of adoption of the amendment or its entry into force. In this case the obligations of the Contracting Parties applying the Regulation shall be the same as set out in paragraph 1.
3. Should a new Contracting Party accede to this Agreement between the time of the notification of the amendment to a Regulation by the Secretary-General and its entry into force, the Regulation in question shall not enter into force for that Contracting Party until two months after it has formally accepted the amendment or two months after the lapse of a period of six months since the communication to that Party by the Secretary-General of the proposed amendment.

Article 13

The text of the Agreement itself and of its Appendices may be amended in accordance with the following procedure:

1. Any Contracting Party may propose one or more amendments to this Agreement and its Appendices. The text of any proposed amendment to the Agreement and its Appendices shall be transmitted to the Secretary-General, who shall transmit it to all Contracting Parties and inform all other countries referred to in paragraph 1 of Article 6 thereof.
2. Any proposed amendment circulated in accordance with paragraph 1 of this Article shall be deemed to be accepted if no Contracting Party expresses an objection within a period of six months following the date of circulation of the proposed amendment by the Secretary-General.
3. The Secretary-General shall, as soon as possible, notify all Contracting Parties whether an objection to the proposed amendment has been expressed. If an objection to the proposed amendment has been expressed, the amendment shall be deemed not to have been accepted, and shall be of no effect whatever. If no such objection has been expressed, the amendment shall enter into force for all Contracting Parties three months after the expiry of the period of six months referred to in paragraph 2 of this Article.

Article 14

In addition to the notifications provided for in Articles 1, 12 and 13 of this Agreement, the Secretary-General shall notify the Contracting Parties of:

- (a) Accessions in accordance with Article 6;
- (b) The dates of entry into force of this Agreement in accordance with Article 7;
- (c) Denunciations in accordance with Article 8; (d) Notifications received in accordance with Article 9;
- (e) Declarations and notifications received in accordance with paragraphs 1 and 2 of Article 11;
- (f) The entry into force of any amendment in accordance with paragraphs 1 and 2 of Article 12;
- (g) The entry into force of any amendment in accordance with paragraph 3 of Article 13.

Article 15

1. If at the date the above provisions come into effect the procedures envisaged in Article 1, paragraphs 3 and 4 of the unamended Agreement are under way for adopting a new Regulation, the said new Regulation shall enter into force under the provisions of paragraph 5 of the said Article.
2. If at the date the above provisions come into effect, the procedures envisaged in Article 12, paragraph 1 of the unamended Agreement are under way for the adoption of an amendment to a Regulation, the said amendment shall enter into force under the provisions of the said Article.
3. If all Contracting Parties to the Agreement agree, any Regulation adopted under the terms of the unamended Agreement may be treated as though it were a Regulation adopted under the terms of the above provisions.

Appendix 1

COMPOSITION AND RULES OF PROCEDURE OF THE ADMINISTRATIVE COMMITTEE

Article 1

The members of the Administrative Committee shall be composed of all the Contracting Parties to the amended Agreement.

Article 2

The Executive Secretary of the United Nations Economic Commission for Europe shall provide the Committee with secretariat services.

Article 3

The Committee shall, at its first session each year, elect a chairman and vice-chairman.

Article 4

The Secretary-General of the United Nations shall convene the Committee under the auspices of the Economic Commission for Europe whenever a new Regulation or an amendment to a Regulation is required to be established.

Article 5

Proposed new Regulations shall be put to the vote. Each country, Contracting Party to the Agreement shall have one vote. A quorum consisting of not less than half of the Contracting Parties is required for the purposes of taking decisions. For the determination of the quorum regional economic integration organizations, being Contracting Parties to the Agreement, vote with the number of votes of their Member States. The representative of a regional economic integration organization may deliver the votes of its constituent sovereign countries. New Draft Regulations shall be established by a two-thirds majority of those present and voting.

Article 6

Proposed amendments to Regulations shall be put to the vote. Each country, Contracting Party to the Agreement applying the Regulation shall have one vote. A quorum of not less than half of the Contracting Parties applying the Regulation is required for the purposes of taking decisions. For the determination of the quorum, regional economic integration organizations, being Contracting Parties to the Agreement, vote with the number of votes of their Member States. The representative of a regional economic integration organization may deliver the votes of those of its constituent sovereign countries which apply the Regulation. Draft Amendments to Regulations shall be established by a two-thirds majority of those present and voting.

Appendix 2

CONFORMITY OF PRODUCTION PROCEDURES

1. INITIAL ASSESSMENT

1.1. The approval authority of a Contracting Party must verify - before granting type approval - the existence of satisfactory arrangements and procedures for ensuring effective control so that vehicles, equipment or parts when in production conform to the approved type.

1.2. The requirement in paragraph 1.1. must be verified to the satisfaction of the authority granting type approval but may also be verified, on behalf and at the request of the authority granting type approval, by the approval authority of another Contracting Party. In that case, the latter approval authority prepares a statement of compliance outlining the areas and production facilities it has covered as relevant to the product(s) to be type approved.

1.3. The approval authority must also accept the manufacturer's registration to harmonized standard ISO 9002 (the scope of which covers the product(s) to be approved) or an equivalent accreditation standard as satisfying the requirements of paragraph 1.1. The manufacturer must provide details of the registration and undertake to inform the approval authority of any revisions to its validity or scope.

1.4. On receiving an application from the authority of another Contracting Party the approval authority shall send forthwith the statement of compliance mentioned in the last sentence of paragraph 1.2. or advise that it is not in a position to provide such a statement.

2. CONFORMITY OF PRODUCTION

2.1. Every vehicle, equipment or part approved under Regulation annexed to this Agreement must be so manufactured as to conform to the type approved by meeting the requirements of this Appendix and of the said Regulation.

2.2. The approval authority of a Contracting Party granting a type approval pursuant to a Regulation annexed to this Agreement must verify the existence of adequate arrangements and documented control plans, to be agreed with the manufacturer for each approval, to carry out at specified intervals those tests or associated checks necessary to verify continued conformity with the approved type, including, specifically, where applicable, tests specified in the said Regulation.

2.3. The holder of the approval must in particular:

2.3.1. Ensure the existence of procedures for effective control of the conformity of products (vehicles, equipment or parts) to the type approval;

2.3.2. Have access to the testing equipment necessary for checking the conformity to each approved type;

2.3.3. Ensure that test results' data are recorded and that annexed documents remain available for a period to be determined in agreement with the approval authority. This period must not exceed 10 years;

2.3.4. Analyze results of each type of test, in order to verify and ensure the stability of the product characteristics, making allowance for variation of an industrial production;

2.3.5. Ensure that for each type of product, at least the checks prescribed in this Appendix and the tests prescribed in the applicable Regulations are carried out;

2.3.6. Ensure that any set of samples or test pieces giving evidence of non-conformity in the type of test in question gives rise to a further sampling and test. All the necessary steps must be taken to restore conformity of the corresponding production.

2.4. The authority which has granted type approval may at any time verify the conformity control methods applied in each production facility. The normal frequency of these verifications must be consistent with the arrangements (if any) accepted under paragraph 1.2. or 1.3. of this Appendix and be such as to ensure that the relevant controls are reviewed over a period consistent with the climate of trust established by the approval authority.

2.4.1. At every inspection, the test records and production records must be available to the visiting inspector.

2.4.2. Where the nature of the test is appropriate, the inspector may select samples at random to be tested in the manufacturer's laboratory (or by the Technical Service where the Regulation annexed to this Agreement so provides). The minimum number of samples may be determined according to the results of the manufacturer's own verification.

2.4.3. Where the level of control appears unsatisfactory, or when it seems necessary to verify the validity of the tests carried out in application of paragraph 2.4.2., the inspector must select samples to be sent to the Technical Service which conducts the type approval tests.

2.4.4. The approval authority may carry out any check or test prescribed in this Appendix or in the applicable Regulation annexed to this Agreement.

2.4.5. In cases where unsatisfactory results are found during an inspection, the approval authority must ensure that all necessary steps are taken to restore conformity of production as rapidly as possible.

B.2 Titles of Regulations - Road Vehicles

CONCERNING THE ADOPTION OF UNIFORM TECHNICAL PRESCRIPTIONS FOR WHEELED VEHICLES, EQUIPMENT AND PARTS WHICH CAN BE FITTED AND/OR BE USED ON WHEELED VEHICLES AND THE CONDITIONS FOR RECIPROCAL RECOGNITION OF APPROVALS GRANTED ON THE BASIS OF THESE PRESCRIPTIONS

Regulation No 1: Uniform provisions concerning the approval of motor vehicle headlamps emitting an asymmetrical passing beam and/or a driving beam and equipped with filament lamps of category R2

Regulation No 2: Uniform provisions concerning the approval of incandescent electric lamps for headlamps emitting an asymmetrical passing beam or a driving beam or both

Regulation No 3: Uniform provisions concerning the approval of retro-reflecting devices for power-driven vehicles and their trailers

Regulation No 4: Uniform provisions concerning the approval of retro-reflecting devices for power-driven vehicles and their trailers

Regulation No 5: Uniform provisions concerning the approval of power-driven vehicle's sealed-beam headlamps (sb) emitting a European asymmetrical passing beam or a driving beam or both

Regulation No 6: Uniform provisions concerning the approval of direction indicators for power-driven vehicles and their trailers

Regulation No 7: Uniform provisions concerning the approval of front and rear position (side) lamps, stop-lamps and end-outline marker lamps for motor vehicles (except motor cycles) and their trailers

Regulation No 8: Uniform provisions concerning the approval of motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with halogen filament lamps (h1, h2, h3, hb3, hb4, h7, h8, h9, hir1, hir2 and/or h11)

Regulation No 9: Uniform provisions concerning the approval of three-wheeled vehicles with regard to noise

Regulation No 10: Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility

Regulation No 11: Uniform provisions concerning the approval of vehicles with regard to door latches and door retention components

Regulation No 12: Uniform provisions concerning the approval of vehicles with regard to the protection of the driver against the steering mechanism in the event of impact

Regulation No 13: Uniform provisions concerning the approval of vehicles of categories m, n and o with regard to braking

Regulation No 14: Uniform provisions concerning the approval of vehicles with regard to safety-belt anchorages, isofix anchorages systems and isofix top tether anchorages

Regulation No 15: Emission of gaseous pollutants. Obsolete. Replaced by Regulation No. No. 83

Regulation No 16: uniform provisions concerning the approval of:

- i. Safety-belts, restraint systems, child restraint systems and isofix Child restraint systems for occupants of power-driven vehicles
- ii. Vehicles equipped with safety-belts, safety-belt reminder, restraint systems, child restraint systems and isofix child restraint systems

Regulation No 17: Uniform provisions concerning the approval of vehicles with regard to the seats, their anchorages and any head restraints

Regulation No 18: Uniform provisions concerning the approval of motor vehicles with regard to their protection against unauthorized use

Regulation No 19: Uniform provisions concerning the approval of motor vehicle front fog lamps

Regulation No 20: Uniform provisions concerning the approval of motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with halogen filament lamps (H4 lamps)

Regulation No 21: Uniform provisions concerning the approval of vehicles with regard to their interior fittings

Regulation No 22: Uniform provisions concerning the approval of protective helmets and their visors for drivers and passengers of motor cycles and mopeds

Regulation No 23: Uniform provisions concerning the approval of reversing lamps for power-driven vehicles and their trailers

Regulation No 24: Uniform provisions concerning:

- i. The approval of compression ignition (c.i.) engines with regard to the Emission of visible pollutants,
- ii. The approval of motor vehicles with regard to the installation of c.i.
- iii. Engines of an approved type,
- iv. The approval of motor vehicles equipped with c.i. engines with regard to the emission of visible pollutants by the engine,
- v. The measurement of power of c.i. engine.

Regulation No 25: Uniform provisions concerning the approval of head restraints (headrests), whether or not incorporated in vehicle seats

Regulation No 26: Uniform provisions concerning the approval of vehicles with regard to their external projections

Regulation No 27: Uniform provisions for the approval of advance-warning triangles

Regulation No 28: Uniform provisions concerning the approval of audible warning devices and of motor vehicles with regard to their audible signals**Regulation No 29: Uniform provisions concerning the approval of vehicles with regard to the protection of the occupants of the cab of a commercial vehicle**

Regulation No 30: Uniform provisions concerning the approval of pneumatic tyres for motor vehicles and their trailers

Regulation No 31: uniform provisions concerning the approval of power-driven vehicle's sealed-beam headlamps (sb) emitting an European asymmetrical passing beam or a driving beam or both

Regulation No 32: Uniform provisions concerning the approval of vehicles with regard to the behaviour of the structure of the impacted vehicle in a rear-end collision

Regulation No 33: Uniform provisions concerning the approval of vehicles with regard to the behaviour of the structure of the impacted vehicle in a head-on collision

Regulation No 34: Uniform provisions concerning the approval of vehicles with regard to the prevention of fire risks

Regulation No 35: Uniform provisions concerning the approval of vehicles with regard to the arrangement of foot pedals

Regulation No 36: Uniform provisions concerning the approval of large passenger vehicles with regard to their general construction

Regulation No 37: Uniform provisions concerning the approval of filament lamps for use in approved lamp units on power-driven vehicles and of their trailers

Regulation No 38: Uniform provisions concerning the approval of rear fog lamps for power-driven vehicles and their trailers

Regulation No 39: Uniform provisions concerning the approval of vehicles with regard to the speedometer equipment including its installation

Regulation No 40: Uniform provisions concerning the approval of motor cycles equipped with a positive -ignition engine with regard to the emission of gaseous pollutants by the engine

Regulation No 41: Uniform provisions concerning the approval of motor cycles with regard to noise

Regulation No 42: Uniform provisions concerning the approval of vehicles with regard to their front and rear protective devices (bumpers, etc.)

Regulation No 43: Uniform provisions concerning the approval of safety glazing materials and their installation on vehicles

Regulation No 44: Uniform provisions concerning the approval of restraining devices for child occupants of power-driven vehicles ("child restraint system")

Regulation No 45: Uniform provisions concerning the approval of headlamp cleaners and of power-driven vehicles with regard to headlamp cleaners

Regulation No 46: Uniform provisions concerning the approval of devices for indirect vision and of motor vehicles with regard to the installation of these devices

Regulation No 47: Uniform provisions concerning the approval of mopeds equipped with a positive-ignition engine with regard to the emission of gaseous pollutants by the engine

Regulation No 48: Uniform provisions concerning the approval of vehicles with regard to the installation of lighting and light-signalling devices

Regulation No 49: uniform provisions concerning the measures to be taken against the emission of gaseous and particulate pollutants from compression-ignition engines for use in vehicles, and the emission of gaseous pollutants from positive-ignition engines fuelled with natural gas or liquefied petroleum gas for use in vehicles

Regulation No 50: Uniform provisions concerning the approval of front position lamps, rear position lamps, stop lamps, direction indicators and rear-registration-plate illuminating devices for vehicles of category 1

Regulation No 51: Uniform provisions concerning the approval of motor vehicles having at least four wheels with regard to their noise emissions

Regulation No 52: Uniform provisions concerning the approval of m2 and m3 small capacity vehicles with regard to their general construction

Regulation No 53: Uniform provisions concerning the approval of category 13 vehicles with regard to the installation of lighting and light signalling devices

Regulation No 54: Uniform provisions concerning the approval of pneumatic tyres for commercial vehicles and their trailers

Regulation No 55: Uniform provisions concerning the approval of mechanical coupling components of combinations of vehicles

Regulation No 56: Uniform provisions concerning the approval of headlamps for mopeds and vehicles treated as such

Regulation No 57: Uniform provisions concerning the approval of headlamps for motor cycles and vehicles treated as such

Regulation No 58: uniform provisions concerning the approval of:

- i. rear underrun protective devices (rupds)
- ii. vehicles with regard to the installation of an rupd of an approved type
- iii. vehicles with regard to their rear underrun protection (rup)

Regulation No 59: Uniform provisions concerning the approval of replacement silencing systems

Regulation No 60: Uniform provisions concerning the approval of two-wheeled motor-cycles and mopeds with regard to driver operated controls including the identification of controls, tell-tales and indicators

Regulation No 61: Uniform provisions concerning the approval of commercial vehicles with regard to their external projections forward of the cabs read panel

Regulation No 62: Uniform provisions concerning the approval of power-driven vehicles with handlebars with regard to their protection against unauthorised use

Regulation No 63: Uniform provisions concerning the approval of mopeds with regard to noise

Regulation No 64: Uniform provisions concerning the approval of vehicles equipped with temporary-use spare wheels/tyres

Regulation No 65: Uniform provisions concerning the approval of special warning lamps for motor vehicles

Regulation No 66: Uniform technical prescriptions concerning the approval of large passenger vehicles with regard to the strength of their superstructure

Regulation No 67: Uniform provisions concerning:

- i. Approval of specific equipment of motor vehicles using liquefied petroleum gases in their propulsion system
- ii. Approval of a vehicle fitted with specific equipment for the use of liquefied petroleum gases in its propulsion system with regard to the installation of such equipment

Regulation No 68: Uniform provisions concerning the approval of power-driven vehicles with regard to the measurement of the maximum speed

Regulation No 69: Uniform provisions concerning the approval of rear marking plates for slow-moving vehicles (by construction) and their trailers

Regulation No 70: Uniform provisions concerning the approval of rear marking plates for heavy and long vehicles

Regulation No 71: Uniform provisions concerning the approval of agricultural tractors with regard to the driver's field of vision

Regulation No 72: Uniform provisions concerning the approval of motor cycle headlamps emitting an asymmetrical passing beam and a driving beam and equipped with halogen lamps (HS1 lamps)

Regulation No 73: Uniform provisions concerning the approval of goods vehicles, trailers and semi-trailers with regard to their lateral protection

Regulation No 74: Uniform provisions concerning the approval of category I1 vehicles with regard to the installation of lighting and light-signalling devices

Regulation No 75: Uniform provisions concerning the approval of pneumatic tyres for motor cycles and mopeds

Regulation No 76: Uniform provisions concerning the approval of headlamps for mopeds emitting a driving beam and a passing beam

Regulation No 77: Uniform provisions concerning the approval of parking lamps for power-driven vehicles

Regulation No 78: Uniform provisions concerning the approval of vehicles of categories I1, I2, I3, I4 and I5 with regard to braking

Regulation No 79: Uniform provisions concerning the approval of vehicles with regard to steering equipment

Regulation No 80: Uniform provisions concerning the approval of seats of large passenger vehicles and of these vehicles with regard to the strength of the seats and their anchorages

Regulation No 81: Uniform provisions concerning the approval of rear-view mirrors and of two-wheeled power-driven vehicles with or without side car, with regard to the installation of rear-view mirrors on handlebars

Regulation No 82: Uniform provisions concerning the approval of moped headlamps equipped with filament halogen lamps (hs2 lamps)

Regulation No 83: Uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements

Regulation No 84: Uniform provisions concerning the approval of passenger cars equipped with an internal combustion engine with regard to the measurement of fuel consumption

Regulation No 85: Uniform provisions concerning the approval of internal combustion engines intended for the propulsion of motor vehicles of categories M and N with regard to the measurement of the net power

Regulation No 86: Uniform provisions concerning the approval of agricultural or forestry tractors with regard to the installation of lighting and light-signalling devices

Regulation No 87: Uniform provisions concerning the approval of daytime running lamps for power-driven vehicles

Regulation No 88: Uniform provisions concerning the approval of retroreflective tyres for two-wheeled vehicles

Regulation No 89: Uniform provisions concerning the approval of:

I. Vehicles with regard to their maximum speed

II. Vehicles with regard to the installation of a speed limitation device (SLD) of an approved type

III. Speed limitation devices (SLD)

Regulation No 90: Uniform provisions concerning the approval of replacement brake lining assemblies and drum brake linings for power-driven vehicles and their trailers

Regulation No 91: Uniform provisions concerning the approval of side-marker lamps for motor vehicles and their trailers

Regulation No 92: Uniform provisions concerning the approval of replacement exhaust silencing systems (RESS) for motor cycles

Regulation No 93: Uniform provisions concerning the approval of:

I. Front underrun protection types (FUPDs)

II. Vehicles with regard to the installation of an FUPD of an approved type

III. Vehicles with regard to their front underrun protection (FUP)

Regulation No 94: Uniform provisions concerning the approval of vehicles with regard to the protection of the occupants in the event of a frontal collision

Regulation No 95: Uniform provisions concerning the approval of vehicles with regard to the protection of the occupants in the event of a lateral collision

Regulation No 96: Uniform provisions concerning the approval of compression ignition (c.i.) engines to be installed in agricultural and forestry tractors and in non-road mobile machinery with regard to the emissions of pollutants by the engine

Regulation No 97: Uniform provisions concerning the approval of vehicle alarm systems (vas) and of motor vehicles with regard to their alarm systems (as)

Regulation No 98: Uniform provisions concerning the approval of motor vehicle headlamps equipped with gas-discharge light sources

Regulation No 99: Uniform provisions concerning the approval of gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles

Regulation No 100: Uniform provisions concerning the approval of battery electric vehicles with regard to specific requirements for the construction and functional safety

Regulation No 101: Uniform provisions concerning the approval of passenger cars powered by an internal combustion engine only, or powered by a hybrid electric power train with regard to the measurement of the emission of carbon dioxide and fuel consumption and/or the measurement of electric energy consumption and electric range, and of categories m1 and n1 vehicles powered by an electric power train only with regard to the measurement of electric energy consumption and electric range

Regulation No 102: Uniform provisions concerning the approval of:

I. A close-coupling device (ccd)

II. Vehicles with regard to the fitting of an approved type of ccd

(Note: this is physical close coupling between vehicles and trailers, not electronic devices which are closely coupled through the near field)

Regulation No 103: Uniform provisions concerning the approval of replacement catalytic converters for power-driven vehicles

Regulation No 104: Uniform provisions concerning the approval of retro-reflective markings for heavy and long vehicles and their trailers

Regulation No 105: Uniform provisions concerning the approval of vehicles intended for the carriage of dangerous goods with regard to their specific constructional features

Regulation No 106: Uniform provisions concerning the approval of pneumatic tyres for agricultural vehicles and their trailers

Regulation No 107: Uniform provisions concerning the approval of category m2 or m3 vehicles with regard to their general construction

Regulation No 108: Uniform provisions concerning the approval for the production of retreaded pneumatic tyres for motor vehicles and their trailers

Regulation No 109: Uniform provisions concerning the approval for the production of retreaded pneumatic tyres for commercial vehicles and their trailers

Regulation No 110: Uniform provisions concerning the approval of:

- I. Specific components of motor vehicles using compressed natural gas (cng) in their propulsion system;
- II. Vehicles with regard to the installation of specific components of an approved type for the use of compressed natural gas (cng) in their propulsion system

Regulation No 111: Uniform provisions concerning the approval of tank vehicles of categories n and o with regard to rollover stability

Regulation No 112: Uniform provisions concerning the approval of motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps

Regulation No 113: Uniform provisions concerning the approval of motor vehicle headlamps emitting a symmetrical passing beam or a driving beam or both and equipped with filament lamps

Regulation No 114: Uniform provisions concerning the approval of:

- i. an airbag module for a replacement airbag system;
- ii. a replacement steering wheel equipped with an airbag module of an approved type;
- iii. a replacement airbag system other than that installed in a steering wheel

Regulation No 115: uniform provisions concerning the approval of:

- i. specific LPG (liquefied petroleum gases) retrofit systems to be installed in motor vehicles for the use of LPG in their propulsion system
- ii. specific CNG (compressed natural gas) retrofit systems to be installed in motor vehicles for the use of CNG in their propulsion system

Regulation No 116: Uniform technical prescriptions concerning the protection of motor vehicles against unauthorized use

Regulation No 117: Uniform provisions concerning the approval of tyres with regard to rolling sound emissions and to adhesion on wet surfaces

Regulation No 118: Uniform technical prescriptions concerning the burning behaviour of materials used in the interior construction of certain categories of motor vehicles

Regulation No 119: Uniform provisions concerning the approval of cornering lamps for power-driven vehicles

Regulation No 120: Uniform provisions concerning the approval of internal combustion engines to be installed in agricultural and forestry tractors and in non-road mobile machinery, with regard to the measurement of the net power, net torque and specific fuel consumption

Regulation No 121: Uniform provisions concerning the approval of vehicles with regard to the location and identification of hand controls, tell-tales and indicators

Regulation No 122: Uniform technical prescriptions concerning the approval of vehicles of categories m, n and o with regard to their heating systems

Regulation No 123: Uniform provisions concerning the approval of adaptive front-lighting systems (afs) for motor vehicles

Regulation No 124: Uniform provisions concerning the approval of wheels for passenger cars and their trailers

Regulation No 125: Uniform provisions concerning the approval of motor vehicles with regard to the forward field of vision of the motor vehicle driver

Regulation No 126: Uniform provisions concerning the approval of partitioning systems to protect passengers against displaced luggage, supplied as non original vehicle equipment

B.3 Titles of Regulations - Transport infrastructures

1. Declaration on the Construction of Main International Traffic Arteries, of 16 September 1950
2. European Agreement on Main International Traffic Arteries (AGR), of 15 November 1975
3. European Agreement on Main International Railway Lines (AGC), of 31 May 1985
4. European Agreement on Important International Combined Transport Lines and Related Installations (AGTC), of 1 February 1991
5. Protocol on Combined Transport on Inland Waterways to the European Agreement on Important International Combined Transport Lines and Related Installations (AGTC) of 1991, of 1997
6. European Agreement on Main Inland Waterways of International Importance (AGN), of 19 January 1996 Road Traffic and Road Signs and Signals
7. Convention on Road Traffic, of 19 September 1949 (including Final Act and related documents)
8. Convention on Road Traffic, of 8 November 1968 (2006 consolidated version)
Vehicle Signs in International Traffic
Convention on Road Traffic, of 8 November 1968 (1993 consolidated version)
9. European Agreement supplementing the 1968 Convention on Road Traffic, of 1 May 1971 (2006 consolidated version) - Hard copy
European Agreement supplementing the 1968 Convention on Road Traffic, of 1 May 1971
10. Protocol on Road Signs and Signals, of 19 September 1949
11. Convention on Road Signs and Signals, of 8 November 1968 (2006 consolidated version)
12. European Agreement supplementing the Convention on Road Signs and Signals (1968), of 1 May 1971
Amendment which entered into force on 28 March 2006
13. European Agreement on the Application of Article 23 of the 1949 Convention on Road Traffic concerning the Dimensions and Weights of Vehicles Permitted to Travel on Certain Roads of the Contracting Parties, of 16 September 1950
14. European Agreement supplementing the 1949 Convention on Road Traffic and the 1949 Protocol on Road Signs and Signals of 16 September 1950
15. European Agreement on Road Markings, of 13 December 1957
16. Protocol on Road Markings, Additional to the European Agreement supplementing the Convention on Road Signs and Signals, of 1 March 1973
17. Agreement on Minimum Requirements for the Issue and Validity of Driving Permits (APC), of 1 April 1975

Annex C: UN ECE Regulation 21- Uniform provisions concerning the approval of vehicles with regard to their interior fittings (Relevant Extracts)

The following text is the verbatim text of relevant extracts from the Regulations. It is reprinted in "normal" font but the original format styles have been retained.

NOTE: Where text has been omitted it is denoted by '(...)' between lines. All subject /chapter headings are included.

C.1 Relevant Extracts from UNECE Regulation 21

(...)

5. REQUIREMENTS

5.1. Forward interior parts of the passenger compartment above the level of the instrument panel in front of the front seat "H" points excluding the side doors

5.1.1 The reference zone defined in paragraph 2.3. above shall not contain any dangerous roughness or sharp edges likely to increase the risk of serious injury to the occupants. The parts referred to in paragraphs 5.1.2. to 5.1.6. below shall be deemed satisfactory if they comply with the requirements of those paragraphs.

5.1.2 Vehicle parts within the reference zone with the exception of those which are not part of the instrument panel and which are placed at less than 10 cm from glazed surfaces shall be energy-dissipating, as prescribed in annex 4 to this Regulation.

Those parts within the reference zone which satisfy both of the following conditions shall also be excluded from consideration if:

5.1.2.1 During a test in accordance with the requirements of annex 4 of this Regulation, the pendulum makes contact with parts outside the reference zone; and

5.1.2.2 Parts to be tested are placed less than 10 cm away from the parts contacted outside the reference zone, this distance being measured on the surface of the reference zone;

any metal support fittings shall have no protruding edges.

5.1.3 The lower edge of the instrument panel shall, unless it meets the requirements of paragraph 5.1.2. above be rounded to a radius of curvature of not less than 19 mm.

5.1.4 Switches, pull-knobs and the like, made of rigid material which, measured in accordance with the method prescribed in Annex 6 project from 3.2 mm to 9.5 mm from the panel shall have a cross sectional area of not less than 2 cm² point projecting furthest and shall have rounded edges with a radius of curvature of not less than 2.5 mm.

5.1.5. If these components project more than 9.5 mm from the surface of the instrument panel, they shall be so designed and constructed as to be able, under the effect of a longitudinal horizontal force of 37.8 daN delivered by a flat-ended ram of not more than 50 mm diameter, either to retract into the surface of the panel until they do not project by more than 9.5 mm or to become detached; in the latter case, no dangerous projections of more than 9.5 mm shall remain; a cross-section of not more than 6.5 mm from the point of maximum projection shall be not less than 6.5 cm² in area.

5.1.6 In the case of a projection comprising a component made of non-rigid material of less than 50 shore A hardness mounted on a rigid support, the requirements of paragraphs 5.1.4. and 5.1.5. shall apply only to the rigid support.

5.2 Forward interior parts of the passenger compartment below the level of the instrument panel and in front of the front seat "H" points, excluding the side doors and the pedals.

5.2.1. Except for the pedals and their fixtures and those components that cannot be contacted by the device described in Annex 7 to this Regulation and used in accordance with the procedure described therein, components covered by paragraph 5.2., such as switches, the ignition key, etc. shall comply with the requirements of paragraphs 5.1.4. to 5.1.6.

5.2.2 The handbrake control, if mounted on or under the instrument panel, shall be so placed that when it is in the position of rest there is no possibility of the occupants of the vehicle striking against it in the event of a frontal impact. If this condition is not met, the surface of the control shall satisfy the requirements of paragraph 5.3.2.3. below.

5.2.3. Shelves and other similar items shall be so designed and constructed that the supports in no case have protruding edges, and they shall meet one or other of the following conditions:

5.2.3.1 The part facing into the vehicle shall present a surface not less than 25 mm high with edges rounded to a radius of curvature of not less than 3.2 mm. This surface shall consist of or be covered with an energy-dissipating material, as defined in annex 4 of this Regulation, and shall be tested in accordance therewith, the impact being applied in a horizontal longitudinal direction.

5.2.3.2 Shelves and other similar items shall, under the effect of a forward-acting horizontal longitudinal force of 37.8 daN exerted by a cylinder of 110 mm diameter with its axis vertical become detached, break up, be substantially distorted or retract without producing dangerous features on the rim of the shelf. The force must be directed at the strongest part of the shelves or other similar items.

5.2.4. If the items in question contain a part made of material less than 50 shore A hardness when fitted to a rigid support, the above requirements, except for the requirements covered by Annex 4 relating to energy-absorption, shall apply only to the rigid support.

5.3 Other interior fittings in the passenger compartment in front of the transverse plane passing through the torso reference line of the manikin placed on the rearmost seats

5.3.1 Scope

The requirements of paragraph 5.3.2. below apply to control handles, levers and knobs and to any other protruding objects not referred to in paragraphs 5.1. and 5.2. above (see also paragraph 5.3.2.2.)

5.3.2 Requirements

If the items referred to in paragraph 5.3.1. above are so placed that occupants of the vehicle can contact them, they shall meet the requirements of paragraphs 5.3.2.1. to 5.3.4. If they can be contacted by a 165 mm diameter sphere and are above the lowest "H" point (see annex 5 of this Regulation) of the front seats and forward of the transverse plane of the torso reference line of the manikin on the rearmost seat, and outside the zones defined in paragraphs 2.3.1. and 2.3.2., these requirements shall be considered to have been fulfilled if:

5.3.2.1 their surface terminates in rounded edges, the radii of curvature being not less than 3.2 mm.

5.3.2.2. control levers and knobs shall be so designed and constructed that, under the effect of a forward acting longitudinal horizontal force of 37.8 daN either the projection in its most unfavourable position is reduced to not more than 25 mm from the surface of the panel or the said fittings become detached or bent; in the two latter cases no dangerous projections shall remain. Window winders may, however, project 35 mm from the surface of the panel;

5.3.2.3 the handbrake control, when in the released position, and the gear lever, when in any forward gear position, have, except when placed in the zones defined in paragraphs 2.3.1. and 2.3.2. and in the zones below the horizontal plane passing through the "H" point of the front seats, a surface area of not less than 6.5 cm² measured at a cross-section normal to the longitudinal horizontal direction up to a distance of 6.5 mm from the part projecting furthest, the radius of curvature being not less than 3.2 mm.

5.3.3 The requirements in paragraph 5.3.2.3. shall not apply to a floor-mounted handbrake control; for such controls, if the height of any part in the released position is above a horizontal plane passing through the lowest "H" point of the front seats (see annex 5 of this Regulation) the control shall have a cross sectional area of at least 6.5 cm² measured in a horizontal plane not more than 6.5 mm from the furthest projecting part (measured in the vertical direction). The radius of curvature shall not be less than 3.2 mm.

5.3.4 The other elements of the vehicle's equipment not covered by the above paragraph, such as seat slide rails, devices for regulating the horizontal or vertical part of the seat, devices for rolling up safety belts, etc. are not subject to any regulation if they are situated below a horizontal line passing through the "H" point of each seat even though the occupant is likely to come into contact with such elements.

5.3.4.1 Components mounted on the roof but which are not part of the roof structure: such as grab handles, lights and sun visors, etc. shall have a radius of curvature not less than 3.2 mm and, in addition, the width of the projecting parts shall not be less than the amount of their downward projection; alternatively, these components shall pass the energy-dissipating test in accordance with the requirements of annex 4.

5.3.5 If the parts considered above comprise a component made of material of less than 50 shore A hardness, mounted on a rigid support, the above requirements shall apply only to the rigid support.

5.4. Roof

5.4.1. Scope

5.4.1.1. The requirements of paragraph 5.4.2. below apply to the inner face of the roof.

5.4.1.2 However, they do not apply to such parts of the roof as cannot be touched by a sphere 165 mm in diameter.

5.4.2 Requirements

That part of the inner face of the roof which is situated above or forward of the occupants shall exhibit no dangerous roughness at sharp edges, directed rearwards or downwards. The width of the projecting parts shall not be less than the amount of their downward projection and the edges shall have a radius of curvature of not less than 5 mm. In particular, the rigid roof sticks or ribs, with the exception of the header rail of the glazed surfaces and door frames, shall not project downwards more than 19 mm.

5.4.2.2. If the roof sticks or ribs do not meet the requirements of paragraph 5.4.2.1. they shall pass the energy-dissipating test in accordance with the requirement of annex 4 to this Regulation.

5.4.2.3 The metal wires which stretch the lining of the roof and the frames of the sun visors shall have a maximum diameter of 5 mm or be able to absorb the energy, as prescribed in annex 4 to this Regulation. Non-rigid attachment elements of the frames of the sun visors shall meet the requirements of paragraph 5.3.4.1. above.

5.5 Vehicles with an opening roof

(...)

5.8 Other not mentioned fittings

5.8.1 The requirements of paragraph 5. shall apply to such fittings not mentioned in previous paragraphs as, according to their location, are capable of being contacted by the occupants in accordance with the various procedures prescribed in paragraphs 5.1. to 5.7.

If the contactable members of such fittings are made of material of less than 50 shore A hardness mounted on a rigid support, the requirements shall apply only to the rigid support.

(...)

EXPLANATORY NOTES

(...)

Paragraph 2.4.

The level of the instrument panel extends over the entire width of the passenger compartment and is defined by the rearmost points of contact of a vertical line with the surface of the instrument panel when the line is moved across the width of the vehicle. Where two or more points of contact occur simultaneously, the lower point of contact shall be used to establish the level of the instrument panel. In the case of consoles if it is not possible to determine the level of the instrument panel by reference to the points of contact of a vertical line the level of the instrument panel shall be where a horizontal line 25.4 mm above the "H" point of the front seats intersects the console.

(...)

Paragraph 5.1.1.

A sharp edge is an edge of a rigid material having a radius of curvature of less than 2.5 mm except in the case of projections of less than 3.2 mm, measured from the panel. In this case, the minimum radius of curvature shall not apply provided the height of the projection is not more than half its width and its edges are blunted.

Grills are considered to comply with the regulations if they meet the minimum requirements of the following table:

(...)

Paragraph 5.1.2.

During the test, it is determined whether parts within the impact zone used for reinforcement may be displaced or protrude so as to increase the hazards to passengers or the severity of injuries.

Paragraph 5.1.3.

These two concepts (level and lower edge of the instrument panel) may be distinct. However, this point is included in paragraph 5.1. (... above the level of the instrument panel ...) and, therefore is applicable only where these two concepts are combined. In the case where the two concepts are not combined, i.e. where the bottom edge of the instrument panel is located below the level of the instrument panel, it will be considered under paragraph 5.3.2.1. by reference to paragraph 5.8.

Paragraph 5.1.4.

If a pull handle or knob has a width dimension equal to or more than 50 mm and is located in a zone such that if it were less than 50 mm in width the maximum projection would be determined using the headroom measuring apparatus with annex 6, paragraph 2, the maximum projection shall be determined in accordance with Annex 6, paragraph 1. i.e. by using a 165 mm diameter sphere and determining the maximum variation in height of the "y" axis.

The cross-sectional area shall be measured in a plane parallel to the surface on which the component is mounted.

Paragraph 5.1.5.

paragraphs 5.1.4. and 5.1.5. Complement each other; the first sentence of paragraph 5.1.5. (i.e. a force of 37.8 daN for retraction or detachment) is applied and then paragraph 5.1.4. in case of retraction up to a protrusion between 3.2 and 9.5 mm or, in the case of detachment, the two last sentences of paragraph 5.1.5. (the cross-section area is measured before the force is applied). However, if, under practical circumstances paragraph 5.1.4. must be applied (retraction to under 9.5 mm and over 3.2 mm) it could be more convenient, at the manufacturer's discretion, to verify the specifications of paragraph 5.1.4. before applying the force of 37.8 daN specified in paragraph 5.1.5.

(...)

Paragraph 5.1.6.

Since, in the presence of soft materials, the requirements apply only to the rigid support, the projection is measured for the rigid support only.

The shore hardness measurement is made on samples of the test subject itself. Where, due to the condition of the material, it is impossible to carry out a hardness measurement by the shore A procedure, comparable measurements shall be used for evaluation.

(...)

Paragraph 5.2.3.

The technical specifications listed in paragraph 5.2.3. apply also to shelves and those parts of consoles below the level of the instrument panel located between the front seats, provided that these are located in front of the that point. If a cavity is closed it will be treated as a glove compartment and not be subject to these specifications.

Paragraph 5.2.3.1.

The dimensions specified refer to the surface before the addition of material of less than 50 shore A hardness (see para. 8.2.43).

Energy-dissipating tests shall be conducted in the spirit of Annex 4.

Paragraph 5.2.3.2.

If a shelf becomes detached or breaks up, no dangerous features must result; this applies not only to the rim but also to other edges facing into the passenger compartment as a result of the applied force.

The strongest part of the shelf shall be considered to be adjacent to a fixture. Also, "substantially distorted" shall mean that, under the effect of the applied force, the deflection of the shelf, measured from the initial point of contact with the test cylinder, must be a fold or a deformation visible to the naked eye. Elastic deformation shall be admissible.

The length of the test cylinder shall be at least 50 mm.

Paragraph 5.3.

"other parts" shall include such parts as window catches, seat belt upper anchorages and other parts located in the foot space and at the door side, unless these parts have been treated previously or are exempted in the text.

Paragraph 5.3.2.

The space between the forward bulkhead and the instrument panel which is located higher than the bottom edge of the instrument panel is not subject to the specifications of paragraph 5.3.

Paragraph 5.3.2.1.

The 3.2 mm radius applies to all contactable components covered by paragraph 5.3. when considered in all positions of use.

As exceptions, glove compartments shall be considered only in the closed position; seat belts will normally be considered only in the fastened position: but any part which has a fixed stowage position shall also comply with the 3.2 mm radius requirement in that stowed position.

Paragraph 5.3.2.2.

The reference surface is found by application of the device described in Annex 6, paragraph 2, with a force of 2 daN. Where this is not possible, the method described in annex 6, paragraph 1, shall be used with a force of 2 daN.

The evaluation of dangerous projections is subject to the discretion of the authority responsible for the tests.

The force of 37.8 daN is applied even if the original projection is less than 35 or 25 mm as applicable. The projection is measured under the applied load.

The horizontal, longitudinal force of 37.8 daN is normally applied by means of a flat-ended ram of not more than 50 mm diameter but. where this is not possible, an equivalent method may be used; for instance, by removing obstacles.

Paragraph 5.3.2.3.

The furthest projecting part, in the case of a gear lever, is that part of the grip or knob first contacted by a vertical transverse plane moved in a longitudinal, horizontal direction. If any part of a gear lever or handbrake lies above the "H" point level. that lever will have to be considered as if the whole of it were above the "H" point level.

Paragraph 5.3.4.

Where the horizontal plane(s) passing through the that point of the lowest front and rear seats do not coincide, then a vertical plane perpendicular to the vehicle's longitudinal axis shall be determined, passing through the front seat "H" point. The exempted zone will then be considered separately for both the front and rear passenger compartments, relative to their respective "H" point and up to the vertical plane defined above.

Paragraph 5.3.4.1.

Movable sun visors shall be considered in all positions of use. The frames of sun visors shall not be regarded as rigid supports (see para. 5.3.5.).

Paragraph 5.4.

When the roof is tested to measure those protrusions and parts which can be contacted by a ball having a diameter of 165 mm, the roof lining must be removed. When evaluating the specified radii the proportions and properties attributable to the materials of the roof lining shall be taken into consideration. The roof testing area shall extend in front of and above the transverse plane limited by the torso reference line of the manikin placed on the rearmost seat.

(...)

In defining the head impact zone of the back of the front seats any structure necessary to support the seat back shall be considered as a component of this seat back.

(...).

Annex 1

DETERMINATION OF THE HEAD-IMPACT ZONE

Paragraph 2.1.1.2.

The choice between the two procedures for determining height is to be left to the manufacturer.

Paragraph .2.

When determining points of contact, the length of the arm of the measuring apparatus is not changed during a particular operation. Each operation starts from the vertical position.

Paragraph 3.

The 25.4 mm dimension means the measurement from a horizontal plane passing through the "H" point to the horizontal tangent to the lower profile of the headform.

ANNEX 4

PROCEDURE FOR TESTING ENERGY-DISSIPATING MATERIAL:

Paragraph 1.4.

The breakage of any component during the energy-dissipation test, see note on paragraph 5.1.2.

ANNEX 5

PROCEDURE FOR DETERMINING THE "H" POINT AND THE ACTUAL TORSO ANGLE FOR SEATING POSITIONS IN MOTOR VEHICLES

Paragraph 4.

For determining the "H" point of any seat, other seats may be removed if necessary.

Annex 1

DETERMINATION OF THE HEAD-IMPACT ZONE

1. The head-impact zone comprises all the non-glazed surfaces of the interior of a vehicle which are capable of entering into static contact with a spherical head 165 mm in diameter that is an integral part of a measuring apparatus whose dimension from the pivotal point of the hip to the top of the head is continuously adjustable between 736 mm and 840 mm
2. The aforesaid zone shall be determined by the following procedure or its graphic equivalent:
 - 2.1. The pivotal point of the follows for each seating made provision: measuring apparatus shall be placed as position for which the manufacturer has made provision
 - 2.1.1. In the case of sliding seats
 - 2.1.1.1. at the "H" point (see annex 5), and
 - 2.1.1.2. at a point situated horizontally 127 mm forward of the "H" point and either at a height resulting from the variation in the height of the "H" point caused by a forward shift of 127 mm or of 19 mm
 - 2.1.2. In the case on non-sliding seats:
 - 2.1.2.1. at the "H" point of the seat considered.
 - 2.2. All points of contact situated forward of the "H" point shall be determined, for each dimension from the pivoted point to the top of the head capable of being measured by the measuring apparatus within the interior dimensions of the vehicle.
 - 2.2.1. In the case where the headform with the arm set at minimum length, overlaps the front seat, from the rear "H" point, no contact point is established for this particular operation.

2.3 With measuring apparatus vertical, possible points of contact shall be determined by pivoting it forwards and downwards through all arcs of vertical planes as far as 90° on either side of the longitudinal vertical plane of the vehicle which passes through the "H" point.

Annex D: R&TTE Directive

The following text is the verbatim text of relevant extracts from the Directive. It is reprinted in "*italic*" font but the original format styles have been retained. Explanation and interpretation provided by the present document is provided in 'normal' font.

In this Annex, in clause D.1 verbatim text of the Directive is shown in *italic* font. Explanation and interpretation provided by the present document is provided in "normal" font.

NOTE: Where text has been omitted it is denoted by "(...)" between lines. All subject /chapter headings are included.

D.1 Section by section summary of the provisions of the R&TTE Directive

The R&TTE Directive is perhaps the most significant of all of the Directives referred to in the present document, and perhaps the least familiar to OEMs and implementers. This Annex provides a summary that is quick to read and hopefully to digest. Those introducing eCall products should refer to the full text in addition to this summary. In this Annex, in clause D.1 verbatim text of the Directive is shown in *italic* font. Explanation and interpretation provided by the present document is provided in 'normal' font.

The first part of a European Directive justifies the purpose of the Directive and why the directive was written in its present format.

Article 1 Scope - Details which equipment is covered by the directive, i.e. Radio Equipment and Telecommunications Terminal Equipment; (see Definitions in article 2).

NOTE: Special mention is given to Automotive devices such that this directive applies but without prejudice to their own directives.

Article 2 Definitions - Definitions of the terms used.

Article 3, Essential Requirements - It is important to note that unlike its predecessor, the TTE directive, there are no performance requirements for connection to the network. The relevant provisions for wireless telecommunications equipment include:

Article 3.1(a) Health and Safety. This refers to the Low Voltage Directive (LVD). Normally the LVD does not cover battery operated devices but the wording "... but with no voltage limit applying." Implies they are included if they come within the scope of this directive.

Article 3.1(b) The EMC requirements are referenced to the EMC directive. (See clause 4.3 below)

Article 3.2 Radio equipment is relevant for eCall. It has requirements to avoid harmful interference. This includes parameters such as Effective Radiated Power, Frequency Stability and Spurious Emissions. It is implied that frequency can only be used as permitted by National Regulations only the intended application and not for other uses.

Article 3.3 provides that performance requirements can be added later if required. Currently only 3 requirements have been implemented under this clause, all of them for radio equipment, two in the marine and waterways domain, one for avalanche beacons. There are no such provisions in respect of wireless communications devices such as GSM/UMTS.

Article 4 Notification and publication of interface specifications - Places a requirement on member states (countries) to notify the commission of interfaces that are provided in their country.

Article 5 Harmonised Standards - is most important for eCall communications equipment . This article introduces the concept of using Harmonised Standards to demonstrate compliance. It summarises the procedures to used by the European Commission to amend or withdraw these standards.

Article 6. Placing on the market

Article 6.1 inhibits member states from imposing additional requirements. It should be read in combination with Article 4 and the final paragraph of clause 4.2.2.1 above. The objective is to ensure a single European level market.

Article 6.2 provides transition safeguards for legacy equipment. If it becomes subject to a new essential requirement as a result of article 3.3 of this directive it can continue to be sold for a "reasonable period" determined by the European Commission.

Article 6.3 provides requirements for the declaration of information, and information declared to the user and on the packaging. There are particular requirements when the equipment is a radio and has potential restrictions or cannot be used in some member states, however none apply to GSM/UMTS. Telecoms equipment has to have details of which interfaces to which it is intended to attach.

Article 6.4 Spectrum Usage Notification. Does not apply to GSM/UMTS which are covered by Harmonised European Standards.

Article 7 Putting into service and right to connect - Equipment that complies with the directive must be allowed to be "put into service" and network operators must not refuse connection. There are, however, some safeguards so that if equipment is found to cause "harmful radio interference" or "serious damage to a network" it can be forced to be withdrawn from service. This Article may be very relevant for aftermarket eCall Systems.

Article 8 Free movement of apparatus - Member States should not restrict the free movement of equipment that meets the requirements of this directive and displays the CE mark. This Article may be very relevant for aftermarket eCall Systems, and to ensure the use of all eCall NADs in all Member States of the EU.

Article 9 Safeguards - Encourages member states to set up surveillance authorities to check compliance with the directive.

Article 10 Conformity Assessment Procedures - This article lays down the ways that compliance to the essential requirements, given in Article 3, can be demonstrated, although the details are given in the referenced annexes II, III, IV and V.

Article 11 Notified Bodies and Surveillance Authorities - Requires the Member States to set up Notified Bodies and Surveillance Authorities.

Article 12 CE Marking - Determines how the CE mark should be displayed. Note that the equipment must be identified by batch and/or serial numbers and the name of the manufacturer or importer. It must also be identified by its name and/or type number as shown in the Declaration of Conformity.

Articles 13, 14 and 15 provides for committees to administer the bureaucracy of the directive.

Article 16 Third Countries - is intended to encourage countries outside of Europe to accept equipment that complies with this directive.

Demonstrating Compliance - 4 annexes detail different ways of demonstrating compliance,

Annex II Internal Production Control - ("Self Certification") the manufacturer, or his authorised representative (usually a distributor) has to ensure that-

- * The product must meet the requirements of the directive.
- * There is a written Declaration of Conformity (D of C).
- * The manufacturer compiles a Technical Construction File (TCF) to enable conformity to be assessed.
- * The TCF is available for at least 10 years after the last product has been manufactured.
- * A copy of the D of C is kept with the TCF.
- * The manufacturer ensures the continued compliance of the product, usually through suitable quality control and change control procedures.

Annex III Internal Production Control plus Specific Apparatus Tests - This includes all the requirements in annex II but where radio equipment does not have test suites defined in the relevant harmonised standard or no harmonised standard exists, a notified body must be used to identify suitable test suites to use. The manufacturer must declare that the equipment complies and affix the notified body number after the CE mark.

Annex IV Technical Construction File - This procedure includes all the elements of annex II and, where applicable, annex III but the Technical Construction File (TCF) is submitted to a notified body for assessment. The notified body issues an "opinion" as to whether compliance has been adequately demonstrated.

Annex V Full Quality Assurance (FQA) - Under this annex your Quality System for design, manufacturing and testing is audited by the Notified Body you may then introduce products without having to submit product information to them. You still get to use the notified body number after the CE mark.

Annex VI Designation of Notified Bodies - This annex simply lists the criteria to be used by member states when designating Notified Bodies and is of no particular interest to a manufacturer.

Annex VII Marking of equipment - The dimensions of the CE mark etc.

Relevant Verbatim extracts from the R&TTE Directive are provided in D2 below.

D.2 Text of R&TTE Directive

Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 100a,

Having regard to the proposal from the Commission (1),

Having regard to the opinion of the Economic and Social Committee (2),

Acting in accordance with the procedure laid down in Article 189b of the Treaty(3), in the light of the joint text approved by the Conciliation Committee on 8 December 1998,

1. Whereas the radio equipment and telecommunications terminal equipment sector is an essential part of the telecommunications market, which is a key element of the economy in the Community; whereas the directives applicable to the telecommunications terminal equipment sector are no longer capable of accommodating the expected changes in the sector caused by new technology, market developments and network legislation;
2. Whereas in accordance with the principles of subsidiarity and proportionality referred to in Article 3b of the Treaty, the objective of creating an open competitive single market for telecommunications equipment cannot be sufficiently achieved by the Member States and can therefore be better achieved by the Community; whereas this Directive does not go beyond what is necessary to achieve this aim;
3. Whereas Member States may rely upon Article 36 of the Treaty to exclude certain classes of equipment from this Directive;
4. Whereas Directive 98/13/EC(4) consolidated the provisions relating to telecommunications terminal equipment and satellite earth station equipment, including measures for the mutual recognition of their conformity;
5. Whereas that Directive does not cover a substantial proportion of the radio equipment market;
6. Whereas dual-use goods are subject to the Community regime of export controls introduced by Council Regulation (EC) No 3381/94(5);
7. Whereas the broad scope of this Directive requires new definitions of the expressions 'radio equipment' and 'telecommunications terminal equipment'; whereas a regulatory regime aimed at the development of a single market for radio equipment and telecommunications terminal equipment should permit investment, manufacture and sale to take place at the pace of technology and market developments;

8. Whereas, given the increasing importance of telecommunications terminal equipment and networks using radio transmission besides equipment connected through wired links, any rules governing the manufacturing, marketing and use of radio equipment and telecommunications terminal equipment should cover both classes of such equipment;
9. Whereas Directive 98/10/EC of the European Parliament and of the Council of 26 February 1998 on the application of open network provision (ONP) to voice telephony and on universal service for telecommunications in a competitive environment(6) calls on national regulatory authorities to ensure the publication of details of technical interface specifications for network access for the purpose of ensuring a competitive market for the supply of terminal equipment;
10. Whereas the objectives of Council Directive 73/23/EEC of 19 February 1973 on the harmonisation of the laws of the Member States relating to electrical equipment designed for use within certain voltage limits(7) are sufficient to cover radio equipment and telecommunications terminal equipment, but with no lower voltage limit applying;
11. Whereas the electromagnetic compatibility related protection requirements laid down by Council Directive 89/336/EEC of 3 May 1989 on the approximation of the laws of Member States relating to electromagnetic compatibility(8) are sufficient to cover radio equipment and telecommunications terminal equipment;
12. Whereas Community law provides that obstacles to the free movement of goods within the Community, resulting from disparities in national legislation relating to the marketing of products, can only be justified where any national requirements are necessary and proportionate; whereas, therefore, the harmonisation of laws must be limited to those requirements necessary to satisfy the essential requirements relating to radio equipment and telecommunications terminal equipment;
13. Whereas the essential requirements relevant to a class of radio equipment and telecommunications terminal equipment should depend on the nature and the needs of that class of equipment; whereas these requirements must be applied with discernment in order not to inhibit technological innovation or the meeting of the needs of a free-market economy;
14. Whereas care should be taken that radio equipment and telecommunications terminal equipment should not represent an avoidable hazard to health;
15. Whereas telecommunications are important to the well-being and employment of people with disabilities who represent a substantial and growing proportion of the population of Europe; whereas radio equipment and telecommunications terminal equipment should therefore in appropriate cases be designed in such a way that disabled people may use it without or with only minimal adaptation;
16. Whereas radio equipment and telecommunications terminal equipment can provide certain functions required by emergency services;
17. Whereas some features may have to be introduced on the radio equipment and telecommunications terminal equipment in order to prevent the infringement of personal data and privacy of the user and of the subscriber and/or the avoidance of fraud;
18. Whereas in some cases interworking via networks with other apparatus within the meaning of this Directive and connection with interfaces of the appropriate type throughout the Community may be necessary;
19. Whereas it should therefore be possible to identify and add specific essential requirements on user privacy, features for users with a disability, features for emergency services and/or features for avoidance of fraud;
20. Whereas it is recognised that in a competitive market, voluntary certification and marking schemes developed by consumer organisations, manufacturers, operators and other industry actors contribute to quality and are a useful means of improving consumers' confidence in telecommunications products and services; whereas Member States may support such schemes; whereas such schemes should be compatible with the competition rules of the Treaty;
21. Whereas unacceptable degradation of service to persons other than the user of radio equipment and telecommunications terminal equipment should be prevented; whereas manufacturers of terminals should construct equipment in a way which prevents networks from suffering harm which results in such degradation when used under normal operating conditions; whereas network operators should construct their networks in a way that does not oblige manufacturers of terminal equipment to take disproportionate measures to prevent networks from being harmed; whereas the European Telecommunications Standards Institute (ETSI) should take due account of this objective when developing standards concerning access to public networks;

22. Whereas effective use of the radio spectrum should be ensured so as to avoid harmful interference; whereas the most efficient possible use, according to the state of the art, of limited resources such as the radio frequency spectrum should be encouraged;
23. Whereas harmonised interfaces between terminal equipment and telecommunications networks contribute to promoting competitive markets both for terminal equipment and network services;
24. Whereas, however, operators of public telecommunications networks should be able to define the technical characteristics of their interfaces, subject to the competition rules of the Treaty; whereas, accordingly, they should publish accurate and adequate technical specifications of such interfaces so as to enable manufacturers to design telecommunications terminal equipment which satisfies the requirements of this Directive;
25. Whereas, nevertheless, the competition rules of the Treaty and Commission Directive 88/301/EEC of 16 May 1988 on competition in the markets in telecommunications terminal equipment(9) establish the principle of equal, transparent and non-discriminatory treatment of all technical specifications having regulatory implications; whereas therefore it is the task of the Community and the Member States, in consultation with the economic players, to ensure that the regulatory framework created by this Directive is fair;
26. Whereas it is the task of the European standardisation organisations, notably ETSI, to ensure that harmonised standards are appropriately updated and drafted in a way which allows for unambiguous interpretation; whereas maintenance, interpretation and implementation of harmonised standards constitute very specialised areas of increasing technical complexity; whereas those tasks require the active participation of experts drawn from amongst the economic players; whereas in some circumstances it may be necessary to provide more urgent interpretation of or corrections to harmonised standards than is possible through the normal procedures of the European standardisation organisations operating in conformity with Directive 98/34/EC of 22 June 1998 of the European Parliament and of the Council laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on information society services(10);
27. Whereas it is in the public interest to have harmonised standards at European level in connection with the design and manufacture of radio equipment and telecommunications terminal equipment; whereas compliance with such harmonised standards gives rise to a presumption of conformity to the essential requirements; whereas other means of demonstrating conformity to the essential requirements are permitted;
28. Whereas the assignment of equipment class identifiers should draw on the expertise of CEPT/ERC and of the relevant European standards bodies in radio matters; whereas other forms of cooperation with those bodies is to be encouraged where possible;
29. Whereas, in order to enable the Commission to monitor market control effectively, the Member States should provide the relevant information concerning types of interfaces, inadequate or incorrectly applied harmonised standards, notified bodies and surveillance authorities;
30. Whereas notified bodies and surveillance authorities should exchange information on radio equipment and telecommunications terminal equipment with a view to efficient surveillance of the market; whereas such cooperation should make the utmost use of electronic means; whereas, in particular, such cooperation should enable national authorities to be informed about radio equipment placed on their market operating in frequency bands not harmonised in the Community;
31. Whereas manufacturers should notify Member States of their intention to place radio equipment on the market using frequency bands whose use is not harmonised throughout the Community; whereas Member States therefore need to put in place procedures for such notification; whereas such procedures should be proportionate and should not constitute a conformity assessment procedure additional to those provided for in Annexes IV or V; whereas it is desirable that those notification procedures should be harmonised and preferably implemented by electronic means and one-stop-shopping;
32. Whereas radio equipment and telecommunications terminal equipment which complies with the relevant essential requirements should be permitted to circulate freely; whereas such equipment should be permitted to be put into service for its intended purpose; whereas the putting into service may be subject to authorisations on the use of the radio spectrum and the provision of the service concerned;
33. Whereas, for trade fairs, exhibitions, etc., it must be possible to exhibit radio equipment and telecommunications terminal equipment which does not conform to this Directive; whereas, however, interested parties should be properly informed that such equipment does not conform and cannot be purchased in that condition; whereas Member States may restrict the putting into service, including the switching on, of such exhibited radio equipment for reasons related to the effective and appropriate use of the radio spectrum, avoidance of harmful interference or matters relating to public health;

34. Whereas radio frequencies are allocated nationally and, to the extent that they have not been harmonised, remain within the exclusive competence of the Member States; whereas it is necessary to include a safeguard provision permitting Member States, in conformity with Article 36 of the Treaty, to prohibit, restrict or require the withdrawal from its market of radio equipment which has caused, or which it reasonably considers will cause, harmful interference; whereas interference with nationally allocated radio frequencies constitutes a valid ground for Member States to take safeguard measures;
35. Whereas manufacturers are liable for damage caused by defective apparatus according to the provisions of Council Directive 85/374/EEC(11); whereas without prejudice to any liability on the part of the manufacturer, any person who imports apparatus into the Community for sale in the course of his business is liable according to that Directive; whereas the manufacturer, his authorised representative or the person responsible for placing the apparatus on the Community market is liable according to the rules of the law of contractual or non-contractual liability in the Member States;
36. Whereas the measures which are appropriate to be taken by the Member States or the Commission where apparatus declared to be compliant with the provisions of this Directive causes serious damage to a network or harmful radio interference shall be determined in accordance with the general principles of Community law, in particular, the principles of objectivity, proportionality and non-discrimination;
37. Whereas on 22 July 1993 the Council adopted Decision 93/465/EEC concerning the modules for the various phases of the conformity assessment procedures and the rules for the affixing and the use of EU conformity marking which are intended to be used in the technical harmonisation directives(12); whereas the applicable conformity assessment procedures should preferably be chosen from among the available modules laid down by that Decision;
38. Whereas Member States may request that notified bodies they designate and their surveillance authorities be accredited according to appropriate European standards;
39. Whereas it is appropriate that compliance of radio equipment and telecommunications terminal equipment with the requirements of Directives 73/23/EEC and 89/336/EEC may be demonstrated using the procedures specified in those Directives where the apparatus is within their scope; whereas, as a result, the procedure provided for in Article 10(1) of Directive 89/336/EEC may be used where the application of harmonised standards gives rise to a presumption of conformity with the protection requirements; whereas the procedure provided for in Article 10(13) may be used where the manufacturer has not applied harmonised standards or where no such standards exist;
40. Whereas Community undertakings should have effective and comparable access to third countries' markets and enjoy treatment in third countries similar to that offered in the Community to undertakings owned wholly, controlled through majority ownership or effectively controlled by nationals of the third countries concerned;
41. Whereas it is desirable to establish a committee bringing together parties directly involved in the implementation of regulation of radio equipment and telecommunications terminal equipment, in particular the national conformity assessment bodies and national bodies responsible for market surveillance, in order to assist the Commission in achieving a harmonised and proportionate application of the provisions so as to meet the needs of the market and the public at large; whereas representatives of telecommunications operators, users, consumers, manufacturers and service providers should be consulted where appropriate;
42. Whereas a modus vivendi between the European Parliament, the Council and the Commission concerning the implementing measures for acts adopted in accordance with the procedure laid down in Article 189b of the Treaty was concluded on 20 December 1994(14);
43. Whereas the Commission should keep under review the implementation and practical application of this and other relevant directives and take steps to ensure coordination of the application of all relevant directives in order to avoid disturbance to telecommunications equipment which affects the health of humans or is harmful to property;
44. Whereas the functioning of this Directive should be reviewed in due course in the light of the development of the telecommunications sector and of experience gained from application of the essential requirements and the conformity assessment procedures provided for in this Directive;
45. Whereas it is necessary to ensure that with the introduction of changes to the regulatory regime there is a smooth transition from the previous regime in order to avoid disruption to the market and legal uncertainty;
46. Whereas this Directive replaces Directive 98/13/EC, which should accordingly be repealed; whereas Directives 73/23/EEC and 89/336/EEC will no longer apply to apparatus within the scope of this Directive, with the exception of protection and safety requirements and certain conformity assessment procedures, being of the State in the case of activities pertaining to State security matters) and the activities of the State in the area of criminal law.

- (1) OJ C 248, 14.8.1997, p.4.
- (2) OJ C 73, 9.3.1998, p. 10.
- (3) Opinion of the European Parliament of 29 January 1998 (OJ C 56, 23.2.1998, p. 27), Council common position of 8 June 1998 (OJ C 227, 20.7.1998, p. 37) and Decision of the European Parliament of 6 October 1998 (OJ C 328, 26.10.1998, p. 32). Decision of the Council of 25 January 1999 and Decision of the European Parliament of 10 February 1999.
- (4) OJ L 74, 12.3.1998, p. 1.
- (5) OJ L 367, 31.12.1994, p. 1.
- (6) OJ L 101, 1.4.1998, p. 24.
- (7) OJ L 77, 26.3.1973, p. 29. Directive as amended by Directive 93/68/EEC (OJ L 220, 30.8.1993, p. 1).
- (8) OJ L 139, 23.5.1989, p. 19. Directive as last amended by Directive 93/68/EEC.
- (9) OJ L 131, 27.5.1998, p. 73. Directive as amended by Directive 94/46/EC (OJ L 268, 19.10.1994, p. 15).
- (10) OJ L 204, 21.7.1998, p. 37. Directive as amended by Directive 98/48/EC (OJ L 217, 5.8.1998, p. 18).
- (11) OJ L 210, 7.8.1985, p. 29.
- (12) OJ L 220, 30.8.1993, p. 23.
- (13) OJ L 220, 30.8.1993, p. 23.
- (14) OJ C 102, 4.4.1996, p. 1.

HAVE ADOPTED THIS DIRECTIVE:

CHAPTER I

GENERAL ASPECTS

Article 1

Scope and aim

1. This Directive establishes a regulatory framework for the placing on the market, free movement and putting into service in the Community of radio equipment and telecommunications terminal equipment.
2. Where apparatus as defined in Article 2(a) incorporates, as an integral part, or as an accessory:
 - a) a medical device within the meaning of Article 1 of Council Directive 93/42/EEC of 14 June 1993 concerning medical devices(1), or
 - b) an active implantable medical device within the meaning of Article 1 of Council Directive 90/385/EEC of 20 June 1990 on the approximation of the laws of the Member States relating to active implantable medical devices(2), the apparatus shall be governed by this Directive, without prejudice to the application of Directives 93/42/EEC and 90/385/EEC to medical devices and active implantable medical devices, respectively.
3. Where apparatus constitutes a component or a separate technical unit of a vehicle within the meaning of Council Directive 72/245/EEC(3) relating to the radio interference (electromagnetic compatibility) of vehicles or a component or a separate technical unit of a vehicle within the meaning of Article 1 of Council Directive 92/61/EEC of 30 June 1992 relating to the type-approval of two or three-wheel motor vehicles, the apparatus shall be governed by this Directive without prejudice to the application of Directive 72/245/EEC or of Directive 92/61/EEC respectively.
4. This Directive shall not apply to equipment listed in Annex I.
5. This Directive shall not apply to apparatus exclusively used for activities concerning public security, defence, State security (including the economic well being of the State in the case of activities pertaining to State security matters) and the activities of the State in the area of criminal law.

(1) OJ L 169, 12.7.1993, p. 1.

(2) OJ L 152, 6.7.1972, p. 15. Directive as last amended by Commission Directive 95/54/EC (OJ L 266, 8.11.1995, p. 1).

(3) OJ L 225, 10.8.1992, p. 72. Directive as amended by the 1994 Act of Accession.

Article 2

Definitions

For the purpose of this Directive the following definitions shall apply:

a) 'apparatus' means any equipment that is either radio equipment or telecommunications terminal equipment or both;

b) 'telecommunications terminal equipment' means a product enabling communication or a relevant component thereof which is intended to be connected directly or indirectly by any means whatsoever to interfaces of public telecommunications networks (that is to say, telecommunications networks used wholly or partly for the provision of publicly available telecommunications services);

c) 'radio equipment' means a product, or relevant component thereof, capable of communication by means of the emission and/or reception of radio waves utilising the spectrum allocated to terrestrial/ space radiocommunication;

d) 'radio waves' means electromagnetic waves of frequencies from 9 kHz to 3 000 GHz, propagated in space without artificial guide;

e) 'interface' means

i. a network termination point, which is a physical connection point at which a user is provided with access to public telecommunications network, and/or

ii. an air interface specifying the radio path between radio equipment and their technical specifications;

f) 'equipment class' means a class identifying particular types of apparatus which under this Directive are considered similar and those interfaces for which the apparatus is designed. Apparatus may belong to more than one equipment class;

g) 'technical construction file' means a file describing the apparatus and providing information and explanations as to how the applicable essential requirements have been implemented;

h) 'harmonised standard' means a technical specification adopted by a recognised standards body under a mandate from the Commission in conformity with the procedures laid down in Directive 98/34/EC for the purpose of establishing a European requirement, compliance with which is not compulsory.

i) "harmful interference" means interference which endangers the functioning of a radionavigation service or of other safety services or which otherwise seriously degrades, obstructs or repeatedly interrupts a radiocommunications service operating in accordance with the applicable Community or national regulations.

Article 3

Essential requirements

1. The following essential requirements are applicable to all apparatus:

a) the protection of the health and the safety of the user and any other person, including the objectives with respect to safety requirements contained in Directive 73/23/EEC, but with no voltage limit applying;

b) the protection requirements with respect to electromagnetic compatibility contained in Directive 89/336/EEC.

2. In addition, radio equipment shall be so constructed that it effectively uses the spectrum allocated to terrestrial/space radio communication and orbital resources so as to avoid harmful interference.

3. In accordance with the procedure laid down in Article 15, the Commission may decide that apparatus within certain equipment classes or apparatus of particular types shall be so constructed that:

- a) it interworks via networks with other apparatus and that it can be connected to interfaces of the appropriate type throughout the Community; and/or that
- b) it does not harm the network or its functioning nor misuse network resources, thereby causing an unacceptable degradation of service; and/or that
- c) it incorporates safeguards to ensure that the personal data and privacy of the user and of the subscriber are protected; and/or that
- d) it supports certain features ensuring avoidance of fraud; and/or that
- e) it supports certain features ensuring access to emergency services; and/or that
- f) it supports certain features in order to facilitate its use by users with a disability.

Article 4

Notification and publication of interface specifications

1. Member States shall notify the interfaces which they have regulated to the Commission insofar as the said interfaces have not been notified under the provisions of Directive 98/34/EC. After consulting the committee in accordance with the procedure set out in Article 15, the Commission shall establish the equivalence between notified interfaces and assign an equipment class identifier, details of which shall be published in the Official Journal of the European Communities.

2. Each Member State shall notify to the Commission the types of interface offered in that State by operators of public telecommunications networks. Member States shall ensure that such operators publish accurate and adequate technical specifications of such interfaces before services provided through those interfaces are made publicly available, and regularly publish any updated specifications. The specifications shall be in sufficient detail to permit the design of telecommunications terminal equipment capable of utilising all services provided through the corresponding interface. The specifications shall include, inter alia, all the information necessary to allow manufacturers to carry out, at their choice, the relevant tests for the essential requirements applicable to the telecommunications terminal equipment. Member States shall ensure that those specifications are made readily available by the operators.

Article 5

Harmonised standards

1. Where apparatus meets the relevant harmonised standards or parts thereof whose reference numbers have been published in the Official Journal of the European Communities, Member States shall presume compliance with those of the essential requirements referred to in Article 3 as are covered by the said harmonised standards or parts thereof.

2. Where a Member State or the Commission considers that conformity with a harmonised standard does not ensure compliance with the essential requirements referred to in Article 3 which they said standard is intended to cover, the Commission or the Member State concerned shall bring the matter before the committee.

3. In the case of shortcomings of harmonised standards with respect to the essential requirements, the Commission may, after consulting the committee and in accordance with the procedure laid down in Article 14, publish in the Official Journal of the European Communities guidelines on the interpretation of harmonised standards or the conditions under which compliance with that standard raises a presumption of conformity. After consultation of the committee and in accordance with the procedure laid down in Article 14, the Commission may withdraw harmonised standards by publication of a notice in the Official Journal of the European Communities.

Article 6

Placing on the market

1. Member States shall ensure that apparatus is placed on the market only if it complies with the appropriate essential requirements identified in Article 3 and the other relevant provisions of this Directive when it is properly installed and maintained and used for its intended purpose. It shall not be subject to further national provisions in respect of placing on the market.

2. In taking a decision regarding the application of essential requirements under Article 3(3), the Commission shall determine the date of application of the requirements. If it is determined that an equipment class needs to comply with particular essential requirements under Article 3(3), any apparatus of the equipment class in question which is first placed on the market before the date of application of the Commission's determination can continue to be placed on the market for a reasonable period. Both the date of application and the period shall be determined by the Commission in accordance with the procedure laid down in Article 14.

3. Member States shall ensure that the manufacturer or the person responsible for placing the apparatus on the market provides information for the user on the intended use of the apparatus, together with the declaration of conformity to the essential requirements. Where it concerns radio equipment, such information shall be sufficient to identify on the packaging and the instructions for use of the apparatus the Member States or the geographical area within a Member State where the equipment is intended to be used and shall alert the user by the marking on the apparatus referred to in Annex VII, paragraph 5, to potential restrictions or requirements for authorisation of use of the radio equipment in certain Member States. Where it concerns telecommunications terminal equipment, such information shall be sufficient to identify interfaces of the public telecommunications networks to which the equipment is intended to be connected. For all apparatus such information shall be prominently displayed.

4. In the case of radio equipment using frequency bands whose use is not harmonised throughout the Community, the manufacturer or his authorised representative established within the Community or the person responsible for placing the equipment on the market shall notify the national authority responsible in the relevant Member State for spectrum management of the intention to place such equipment on its national market. This notification shall be given no less than four weeks in advance of the start of placing on the market and shall provide information about the radio characteristics of the equipment (in particular frequency bands, channel spacing, type of modulation and RF-power) and the identification number of the notified body referred to in Annex IV or V.

Article 7

Putting into service and right to connect

1. Member States shall allow the putting into service of apparatus for its intended purpose where it complies with the appropriate essential requirements identified in Article 3 and the other relevant provisions of this Directive.

2. Notwithstanding paragraph 1, and without prejudice to conditions attached to authorisations for the provision of the service concerned in conformity with Community law, Member States may restrict the putting into service of radio equipment only for reasons related to the effective and appropriate use of the radio spectrum, avoidance of harmful interference or matters relating to public health.

3. Without prejudice to paragraph 4, Member States shall ensure that operators of public telecommunications networks do not refuse to connect telecommunications terminal equipment to appropriate interfaces on technical grounds where that equipment complies with the applicable requirements of Article 3.

4. Where a Member State considers that apparatus declared to be compliant with the provisions of this Directive causes serious damage to a network or harmful radio interference or harm to the network or its functioning, the operator may be authorised to refuse connection, to disconnect such apparatus or to withdraw it from service. The Member States shall notify each such authorisation to the Commission, which shall convene a meeting of the committee for the purpose of giving its opinion on the matter. After the committee has been consulted, the Commission may initiate the procedures referred to in Article 5(2) and (3). The Commission and the Member States may also take other appropriate measures.

5. In case of emergency, an operator may disconnect apparatus if the protection of the network requires the equipment to be disconnected without delay and if the user can be offered, without delay and without costs for him, an alternative solution. The operator shall immediately inform the national authority responsible for the implementation of paragraph 4 and Article 9.

Article 8

Free movement of apparatus

1. Member States shall not prohibit, restrict or impede the placing on the market and putting into service in their territory of apparatus bearing the CE marking referred to in Annex VII, which indicates its conformity with all provisions of this Directive, including the conformity assessment procedures set out in Chapter II. This shall be without prejudice to Articles 6(4), 7(2) and 9(5).

2. At trade fairs, exhibitions, demonstrations, etc., Member States shall not create any obstacles to the display of apparatus which does not comply with this Directive, provided that a visible sign clearly indicates that such apparatus may not be marketed or put into service until it has been made to comply.

3. Where the apparatus is subject to other directives which concern other aspects and also provide for the affixing of the CE marking, the latter shall indicate that such apparatus also fulfils the provisions of those other directives. However, should one or more of those directives allow the manufacturer, during a transitional period, to choose which arrangements to apply, the CE marking shall indicate that the apparatus fulfils the provisions only of those directives applied by the manufacturer. In this case, the particulars of those directives, as published in the Official Journal of the European Communities, must be given in the documents, notices or instructions required by those directives and accompanying such products.

Article 9

Safeguards

1. Where a Member State ascertains that apparatus within the scope of this Directive does not comply with the requirements of this Directive, it shall take all appropriate measures in its territory to withdraw the apparatus from the market or from service, prohibit its placing on the market or putting into service or restrict its free movement.

2. The Member State concerned shall immediately notify the Commission of any such measures indicating the reasons for its decision and whether non-compliance is due to:

a) incorrect application of the harmonised standards referred to in Article 5(1);

b) shortcomings in the harmonised standards referred to in Article 5(1);

c) failure to satisfy the requirements referred to in Article 3 where the apparatus does not meet the harmonised standards referred to in Article 5(1).

3. If the measures referred to in paragraph 1 are attributed to incorrect application of the harmonised standards referred to in Article 5(1) or to a failure to satisfy the requirements referred to in Article 3 where the apparatus does not meet the harmonised standards referred to in Article 5(1), the Commission shall consult the parties concerned as soon as possible. The Commission shall forthwith inform the Member States of its findings and of its opinion as to whether the measures are justified, within two months of notification of the said measures to the Commission.

4. Where the decision referred to in paragraph 1 is attributed to shortcomings in the harmonised standards referred to in Article 5(1), the Commission shall bring the matter before the committee within two months. The committee shall deliver an opinion in accordance with the procedure laid down in Article 14. After such consultation, the Commission shall inform the Member States of its findings and of its opinion as to whether the action by the Member State is justified. If it finds that the action is justified it shall forthwith initiate the procedure referred to in Article 5(2).

5. (a) Notwithstanding the provisions of Article 6, a Member State may, acting in conformity with the Treaty, and in particular Articles 30 and 36 thereof, adopt any appropriate measures with a view to:

i. prohibiting or restricting the placing on its market, and/or

ii. requiring the withdrawal from its market,

of radio equipment, including types of radio equipment, which has caused or which it reasonably considers will cause harmful interference, including interference with existing or planned services on nationally allocated frequency bands.

b. Where a Member State takes measures in accordance with subparagraph (a) it shall immediately inform the Commission of the said measures, specifying the reasons for adopting them.

6. When a Member State notifies the Commission of a measure referred to in paragraph 1 or 5 the Commission shall in turn inform other Member States and consult the committee on the matter.

Where, after such consultation, the Commission considers that:

the measure is justified, it shall immediately so inform the Member State which took the initiative and the other Member States, the measure is unjustified, it shall immediately so inform the Member State and request it to withdraw the measure.

7. The Commission shall maintain a record of the cases notified by Member States, which shall be made available to them on request.

CHAPTER II

CONFORMITY ASSESSMENT

Article 10

Conformity assessment procedures

1. The conformity assessment procedures identified in this Article shall be used to demonstrate the compliance of the apparatus with all the relevant essential requirements identified in Article 3.
2. At the choice of the manufacturer, compliance of the apparatus with the essential requirements identified in Article 3(1)(a) and (b) may be demonstrated using the procedures specified in Directive 73/23/EEC and Directive 89/336/EEC respectively, where the apparatus is within the scope of those Directives, as an alternative to the procedures laid out below.
3. Telecommunications terminal equipment which does not make use of the spectrum allocated to terrestrial/space radio communication and receiving parts of radio equipment shall be subject to the procedures described in any one of Annexes II, IV or V at the choice of the manufacturer.
4. Where a manufacturer has applied the harmonised standards referred to in Article 5(1), radio equipment not within the scope of paragraph 3 shall be subject to the procedures described in any one of Annexes III, IV or V at the choice of the manufacturer.
5. Where a manufacturer has not applied or has only applied in part the harmonised standards referred to in Article 5(1), radio equipment not within the scope of paragraph 3 of this Article shall be subject to the procedures described in either of Annexes IV or V at the choice of the manufacturer.
6. Records and correspondence relating to the conformity assessment procedures referred to in paragraphs 2 to 5 shall be in an official language of the Member State where the procedure will be carried out, or in a language accepted by the notified body involved.

Article 11

Notified bodies and surveillance authorities

1. Member States shall notify the Commission of the bodies which they have designated to carry out the relevant tasks referred to in Article 10. Member States shall apply the criteria laid down in Annex VI in determining the bodies to be designated.
2. Member States shall notify the Commission of the authorities established within their territory which are to carry out the surveillance tasks related to the operation of this Directive.
3. The Commission shall publish a list of the notified bodies, together with their identification numbers and the tasks for which they have been notified, in the Official Journal of the European Communities. The Commission shall also publish a list of surveillance authorities in the Official Journal of the European Communities. Member States shall provide the Commission with all information necessary to keep these lists up to date.

CHAPTER III

CE CONFORMITY MARKING AND INSCRIPTIONS

Article 12

CE marking

1. Apparatus complying with all relevant essential requirements shall bear the EC conformity marking referred to in Annex VII. It shall be affixed under the responsibility of the manufacturer, his authorized representative within the Community or the person responsible for placing the apparatus on the market.

Where the procedures identified in Annex III, IV or V are used, the marking shall be accompanied by the identification number of the notified body referred to in Article 11(1). Radio equipment shall in addition be accompanied by the equipment class identifier where such identifier has been assigned. Any other marking may be affixed to the equipment provided that the visibility and legibility of the EC marking is not thereby reduced.

2. No apparatus, whether or not it complies with the relevant essential requirements, may bear any other marking which is likely to deceive third parties as to the meaning and form of the EC marking specified in Annex VII.
3. The competent Member State shall take appropriate action against any person who has affixed a marking not in conformity with paragraphs 1 and 2. If the person who affixed the marking is not identifiable, appropriate action may be taken against the holder of the apparatus at the time when non-compliance was discovered.
4. Apparatus shall be identified by the manufacturer by means of type, batch and/or serial numbers and by the name of the manufacturer or the person responsible for placing the apparatus on the market.

CHAPTER IV

THE COMMITTEE

Article 13

Constitution of the committee

The Commission shall be assisted by a committee, the Telecommunication Conformity Assessment and Market Surveillance Committee (TCAM), composed of representatives of the Member States and chaired by a representative of the Commission.

Article 14

Advisory committee procedure

1. The committee shall be consulted on the matters covered by Articles 5, 6(2), 7(4), 9(4) and Annex VII(5).
2. The Commission shall consult the committee periodically on the surveillance tasks related to the application of this Directive, and, where appropriate, issue guidelines on this matter.
3. The representative of the Commission shall submit to the committee a draft of the measures to be taken. The committee shall deliver its opinion on the draft within a time limit which the chairman may lay down according to the urgency of the matter, if necessary by taking a vote.

The opinion shall be recorded in the minutes; in addition, each Member State shall have the right to ask to have its position recorded in the minutes.

The Commission shall take the utmost account of the opinion delivered by the committee. It shall inform the committee of the manner in which its opinion has been taken into account and decide within one month after having received the opinion of the committee.

4. The Commission shall periodically consult the representatives of the telecommunications networks providers, the consumers and the manufacturers. It shall keep the committee regularly informed of the outcome of such consultations.

Article 15

Regulatory committee procedure

1. Notwithstanding the provisions of Article 14, the following procedure shall apply in respect of the matters covered by Articles 3(3) and 4(1).
2. The representative of the Commission shall submit to the committee a draft of the measures to be taken. The committee shall deliver its opinion on the draft within a time limit which the chairman may lay down according to the urgency of the matter. The opinion shall be delivered by the majority laid down in Article 148(2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission.

The votes of the representatives of the Member States within the committee shall be weighted in the manner set out in that Article. The chairman shall not vote.

3. The Commission shall adopt the measures envisaged if they are in accordance with the opinion of the committee.

If the measures envisaged are not in accordance with the opinion of the committee, or if no opinion is delivered, the Commission shall, without delay, submit to the Council a proposal relating to the measures to be taken.

The Council shall act by a qualified majority.

If, on the expiry of a period of three months from the date of referral to the Council, the Council has not acted, the proposed measures shall be adopted by the Commission.

CHAPTER V

FINAL AND TRANSITIONAL PROVISIONS

Article 16

Third countries

1. Member States may inform the Commission of any general difficulties encountered, de jure or de facto, by Community undertakings with respect to placing on the market in third countries, which have been brought to their attention.
2. Whenever the Commission is informed of such difficulties, it may, if necessary, submit proposals to the Council for an appropriate mandate for negotiation of comparable rights for Community undertakings in these third countries. The Council shall decide by qualified majority.
3. Measures taken pursuant to paragraph 2 shall be without prejudice to the obligations of the Community and of the Member States under relevant international agreements.

Article 17

Review and reporting

The Commission shall review the operation of this Directive and report thereon to the European Parliament and to the Council, on the first occasion not later than 7 October 2000 18 months after the entry into force of this Directive and every third year thereafter. The report shall cover progress on drawing up the relevant standards, as well as any problems that have arisen in the course of implementation. The report shall also outline the activities of the committee, assess progress in achieving an open competitive market for apparatus at Community level and examine how the regulatory framework for the placing on the market and putting into service of apparatus should be developed to:

- a) ensure that a coherent system is achieved at Community level for all apparatus;
- b) allow for convergence of the telecommunications, audiovisual and information technology sectors;
- c) enable harmonisation of regulatory measures at international level. It shall in particular examine whether essential requirements are still necessary for all categories of apparatus covered and whether the procedures contained in Annex IV, third paragraph, are proportionate to the aim of ensuring that the essential requirements are met for apparatus covered by that Annex. Where necessary, further measures may be proposed in the report for full implementation of the aim of the Directive.

Article 18

Transitional provisions

1. Standards under Directive 73/23/EEC or 89/336/EEC whose references have been published in the Official Journal of the European Communities may be used as the basis for a presumption of conformity with the essential requirements referred to in Article 3(1)(a) and Article 3(1)(b). Common technical regulations under Directive 98/13/EC whose references have been published in the Official Journal of the European Communities may be used as the basis for a presumption of conformity with the other relevant essential requirements referred to in Article 3. The Commission shall publish a list of references to those standards in the Official Journal of the European Communities immediately after this Directive enters into force.
2. Member States shall not impede the placing on the market and putting into service of apparatus which is in accordance with the provisions in Directive 98/13/EC or rules in force in their territory and was placed on the market for the first time before this Directive entered into force or at the latest two years after this Directive entered into force.
3. Apart from the essential requirements referred to in Article 3(1), the Member States may request to continue, for a period of up to 30 months following the date referred to in the first sentence of Article 19(1), and in conformity with the provisions of the Treaty, to require telecommunications terminal equipment not to be capable of causing unacceptable deterioration of a voice telephony service accessible within the framework of the universal service as defined in Directive 98/10/EC.

The Member State shall inform the Commission of the reasons for requesting a continuation of such a requirement, the date by which the service concerned will no longer need the requirement, and the measures envisaged in order to meet this deadline. The Commission shall consider the request taking into account the particular situation in the Member State and the need to ensure a coherent regulatory environment at Community level, and shall inform the Member State whether it deems that the particular situation in that Member State justifies a continuation and, if so, until which date such continuation is justified.

Article 19

Transposition

1. Member States shall not later than 7 April 2000 adopt and publish the laws, regulations and administrative provisions necessary to comply with this Directive. They shall forthwith inform the Commission thereof. They shall apply these provisions as from 8 April 2000.

When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such a reference shall be laid down by Member States.

2. Member States shall inform the Commission of the main provisions of domestic law which they adopt in the field covered by this Directive.

Article 20

Repeal

1. Directive 98/13/EC is hereby repealed as from 8 April 2000.

2. This Directive is not a specific directive within the meaning of Article 2(2) of Directive 89/336/EEC. The provisions of Directive 89/336/EEC shall not apply to apparatus falling within the scope of this Directive, with the exception of the protection requirements in Article 4 and Annex III and the conformity assessment procedure in Article 10(1) and (2) of, and Annex I to, Directive 89/336/EEC, as from 8 April 2000.

3. The provisions of Directive 73/23/EEC shall not apply to apparatus falling within the scope of this Directive, with the exceptions of the objectives with respect to safety requirements in Article 2 and Annex I and the conformity assessment procedure in Annex III, clause B, and Annex IV to Directive 73/23/EEC, as from 8 April 2000.

Article 21

Entry into force

This Directive shall enter into force on the day of its publication in the Official Journal of the European Communities.

Article 22

Addressees

This Directive is addressed to the Member States.

Done at Brussels, 9 March 1999.

For the European Parliament The President J. M. GIL-ROBLES

For the Council The President W. RIESTER

ANNEX I

EQUIPMENT NOT COVERED BY THIS DIRECTIVE AS REFERRED TO IN ARTICLE 1(4)

1. Radio equipment used by radio amateurs within Article 1, definition 53, of the International Telecommunications Union (ITU) radio regulations unless the equipment is available commercially.

Kits of components to be assembled by radio amateurs and commercial equipment modified by and for the use of radio amateurs are not regarded as commercially available equipment.

2. Equipment falling within the scope of Council Directive 96/98/EC of 20 December 1996 on marine equipment(1).

3. Cabling and wiring.
4. Receive only radio equipment intended to be used solely for the reception of sound and TV broadcasting services.
5. Products, appliances and components within the meaning of Article 2 of Council Regulation (EEC) No 3922/91 of 16 December 1991 on the harmonisation of technical requirements and administrative procedures in the field of civil aviation(2).
6. Air-traffic-management equipment and systems within the meaning of Article 1 of Council Directive 93/65/EEC of 19 July 1993 on the definition and use of compatible technical specifications for the procurement of air-traffic-management equipment and systems(3).

(1) OJ L 46, 17.2.1997, p. 25.

(2) OJ L 373, 31.12.1991, p. 4. Regulation as amended by Commission Regulation (EC) No 2176/96 (OJ L 291, 14.11.1996, p. 15).

(3) OJ L 187, 29.7.1993, p. 52. Directive as last amended by Commission Directive 97/15/EC (OJ L 95, 10.4.1997, p. 16).

ANNEX II

CONFORMITY ASSESSMENT PROCEDURE REFERRED TO IN ARTICLE 10(3)

Module A (internal production control)

1. This module describes the procedure whereby the manufacturer or his authorised representative established within the Community, who carries out the obligations laid down in point 2, ensures and declares that the products concerned satisfy the requirements of this Directive that apply to them. The manufacturer or his authorised representative established within the Community must affix the CE marking to each product and draw up a written declaration of conformity.
 2. The manufacturer must establish the technical documentation described in point 4 and he or his authorised representative established within the Community must keep it for a period ending at least 10 years after the last product has been manufactured at the disposal of the relevant national authorities of any Member State for inspection purposes.
 3. Where neither the manufacturer nor his authorised representative is established within the Community, the obligation to keep the technical documentation available is the responsibility of the person who places the product on the Community market.
 4. The technical documentation must enable the conformity of the product with the essential requirements to be assessed. It must cover the design, manufacture and operation of the product, in particular:
 - a general description of the product,
 - conceptual design and manufacturing drawings and schemes of components, sub-assemblies, circuits, etc.,
 - descriptions and explanations necessary for the understanding of said drawings and schemes and the operation of the product,
 - a list of the standards referred to in Article 5, applied in full or in part, and descriptions and explanations of the solutions adopted to meet the essential requirements of the Directive where such standards referred to in Article 5 have not been applied or do not exist,
 - results of design calculations made, examinations carried out, etc.,
 - test reports.
1. The manufacturer or his authorised representative must keep a copy of the declaration of conformity with the technical documentation.
 2. The manufacturer must take all measures necessary in order that the manufacturing process ensures compliance of the manufactured products with the technical documentation referred to in point 2 and with the requirements of this Directive that apply to them.

ANNEX III

CONFORMITY ASSESSMENT PROCEDURE REFERRED TO IN ARTICLE 10(4)

(Internal production control plus specific apparatus tests)

(1) This Annex consists of Annex II, plus the following supplementary requirements:

For each type of apparatus, all essential radio test suites must be carried out by the manufacturer or on his behalf. The identification of the test suites that are considered to be essential is the responsibility of a notified body chosen by the manufacturer except where the test suites are defined in the harmonised standards. The notified body must take due account of previous decisions made by notified bodies acting together.

The manufacturer or his authorised representative established within the Community or the person responsible for placing the apparatus on the market must declare that these tests have been carried out and that the apparatus complies with the essential requirements and must affix the notified body's identification number during the manufacturing process.

(1) Annex based on Module A with additional requirements appropriate to the sector.

ANNEX IV

CONFORMITY ASSESSMENT PROCEDURE REFERRED TO IN ARTICLE 10(5)

(Technical construction file)

This Annex consists of Annex III plus the following supplementary requirements:

The technical documentation described in point 4 of Annex II and the declaration of conformity to specific radio test suites described in Annex III must form a technical construction file.

The manufacturer, his authorised representative established within the Community or the person responsible for placing the apparatus on the market, must present the file to one or more notified bodies, each of the notified bodies must be informed of others who have received the file.

The notified body must review the file and if it is considered that it has not been properly demonstrated that the requirements of the Directive have been met, the notified body may issue an opinion to the manufacturer, his representative or the person responsible for placing the apparatus on the market and must inform the other notified bodies who have received the file accordingly. Such an opinion must be given within four weeks of receipt of the file by the notified body. On receipt of this opinion, or after the end of the four-week period, the apparatus may be placed on the market, without prejudice to Articles 6(4) and 9(5).

The manufacturer or his authorised representative established within the Community or the person responsible for placing the apparatus on the market must keep the file for a period ending at least 10 years after the last apparatus has been manufactured at the disposal of the relevant national authorities of any Member States for inspection.

ANNEX V

CONFORMITY ASSESSMENT PROCEDURE REFERRED TO IN ARTICLE 10

Full quality assurance

1. Full quality assurance is the procedure whereby the manufacturer who satisfies the obligations of point 2 ensures and declares that the products concerned satisfy the requirements of the Directive that apply to them. The manufacturer must affix the marks referred to in Article 12(1) to each product and draw up a written declaration of conformity.
2. The manufacturer must operate an approved quality system for design, manufacture and final product inspection and testing as specified in point 3 and must be subject to surveillance as specified in point 4.

3. Quality system

3.1 The manufacturer must lodge an application for assessment of his quality system with a notified body. The application must include:

all relevant information for the products envisaged,
the quality system's documentation.

3.2. The quality system must ensure compliance of the products with the requirements of the Directive that apply to them. All the elements, requirements and provisions adopted by the manufacturer must be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. This quality system documentation must ensure a common understanding of the quality policies and procedures such as quality programmes, plans, manuals and records.

It must contain in particular an adequate description of:

the quality objectives and the organisational structure, responsibilities and powers of the management with regard to design and product quality,

the technical specifications, including the harmonised standards and technical regulations as well as relevant test specifications that will be applied and, where the standards referred to in Article 5(1) will not be applied in full, the means that will be used to ensure that the essential requirements of the Directive that apply to the products will be met,

the design control and design verification techniques, processes and systematic actions that will be used when designing the products pertaining to the product category covered,

the corresponding manufacturing, quality control and quality assurance techniques, processes and systematic actions that will be used,

the examinations and tests that will be carried out before, during and after manufacture, and the frequency with which they will be carried out, as well as the results of the tests carried out before manufacture where appropriate,

the means by which it is ensured that the test and examination facilities respect the appropriate requirements for the performance of the necessary test,

the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.,

the means to monitor the achievement of the required design and product quality and the effective operation of the quality system.

3.3. The notified body must assess the quality system to determine whether it satisfies the requirements referred to in point 3.2. It must presume compliance with these requirements in respect of quality systems that implement the relevant harmonised standard.

The notified body must assess in particular whether the quality control system ensures conformity of the products with the requirements of the Directive in the light of the relevant documentation supplied in respect of points 3.1 and 3.2 including, where relevant, test results supplied by the manufacturer.

The auditing team must have at least one member experienced as an assessor in the product technology concerned. The evaluation procedure must include an assessment visit to the manufacturer's premises.

The decision must be notified to the manufacturer. The notification must contain the conclusions of the examination and the reasoned assessment decision.

3.4. The manufacturer must undertake to fulfil the obligations arising out of the quality system as approved and to uphold it so that it remains adequate and efficient.

The manufacturer or his authorised representative must keep the notified body that has approved the quality system informed of any intended updating of the quality system.

The notified body must evaluate the modifications proposed and decide whether the amended quality system will still satisfy the requirements referred to in point 3.2 or whether a reassessment is required.

It must notify its decision to the manufacturer. The notification must contain the conclusions of the examination and the reasoned assessment decision.

4. EC surveillance under the responsibility of the notified body

4.1. The purpose of surveillance is to make sure that the manufacturer duly fulfils the obligations arising out of the approved quality system.

4.2. The manufacturer must allow the notified body access for inspection purposes to the locations of design, manufacture, inspection and testing, and storage and must provide it with all necessary information, in particular:

the quality system documentation,

the quality records as foreseen by the design part of the quality system, such as results of analyses, calculations, tests, etc.,

the quality records as foreseen by the manufacturing part of the quality system, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.

4.3. The notified body must carry out audits at reasonable intervals to make sure that the manufacturer maintains and applies the quality system and must provide an audit report to the manufacturer.

4.4. Additionally, the notified body may pay unexpected visits to the manufacturer. At the time of such visits, the notified body may carry out tests or have them carried out in order to check the proper functioning of the quality system where necessary; it must provide the manufacturer with a visit report and, if a test has been carried out, with a test report.

5. The manufacturer must, for a period ending at least 10 years after the last product has been manufactured, keep at the disposal of the national authorities:

the documentation referred to in the second indent of point 3.1,

the updating referred to in the second paragraph of point 3.4,

the decisions and reports from the notified body which are referred to in the final paragraph of point 3.4 and in points 4.3 and 4.4.

6. Each notified body must make available to the other notified bodies the relevant information concerning quality system approvals including references to the product(s) concerned, issued and withdrawn.

ANNEX VI

MINIMUM CRITERIA TO BE TAKEN INTO ACCOUNT BY MEMBER STATES WHEN DESIGNATING NOTIFIED BODIES IN ACCORDANCE WITH ARTICLE 11(1)

1. The notified body, its director and the staff responsible for carrying out the tasks for which the notified body has been designated must not be a designer, manufacturer, supplier or installer of radio equipment or telecommunications terminal equipment, or a network operator or a service provider, nor the authorised representative of any of such parties. They must be independent and not become directly involved in the design, construction, marketing or maintenance of radio equipment or telecommunications terminal equipment, nor represent the parties engaged in these activities. This does not preclude the possibility of exchanges of technical information between the manufacturer and the notified body.

2. The notified body and its staff must carry out the tasks for which the notified body has been designated with the highest degree of professional integrity and technical competence and must be free from all pressures and inducements, particularly financial, which might influence their judgement or the results of any inspection, especially from persons or groups of persons with an interest in such results.

3. The notified body must have at its disposal the necessary staff and facilities to enable it to perform properly the administrative and technical work associated with the tasks for which it has been designated.

4. The staff responsible for inspections must have:

i. sound technical and professional training,

ii. satisfactory knowledge of the requirements of the tests or inspections that are carried out and adequate experience of such tests or inspections,

iii. the ability to draw up the certificates, records and reports required to authenticate the performance of the inspections.

1. The impartiality of inspection staff must be guaranteed. Their remuneration must not depend on the number of tests or inspections carried out nor on the results of such inspections.
2. The notified body must take out liability insurance unless its liability is assumed by the Member State in accordance with national law, or the Member State itself is directly responsible.
3. The staff of the notified body is bound to observe professional secrecy with regard to all information gained in carrying out its tasks (except vis-à-vis the competent administrative authorities of the Member State in which its activities are carried out) under this Directive or any provision of national law giving effect thereto.

ANNEX VII

MARKING OF EQUIPMENT REFERRED TO IN ARTICLE 12(1)

1. The CE conformity marking must consist of the initials 'CE' taking the following form:



The CE Mark

If the CE marking is reduced or enlarged, the proportions given in the above graduated drawing must be respected.

2. The CE marking must have a height of at least 5 mm except where this is not possible on account of the nature of the apparatus.
3. The CE marking must be affixed to the product or to its data plate. Additionally it must be affixed to the packaging, if any, and to the accompanying documents.
4. The CE marking must be affixed visibly, legibly and indelibly.
5. The equipment class identifier must take a form to be decided by the Commission in accordance with the procedure laid down in Article 14.

Where appropriate it must include an element intended to provide information to the user that the apparatus makes use of radio frequency bands where their use is not harmonised throughout the Community.

It must have the same height as the initials 'CE'.

Last update: 28/11/2002

Annex E: EMC Directive

The following text is the verbatim text of relevant extracts from the Directive. It is reprinted in "normal" font but the original format styles have been retained.

E.1 Text of the EMC Directive

DIRECTIVE 2004/108/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 15 December 2004

on the approximation of the laws of the Member States relating to electromagnetic compatibility and repealing Directive 89/336/EEC

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 95 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Economic and Social Committee (1),

Acting in accordance with the procedure referred to in Article 251 of the Treaty (2),

Whereas:

(1) Council Directive 89/336/EEC of 3 May 1989 on the approximation of laws of the Member States relating to electromagnetic compatibility (3) has been the subject of a review under the initiative known as Simpler Legislation for the Internal Market (SLIM). Both the SLIM process and a subsequent in-depth consultation have revealed the need to complete, reinforce and clarify the framework established by Directive 89/336/EEC.

(2) Member States are responsible for ensuring that radiocommunications, including radio broadcast reception and the amateur radio service operating in accordance with International Telecommunication Union (ITU) radio regulations, electrical supply networks and telecommunications networks, as well as equipment connected thereto, are protected against electromagnetic disturbance.

(3) Provisions of national law ensuring protection against electromagnetic disturbance should be harmonised in order to guarantee the free movement of electrical and electronic apparatus without lowering justified levels of protection in the Member States.

(4) Protection against electromagnetic disturbance requires obligations to be imposed on the various economic operators. Those obligations should be applied in a fair and effective way in order to achieve such protection.

(5) The electromagnetic compatibility of equipment should be regulated with a view to ensuring the functioning of the internal market, that is to say, of an area without internal frontiers in which the free movement of goods, persons, services and capital is assured.

(6) The equipment covered by this Directive should include both apparatus and fixed installations. However, separate provision should be made for each. This is so because, whereas apparatus as such may move freely within the Community, fixed installations on the other hand are installed for permanent use at a predefined location, as assemblies of various types of apparatus and, where appropriate, other devices. The composition and function of such installations correspond in most cases to the particular needs of their operators.

(7) Radio equipment and telecommunications terminal equipment should not be covered by this Directive since they are already regulated by Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity (4). The electromagnetic compatibility requirements in both Directives achieve the same level of protection.

- (8) Aircraft or equipment intended to be fitted into aircraft should not be covered by this Directive, since they are already subject to special Community or international rules governing electromagnetic compatibility.
- (9) This Directive need not regulate equipment which is inherently benign in terms of electromagnetic compatibility.
- (10) This Directive should not deal with the safety of equipment, since that is dealt with by separate Community or national legislation.
- (11) Where this Directive regulates apparatus, it should refer to finished apparatus commercially available for the first time on the Community market. Certain components or sub-assemblies should, under certain conditions, be considered to be apparatus if they are made available to the end-user.

L 390/24 EN Official Journal of the European Union 31.12.2004

- (1) OJ C 220, 16.9.2003, p. 13.
- (2) Opinion of the European Parliament of 9 March 2004 (not yet published in the Official Journal) and Council Decision of 29 November 2004.
- (3) OJ L 139, 23.5.1989, p. 19. Directive as last amended by Directive 93/68/EEC (OJ L 220, 30.8.1993, p. 1).
- (4) OJ L 91, 7.4.1999, p. 10. Directive as amended by Regulation (EC) No 1882/2003 (OJ L 284, 31.10.2003, p. 1).
- (12) The principles on which this Directive is based are those set out in the Council Resolution of 7 May 1985 on a new approach to technical harmonization and standards (1). In accordance with that approach, the design and manufacture of equipment is subject to essential requirements in relation to electromagnetic compatibility. Those requirements are given technical expression by harmonised European standards, to be adopted by the various European standardisation bodies, European Committee for Standardisation (CEN), European Committee for Electro-technical Standardisation (CENELEC) and European Telecommunications Standards Institute (ETSI). CEN, CENELEC and ETSI are recognised as the competent institutions in the field of this Directive for the adoption of harmonised standards, which they draw up in accordance with the general guidelines for cooperation between themselves and the Commission, and with the procedure laid down in Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services (2).
- (13) Harmonised standards reflect the generally acknowledged state of the art as regards electromagnetic compatibility matters in the European Union. It is thus in the interest of the functioning of the internal market to have standards for the electromagnetic compatibility of equipment which have been harmonised at Community level. Once the reference to such a standard has been published in the Official Journal of the European Union, compliance with it should raise a presumption of conformity with the relevant essential requirements, although other means of demonstrating such conformity should be permitted. Compliance with a harmonised standard means conformity with its provisions and demonstration thereof by the methods the harmonised standard describes or refers to.
- (14) Manufacturers of equipment intended to be connected to networks should construct such equipment in a way that prevents networks from suffering unacceptable degradation of service when used under normal operating conditions. Network operators should construct their networks in such a way that manufacturers of equipment liable to be connected to networks do not suffer a disproportionate burden in order to prevent networks from suffering an unacceptable degradation of service. The European standardisation organisations should take due account of that objective (including the cumulative effects of the relevant types of electromagnetic phenomena) when developing harmonised standards.
- (15) It should be possible to place apparatus on the market or put it into service only if the manufacturers concerned have established that such apparatus has been designed and manufactured in conformity with the requirements of this Directive. Apparatus placed on the market should bear the 'CE' marking attesting to compliance with this Directive. Although conformity assessment should be the responsibility of the manufacturer, without any need to involve an independent conformity assessment body, manufacturers should be free to use the services of such a body.
- (16) The conformity assessment obligation should require the manufacturer to perform an electromagnetic compatibility assessment of apparatus, based on relevant phenomena, in order to determine whether or not it meets the protection requirements under this Directive.

(17) Where apparatus is capable of taking different configurations, the electromagnetic compatibility assessment should confirm whether the apparatus meets the protection requirements in the configurations foreseeable by the manufacturer as representative of normal use in the intended applications; in such cases it should be sufficient to perform an assessment on the basis of the configuration most likely to cause maximum disturbance and the configuration most susceptible to disturbance.

(18) Fixed installations, including large machines and networks, may generate electromagnetic disturbance, or be affected by it. There may be an interface between fixed installations and apparatus, and the electromagnetic disturbances produced by fixed installations may affect apparatus, and vice versa. In terms of electromagnetic compatibility, it is irrelevant whether the electromagnetic disturbance is produced by apparatus or by a fixed installation. Accordingly, fixed installations and apparatus should be subject to a coherent and comprehensive regime of essential requirements. It should be possible to use harmonised standards for fixed installations in order to demonstrate conformity with the essential requirements covered by such standards.

(19) Due to their specific characteristics, fixed installations need not be subject to the affixation of the 'CE' marking or to the declaration of conformity.

(20) It is not pertinent to carry out the conformity assessment of apparatus placed on the market for incorporation into a given fixed installation, and otherwise not commercially available, in isolation from the fixed installation into which it is to be incorporated. Such apparatus should therefore be exempted from the conformity assessment procedures normally applicable to apparatus. However, such apparatus should not be permitted to compromise the conformity of the fixed installation into which it is incorporated. Should apparatus be incorporated into more than one identical fixed installation, identifying the electromagnetic compatibility characteristics of these installations should be sufficient to ensure exemption from the conformity assessment procedure.

31.12.2004 EN Official Journal of the European Union L 390/25

(1) OJ C 136, 4.6.1985, p. 1.

(2) OJ L 204, 21.7.1998, p. 37. Directive as last amended by the 2003 Act of Accession.

(21) A transitional period is necessary in order to ensure that manufacturers and other concerned parties are able to adapt to the new regulatory regime.

(22) Since the objective of this Directive, namely to ensure the functioning of the internal market by requiring equipment to comply with an adequate level of electromagnetic compatibility, cannot be sufficiently achieved by Member States and can therefore, by reason of its scale and effects, be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve that objective.

(23) Directive 89/336/EEC should therefore be repealed,

HAVE ADOPTED THIS DIRECTIVE:

CHAPTER I

GENERAL PROVISIONS

Article 1

Subject matter and scope

1. This Directive regulates the electromagnetic compatibility of equipment. It aims to ensure the functioning of the internal market by requiring equipment to comply with an adequate level of electromagnetic compatibility. This Directive applies to equipment as defined in Article 2.

2. This Directive shall not apply to:

(a) equipment covered by Directive 1999/5/EC;

(b) aeronautical products, parts and appliances as referred to in Regulation (EC) No 1592/2002 of the European Parliament and of the Council of 15 July 2002 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency (1);

(c) radio equipment used by radio amateurs within the meaning of the Radio Regulations adopted in the framework of the Constitution and Convention of the ITU (2), unless the equipment is available commercially. Kits of components to be assembled by radio amateurs and commercial equipment modified by and for the use of radio amateurs are not regarded as commercially available equipment.

3. This Directive shall not apply to equipment the inherent nature of the physical characteristics of which is such that:

(a) it is incapable of generating or contributing to electromagnetic emissions which exceed a level allowing radio and telecommunication equipment and other equipment to operate as intended; and

(b) it will operate without unacceptable degradation in the presence of the electromagnetic disturbance normally consequent upon its intended use.

4. Where, for the equipment referred to in paragraph 1, the essential requirements referred to in Annex I are wholly or partly laid down more specifically by other Community directives, this Directive shall not apply, or shall cease to apply, to that equipment in respect of such requirements from the date of implementation of those directives.

5. This Directive shall not affect the application of Community or national legislation regulating the safety of equipment.

Article 2

Definitions

1. For the purposes of this Directive, the following definitions shall apply:

(a) 'equipment' means any apparatus or fixed installation;

(b) 'apparatus' means any finished appliance or combination thereof made commercially available as a single functional unit, intended for the end user and liable to generate electromagnetic disturbance, or the performance of which is liable to be affected by such disturbance;

(c) 'fixed installation' means a particular combination of several types of apparatus and, where applicable, other devices, which are assembled, installed and intended to be used permanently at a predefined location;

(d) 'electromagnetic compatibility' means the ability of equipment to function satisfactorily in its electromagnetic environment without introducing intolerable electromagnetic disturbances to other equipment in that environment;

(e) 'electromagnetic disturbance' means any electromagnetic phenomenon which may degrade the performance of equipment. An electromagnetic disturbance may be electromagnetic noise, an unwanted signal or a change in the propagation medium itself;

(f) 'immunity' means the ability of equipment to perform as intended without degradation in the presence of an electromagnetic disturbance;

(g) 'safety purposes' means the purposes of safeguarding human life or property;

(h) 'electromagnetic environment' means all electromagnetic phenomena observable in a given location.

L 390/26 EN Official Journal of the European Union 31.12.2004

(1) OJ L 240, 7.9.2002, p. 1. Regulation as amended by Commission Regulation (EC) No 1701/2003 (OJ L 243, 27.9.2003, p. 5).

(2) Constitution and Convention of the International Telecommunication Union adopted by the Additional Plenipotentiary Conference (Geneva, 1992) as amended by the Plenipotentiary Conference (Kyoto, 1994).

2. For the purposes of this Directive the following shall be deemed to be an apparatus within the meaning of paragraph 1(b):

(a) 'components' or 'sub-assemblies' intended for incorporation into an apparatus by the end user, which are liable to generate electromagnetic disturbance, or the performance of which is liable to be affected by such disturbance;

(b) 'mobile installations' defined as a combination of apparatus and, where applicable, other devices, intended to be moved and operated in a range of locations.

Article 3

Placing on the market and/or putting into service

Member States shall take all appropriate measures to ensure that equipment is placed on the market and/or put into service only if it complies with the requirements of this Directive when properly installed, maintained and used for its intended purpose.

Article 4

Free movement of equipment

1. Member States shall not impede, for reasons relating to electromagnetic compatibility, the placing on the market and/ or the putting into service in their territory of equipment which complies with this Directive.

2. The requirements of this Directive shall not prevent the application in any Member State of the following special measures concerning the putting into service or use of equipment:

(a) measures to overcome an existing or predicted electromagnetic compatibility problem at a specific site;

(b) measures taken for safety reasons to protect public telecommunications networks or receiving or transmitting stations when used for safety purposes in well-defined spectrum situations. Without prejudice to Directive 98/34/EC, Member States shall notify those special measures to the Commission and to the

other Member States. The special measures which have been accepted shall be published by the Commission in the Official Journal of the European Union.

3. Member States shall not create any obstacles to the display and/or demonstration at trade fairs, exhibitions or similar events of equipment which does not comply with this Directive, provided that a visible sign clearly indicates that such equipment may not be placed on the market and/or put into service until it has been brought into conformity with this Directive. Demonstration may only take place provided that adequate measures are taken to avoid electromagnetic disturbances.

Article 5

Essential requirements

The equipment referred to in Article 1 shall meet the essential requirements set out in Annex I.

Article 6

Harmonised standards

1. 'Harmonised standard' means a technical specification adopted by a recognised European standardisation body under a mandate from the Commission in conformity with the procedures laid down in Directive 98/34/EC for the purpose of establishing a European requirement. Compliance with a 'harmonised standard' is not compulsory.

2. The compliance of equipment with the relevant harmonised standards whose references have been published in the Official Journal of the European Union shall raise a presumption, on the part of the Member States, of conformity with the essential requirements referred to in Annex I to which such standards relate. This presumption of conformity is limited to the scope of the harmonised standard(s) applied and the relevant essential requirements covered by such harmonised standard(s).

3. Where a Member State or the Commission considers that a harmonised standard does not entirely satisfy the essential requirements referred to in Annex I, it shall bring the matter before the Standing Committee set up by Directive 98/34/EC (hereinafter 'the Committee'), stating its reasons. The Committee shall deliver an opinion without delay.

4. Upon receipt of the Committee's opinion, the Commission shall take one of the following decisions with regard to the references to the harmonised standard concerned:

(a) not to publish;

(b) to publish with restrictions;

(c) to maintain the reference in the Official Journal of the European Union;

(d) to withdraw the reference from the Official Journal of the European Union.

The Commission shall inform the Member States of its decision without delay.

CHAPTER II

APPARATUS

Article 7

Conformity assessment procedure for apparatus

Compliance of apparatus with the essential requirements referred to in Annex I shall be demonstrated by means of the procedure described in Annex II (internal production control). However, at the discretion of the manufacturer or of his authorised representative in the Community, the procedure described in Annex III may also be followed.

Article 8

'CE' marking

1. Apparatus whose compliance with this Directive has been established by means of the procedure laid down in Article 7 shall bear the 'CE' marking which attests to that fact. The affixing of the 'CE' marking shall be the responsibility of the manufacturer or his authorised representative in the Community. The 'CE' marking shall be affixed in accordance with Annex V.
2. Member States shall take the necessary measures to prohibit the affixing to the apparatus, or to its packaging, or to the instructions for its use, of marks which are likely to mislead third parties in relation to the meaning and/or graphic form of the 'CE' marking.
3. Any other mark may be affixed to the apparatus, its packaging, or the instructions for its use, provided that neither the visibility nor the legibility of the 'CE' marking is thereby impaired.
4. Without prejudice to Article 10, if a competent authority establishes that the 'CE' marking has been unduly affixed, the manufacturer or his authorised representative in the Community shall bring the apparatus into conformity with the provisions concerning the 'CE' marking under conditions imposed by the Member State concerned.

Article 9

Other marks and information

1. Each apparatus shall be identified in terms of type, batch, serial number or any other information allowing for the identification of the apparatus.
2. Each apparatus shall be accompanied by the name and address of the manufacturer and, if he is not established within the Community, the name and address of his authorised representative or of the person in the Community responsible for placing the apparatus on the Community market.
3. The manufacturer shall provide information on any specific precautions that must be taken when the apparatus is assembled, installed, maintained or used, in order to ensure that, when put into service, the apparatus is in conformity with the protection requirements set out in Annex I, point 1.
4. Apparatus for which compliance with the protection requirements is not ensured in residential areas shall be accompanied by a clear indication of this restriction of use, where appropriate also on the packaging.
5. The information required to enable apparatus to be used in accordance with the intended purpose of the apparatus shall be contained in the instructions accompanying the apparatus.

Article 10

Safeguards

1. Where a Member State ascertains that apparatus bearing the 'CE' marking does not comply with the requirements of this Directive, it shall take all appropriate measures to withdraw the apparatus from the market, to prohibit its placing on the market or its putting into service, or to restrict the free movement thereof.

2. The Member State concerned shall immediately inform the Commission and the other Member States of any such measure, indicating the reasons and specifying, in particular, whether non-compliance is due to:

(a) failure to satisfy the essential requirements referred to in Annex I, where the apparatus does not comply with the harmonised standards referred to in Article 6;

(b) incorrect application of the harmonised standards referred to in Article 6;

(c) shortcomings in the harmonised standards referred to in Article 6.

3. The Commission shall consult the parties concerned as soon as possible, following which it shall inform the Member States whether or not it finds the measure to be justified.

4. Where the measure referred to in paragraph 1 is attributed to a shortcoming in harmonised standards, the Commission, after consulting the parties, shall, if the Member State concerned intends to uphold the measure, bring the matter before the Committee and initiate the procedure laid down in Article 6(3) and (4).

5. Where the non-compliant apparatus has been subject to the conformity assessment procedure referred to in Annex III, the Member State concerned shall take appropriate action in respect of the author of the statement referred to in Annex III, point 3, and shall inform the Commission and the other Member States accordingly.

Article 11

Decisions to withdraw, prohibit or restrict the free movement of apparatus

1. Any decision taken pursuant to this Directive to withdraw apparatus from the market, prohibit or restrict its placing on the market or its putting into service, or restrict the free movement thereof, shall state the exact grounds on which it is based. Such decisions shall be notified without delay to the party concerned, who shall at the same time be informed of the remedies available to him under the national law in force in the Member State in question and of the time limits to which such remedies are subject.

2. In the event of a decision as referred to in paragraph 1, the manufacturer, his authorised representative, or any other interested party shall have the opportunity to put forward his point of view in advance, unless such consultation is not possible because of the urgency of the measure to be taken as justified in particular with respect to public interest requirements.

Article 12

Notified bodies

1. Member States shall notify the Commission of the bodies which they have designated to carry out the tasks referred to in Annex III. When determining the bodies to be designated, Member States shall apply the criteria laid down in Annex VI. Such notification shall state whether the bodies are designated to carry out the tasks referred to in Annex III for all apparatus covered by this Directive, and/or the essential requirements referred to in Annex I or whether the scope of designation is limited to certain specific aspects and/or categories of apparatus.

2. Bodies which comply with the assessment criteria established by the relevant harmonised standards shall be presumed to comply with the criteria set out in Annex VI covered by such harmonised standards. The Commission shall publish in the Official Journal of the European Union the references of those standards.

3. The Commission shall publish in the Official Journal of the European Union a list of notified bodies. The Commission shall ensure that the list is kept up to date.

4. If a Member State finds that a notified body no longer meets the criteria listed in Annex VI, it shall inform the Commission and the other Member States accordingly. The Commission shall withdraw the reference to that body from the list referred to in paragraph 3.

CHAPTER III

FIXED INSTALLATIONS

Article 13

Fixed installations

1. Apparatus which has been placed on the market and which may be incorporated into a fixed installation is subject to all relevant provisions for apparatus set out in this Directive. However, the provisions of Articles 5, 7, 8 and 9 shall not be compulsory in the case of apparatus which is intended for incorporation into a given fixed installation and is otherwise not commercially available. In such cases, the accompanying documentation shall identify the fixed installation and its electromagnetic compatibility characteristics and shall indicate the precautions to be taken for the incorporation of the apparatus into the fixed installation in order not to compromise the conformity of that installation. It shall furthermore include the information referred to in Article 9(1) and (2).
2. Where there are indications of non-compliance of the fixed installation, in particular, where there are complaints about disturbances being generated by the installation, the competent authorities of the Member State concerned may request evidence of compliance of the fixed installation, and, when appropriate, initiate an assessment. Where non-compliance is established, the competent authorities may impose appropriate measures to bring the fixed installation into compliance with the protection requirements set out in Annex I, point 1.
3. Member States shall set out the necessary provisions for identifying the person or persons responsible for the establishment of compliance of a fixed installation with the relevant essential requirements.

CHAPTER IV

FINAL PROVISIONS

Article 14

Repeal

Directive 89/336/EEC is hereby repealed as from 20 July 2007.

References to Directive 89/336/EEC shall be construed as references to this Directive and should be read in accordance with the correlation table set out in Annex VII.

Article 15

Transitional provisions

Member States shall not impede the placing on the market and/ or the putting into service of equipment which is in compliance with the provisions of Directive 89/336/EEC and which was placed on the market before 20 July 2009.

Article 16

Transposition

1. Member States shall adopt and publish the laws, regulations and administrative provisions necessary to comply with this Directive by 20 January 2007. They shall forthwith inform the Commission thereof. They shall apply those provisions as from 20 July 2007. When Member States adopt those provisions, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.
2. Member States shall communicate to the Commission the texts of the provisions of national law which they adopt in the field covered by this Directive.

Article 17

Entry into force

This Directive shall enter into force on the twentieth day after its publication in the Official Journal of the European Union.

Article 18**Addressees**

This Directive is addressed to the Member States.

Done at Strasbourg, 15 December 2004.

For the European Parliament	For the Council
The President	The President
J. BORRELL FONTELLES	A. NICOLAI

ANNEX I**ESSENTIAL REQUIREMENTS REFERRED TO IN ARTICLE 5****1. Protection requirements**

Equipment shall be so designed and manufactured, having regard to the state of the art, as to ensure that:

- (a) the electromagnetic disturbance generated does not exceed the level above which radio and telecommunications equipment or other equipment cannot operate as intended;
- (b) it has a level of immunity to the electromagnetic disturbance to be expected in its intended use which allows it to operate without unacceptable degradation of its intended use.

2. Specific requirements for fixed installations

Installation and intended use of components.

A fixed installation shall be installed applying good engineering practices and respecting the information on the intended use of its components, with a view to meeting the protection requirements set out in Point 1. Those good engineering practices shall be documented and the documentation shall be held by the person(s) responsible at the disposal of the relevant national authorities for inspection purposes for as long as the fixed installation is in operation.

ANNEX II**CONFORMITY ASSESSMENT PROCEDURE REFERRED TO IN ARTICLE 7****(internal production control)**

1. The manufacturer shall perform an electromagnetic compatibility assessment of the apparatus, on the basis of the relevant phenomena, with a view to meeting the protection requirements set out in Annex I, point 1. The correct application of all the relevant harmonised standards whose references have been published in the Official Journal of the European Union shall be equivalent to the carrying out of the electromagnetic compatibility assessment.
2. The electromagnetic compatibility assessment shall take into account all normal intended operating conditions. Where the apparatus is capable of taking different configurations, the electromagnetic compatibility assessment shall confirm whether the apparatus meets the protection requirements set out in Annex I, point 1, in all the possible configurations identified by the manufacturer as representative of its intended use.
3. In accordance with the provisions set out in Annex IV, the manufacturer shall draw up technical documentation providing evidence of the conformity of the apparatus with the essential requirements of this Directive.
4. The manufacturer or his authorised representative in the Community shall hold the technical documentation at the disposal of the competent authorities for at least ten years after the date on which such apparatus was last manufactured.
5. The compliance of apparatus with all relevant essential requirements shall be attested by an EC declaration of conformity issued by the manufacturer or his authorised representative in the Community.

6. The manufacturer or his authorised representative in the Community shall hold the EC declaration of conformity at the disposal of the competent authorities for a period of at least ten years after the date on which such apparatus was last manufactured.
7. If neither the manufacturer nor his authorised representative is established within the Community, the obligation to hold the EC declaration of conformity and the technical documentation at the disposal of the competent authorities shall lie with the person who places the apparatus on the Community market.
8. The manufacturer must take all measures necessary to ensure that the products are manufactured in accordance with the technical documentation referred to in point 3 and with the provisions of this Directive that apply to them.
9. The technical documentation and the EC declaration of conformity shall be drawn up in accordance with the provisions set out in Annex IV.

ANNEX III

CONFORMITY ASSESSMENT PROCEDURE REFERRED TO IN ARTICLE 7

1. This procedure consists of applying Annex II, completed as follows:
2. The manufacturer or his authorised representative in the Community shall present the technical documentation to the notified body referred to in Article 12 and request the notified body for an assessment thereof. The manufacturer or his authorised representative in the Community shall specify to the notified body which aspects of the essential requirements must be assessed by the notified body.
3. The notified body shall review the technical documentation and assess whether the technical documentation properly demonstrates that the requirements of the Directive that it is to assess have been met. If the compliance of the apparatus is confirmed, the notified body shall issue a statement to the manufacturer or his authorised representative in the Community confirming the compliance of the apparatus. That statement shall be limited to those aspects of the essential requirements which have been assessed by the notified body.
4. The manufacturer shall add the statement of the notified body to the technical documentation.

ANNEX IV

TECHNICAL DOCUMENTATION AND EC DECLARATION OF CONFORMITY

1. Technical documentation

- The technical documentation must enable the conformity of the apparatus with the essential requirements to be assessed. It must cover the design and manufacture of the apparatus, in particular:
- a general description of the apparatus;
- evidence of compliance with the harmonised standards, if any, applied in full or in part;
- where the manufacturer has not applied harmonised standards, or has applied them only in part, a description and explanation of the steps taken to meet the essential requirements of the Directive, including a description of the electromagnetic compatibility assessment set out in Annex II, point 1, results of design calculations made, examinations carried out, test reports, etc.;
- a statement from the notified body, when the procedure referred to in Annex III has been followed.

2. EC declaration of conformity

The EC declaration of conformity must contain, at least, the following:

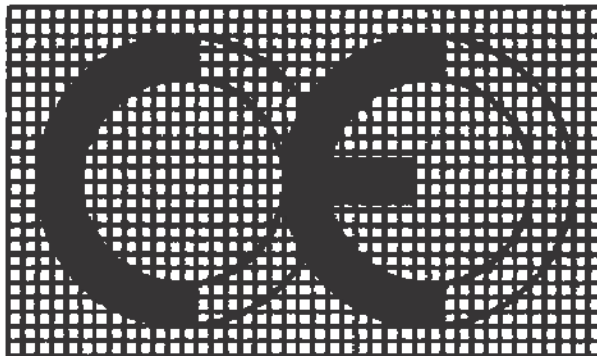
- a reference to this Directive,
- an identification of the apparatus to which it refers, as set out in Article 9(1),
- the name and address of the manufacturer and, where applicable, the name and address of his authorised representative in the Community,

- a dated reference to the specifications under which conformity is declared to ensure the conformity of the apparatus with the provisions of this Directive,
- the date of that declaration,
- the identity and signature of the person empowered to bind the manufacturer or his authorised representative.

ANNEX V

'CE' MARKING REFERRED TO IN ARTICLE 8

The 'CE' marking shall consist in the initials 'CE' taking the following form:



The 'CE' marking must have a height of at least 5 mm. If the 'CE' marking is reduced or enlarged the proportions given in the above graduated drawing must be respected.

The 'CE' marking must be affixed to the apparatus or to its data plate. Where this is not possible or not warranted on account of the nature of the apparatus, it must be affixed to the packaging, if any, and to the accompanying documents.

Where the apparatus is the subject of other Directives covering other aspects and which also provide for the 'CE' marking, the latter shall indicate that the apparatus also conforms with those other Directives.

However, where one or more of those Directives allow the manufacturer, during a transitional period, to choose which arrangements to apply, the 'CE' marking shall indicate conformity only with the Directives applied by the manufacturer.

In that case, particulars of the Directives applied, as published in the Official Journal of the European Union, must be given in the documents, notices or instructions required by the Directives and accompanying such apparatus.

ANNEX VI

CRITERIA FOR THE ASSESSMENT OF THE BODIES TO BE NOTIFIED

1. The bodies notified by the Member States shall fulfil the following minimum conditions:
 - (a) availability of personnel and of the necessary means and equipment;
 - (b) technical competence and professional integrity of personnel;
 - (c) independence in preparing the reports and performing the verification function provided for in this Directive;
 - (d) independence of staff and technical personnel in relation to all interested parties, groups or persons directly or indirectly concerned with the equipment in question;
 - (e) maintenance of professional secrecy by personnel;
 - (f) possession of civil liability insurance unless such liability is covered by the Member State under national law.

2. Fulfilment of the conditions laid down in point 1 shall be verified at intervals by the competent authorities of the Member State.

ANNEX VII
CORRELATION TABLE

Directive 89/336/EEC	This Directive
Article 1, point 1	Article 2(1)(a), (b) and (c)
Article 1, point 2	Article 2(1)(e)
Article 1, point 3	Article 2(1)(f)
Article 1, point 4	Article 2(1)(d)
Article 1, points 5 and 6	-
Article 2(1)	Article 1(1)
Article 2(2)	Article 1(4)
Article 2(3)	Article 1(2)
Article 3	Article 3
Article 4	Article 5 and Annex I
Article 5	Article 4(1)
Article 6	Article 4(2)
Article 7(1)(a)	Article 6(1) and (2)
Article 7(1)(b)	-
Article 7(2).	-
Article 7(3)	-
Article 8(1)	Article 6(3) and (4)
Article 8(2)	-
Article 9(1)	Article 10(1) and (2)
Article 9(2)	Article 10(3) and (4)
Article 9(3)	Article 10(5)
Article 9(4)	Article 10(3)
Article 10(1), first sub-paragraph	Article 7, Annexes II and III
Article 10(1), second sub-paragraph	Article 8
Article 10(2)	Article 7, Annexes II and III
Article 10(3)	-
Article 10(4)	-
Article 10(5)	Article 7, Annexes II and III
Article 10(6)	Article 12
Article 11	Article 14
Article 12	Article 16
Article 13	Article 18
Annex I, point 1	Annex IV, point 2
Annex I, point 2	Annex V
Annex II	Annex VI
Annex III, last paragraph	Article 9(5)

Annex F: Low Voltage Directive

The following text is the verbatim text of relevant extracts from the Directive. It is reprinted in "normal" font but the original format styles have been retained.

NOTE: Where text has been omitted it is denoted by "(...)" between lines. All subject /chapter headings are included.

F.1 Text of the Low Voltage Directive

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

This LV applies to products with 50 to 1,000 VAC or 75-1500 VDC Input. Products may include computers, information technology equipment, household products, power tools, laboratory equipment, test and measurement equipment and power supplies. Components must comply with the applicable directives, but in most cases should not be CE Marked. The Low-Voltage Directive has been in effect since 1973. The Low-Voltage Directive 73/23/EEC was amended by 93/68/EEC with the adding of the CE Marking. The latter Directive covers the addition of CE marking to a large number of earlier Directives, so most of the text is not relevant to eCall or telecommunications equipment or NADs. This directive is therefore not reproduced, save for the relevant text which is:

COUNCIL DIRECTIVE 93/68/EEC of 22 July 1993 amending Directives (...) and 73/23/EEC (electrical equipment designed for use within certain voltage limits)

THE COUNCIL OF THE EUROPEAN COMMUNITIES ,Having regard to the Treaty establishing the European Economic Community, and in particular Article 100a thereof,

Having regard to the proposal from the Commission (1),

In cooperation with the European Parliament (2),

Having regard to the opinion of the Economic and Social Committee (3),

Whereas the Council has already adopted a series of Directives designed to remove technical barriers to trade in accordance with the principles established in its Resolution of 7 May 1985 on a new approach to technical harmonization and standards (4); whereas each of these Directives provides for the affixing of the 'CE' marking; whereas, therefore, in the interests of simplifying Community legislation and making it more consistent, these various provisions need to be replaced by uniform prescriptions; whereas it is therefore necessary to harmonize these provisions, particularly with regard to products which may fall within the scope of several of these Directives;

Whereas, in its communication of 15 June 1989 on a global approach to certification and testing (5), the Commission proposed that common rules be drawn up concerning a 'CE' conformity marking with a single design; whereas, in its Resolution of 21 December 1989 on a global approach to conformity assessment (6), the Council approved as a guiding principle the adoption of a consistent approach such as this with regard to the use of the 'CE' marking;

Whereas the two basic elements of the new approach which must be applied are therefore the essential requirements and the conformity assessment procedures;

Whereas this harmonization of the provisions concerning the affixing and use of the 'CE' marking requires that existing Directives undergo detailed amendment to bring them into line with the new arrangements,

HAS ADOPTED THIS DIRECTIVE:

Article 1

The following Directives are hereby amended:

(...)..

12. Council Directive 73/23/EEC of 19 February 1973 on the harmonization of the laws of the Member States relating to electrical equipment designed for use within certain voltage limits (18).

Article 2

Directive 87/404/EEC is hereby amended as follows:

1. throughout the text, the term 'EC mark' is replaced by 'CE marking';

Low Voltage Directive

COUNCIL DIRECTIVE of 19 February 1973 on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits (73/23/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100 thereof;

Having regard to the proposal from the Commission;

Having regard to the Opinion of the European Parliament;

Having regard to the Opinion of the Economic and Social Committee;

Whereas the provisions in force in the Member States designed to ensure safety in the use of electrical equipment used within certain voltage limits may differ, thus impeding trade;

Whereas in certain Member States in respect of certain electrical equipment, the safety legislation takes the form of preventive and repressive measures by means of binding provisions;

Whereas in other Member States in order to achieve the same objective, the safety legislation provides for reference to technical standards laid down by Standards Bodies ; whereas such a system offers the advantage of rapid adjustment to technical progress without neglecting safety requirements;

Whereas certain Member States carry out administrative operations to approve standards ; whereas such approval neither affects the technical content of the standards in any way nor limits their conditions of use ; whereas such approval cannot therefore alter the effects, from a Community point of view, of harmonized and published standards;

Whereas within the Community the free movement of electrical equipment should follow when this equipment complies with certain safety requirements recognized in all Member States ; whereas without prejudice to any other form of proof, the proof of compliance with these requirements may be established by reference to harmonized standards which incorporate these conditions ; whereas these harmonized standards should be established by common agreement by bodies to be notified by each Member State to the other Member States and to the Commission and should be publicized as widely as possible ; whereas such harmonization should for the purposes of trade eliminate the inconveniences, resulting from differences between national standards;

Whereas, without prejudice to any other form of proof, the compliance of electrical equipment with the harmonized standards may be presumed from the affixing or issue of marks or certificates by the competent organizations or, in the absence thereof, from a manufacturer's declaration of compliance ; whereas in order to facilitate the removal of barriers to trade the Member States should recognize such marks or certificates or such declaration as elements of proof ; whereas, with this end in view, the said marks or certificates should be publicized in particular by their publication in the Official Journal of the European Communities;

Whereas as a transitional measure, the free movement of electrical equipment for which harmonized standards do not yet exist may be achieved by applying the safety provisions or standards already laid down by other international bodies or by one of the bodies which establish harmonized standards;

Whereas it is possible that electrical equipment may be placed in free circulation even though it does not comply with the safety requirements, and whereas it is therefore desirable to lay down suitable provisions to minimize this danger;

HAS ADOPTED THIS DIRECTIVE:

Article 1

For the purposes of this Directive "electrical equipment" means any equipment designed for use with a voltage rating of between 50 and 1 000 v for alternating current and between 75 and 1 500 v for direct current, other than the equipment and phenomena listed in Annex II.

Article 2

1. The Member States shall take all appropriate measures to ensure that electrical equipment may be placed on the market only if, having been constructed in accordance with good engineering practice in safety matters in force in the Community, it does not endanger the safety of persons, domestic animals or property when properly installed and maintained and used in applications for which it was made.

2. The principal elements of the safety objectives referred to in paragraph 1 are listed in Annex I.

Article 3

The Member States shall take all appropriate measures to ensure that if electrical equipment is of such a nature as to comply with the provisions of Article 2, subject to the conditions laid down in Articles 5, 6, 7 and 8, the free movement thereof within the Community shall not be impeded for reasons of safety.

Article 4

In relation to electrical equipment the Member States shall ensure that stricter safety requirements than those laid down in Article 2 are not imposed by electricity supply bodies for connection to the grid, or for the supply of electricity to users of electrical equipment.

Article 5

The Member States shall take all appropriate measures to ensure that, in particular, electrical equipment which complies with the safety provisions of harmonized standards shall be regarded by their competent administrative authorities as complying with the provisions of Article 2, for the purposes of placing on the market and free movement as referred to in Articles 2 and 3 respectively.

Standards shall be regarded as harmonized once they are drawn up by common agreement between the bodies notified by the Member States in accordance with the procedure laid down in Article 11, and published under national procedures. The standards shall be kept up to date in the light of technological progress and the developments in good engineering practice in safety matters.

For purposes of information the list of harmonized standards and their references shall be published in the Official Journal of the European Communities.

Article 6

1. Where harmonized standards as defined in Article 5 have not yet been drawn up and published, the Member States shall take all appropriate measures to ensure that, for the purposes of placing on the market or free movement as referred to in Articles 2 and 3 respectively, their competent administrative authorities shall also regard, as complying with the provisions of Article 2, electrical equipment which complies with the safety provisions of the International Commission on the Rules for the Approval of Electrical Equipment (CEE) or of the International Electrotechnical Commission (IEC) in respect of which the publication procedure laid down in paragraphs 2 and 3 has been applied.

2. The safety provisions referred to in paragraph 1 shall be notified to the Member States by the Commission as from the entry into force of this Directive, and thereafter as and when they are published. The Commission, after consulting the Member States, shall state the provisions and in particular the variants which it recommends to be published.

3. The Member States shall inform the Commission within a period of three months of such objections as they may have to the provisions thus notified, stating the safety grounds on account of which the provisions should not be recognized.

For purposes of information those safety provisions against which no objection has been raised shall be published in the Official Journal of the European Communities.

Article 7

Where harmonized standards within the meaning of Article 5 or safety provisions published in accordance with Article 6 are not yet in existence, the Member States shall take all appropriate measures to ensure that, for the purpose of placing on the market or free movement as referred to in Articles 2 and 3 respectively, their competent administrative authorities shall also regard as complying with the provisions of Article 2, electrical equipment manufactured in accordance with the safety provisions of the standards in force in the Member State of manufacture, if it ensures a safety level equivalent to that required in their own territory.

Article 8

1. The Member States shall take all appropriate steps to ensure that their competent administrative authorities shall also allow the placing on the market or free movement, as referred to in Articles 2 and 3 respectively, of electrical equipment which, although not conforming with the harmonized standards referred to in Article 5 or the provisions of Articles 6 and 7, complies with the provisions of Article 2.

2. In the event of a challenge the manufacturer or importer may submit a report, drawn up by a body, which is notified in accordance with the procedure set out in Article 11, on the conformity of the electrical equipment with the provisions of Article 2.

Article 9

1. If, for safety reasons, a Member State prohibits the placing on the market of any electrical equipment or impedes its free movement, it shall immediately inform the other Member States concerned and the Commission, indicating the grounds for its decision and stating in particular: - whether its non-conformity with Article 2 is attributable to a shortcoming in the harmonized standards referred to in Article 5, the provisions referred to in Article 6 or the standards referred to in Article 7;

- whether its non-conformity is attributable to faulty application of such standards or publications or to failure to comply with good engineering practice as referred to in Article 2.

2. If other Member States raise objections to the decision referred to in paragraph 1, the Commission shall immediately consult the Member States concerned.

3. If an agreement has not been reached within three months from the date of notification as laid down in paragraph 1, the Commission shall obtain the opinion of one of the bodies notified in accordance with the procedure laid down in Article 11 having its registered office outside the territory of the Member States concerned and which has not been involved in the procedure provided for in Article 8. The opinion shall state the extent to which the provisions of Article 2 have not been complied with.

4. The Commission shall communicate the opinion of this body to all the Member States which may, within a period of one month, make their observations known to the Commission. The Commission shall at the same time note any observations by the parties concerned on the above mentioned opinion.

5. Having taken note of these observations the Commission shall, if necessary, formulate the appropriate recommendations or opinions.

Article 10

1. Without prejudice to other methods of proof, the Member States shall take all appropriate steps to ensure that their competent administrative authorities shall accept that there is a presumption of conformity with the provisions of Articles 5, 6 and 7 where a mark has been placed on the electrical equipment denoting conformity, or where a certificate of conformity is produced or, in the absence thereof, and in particular in the case of industrial equipment, the manufacturer's declaration of conformity.

2. The marks or certificates shall be established, separately or by common agreement, by the bodies notified in accordance with the procedure laid down in Article 11. Specimens of these marks or certificates shall be published by these bodies and, for information purposes in the Official Journal of the European Communities.

Article 11

Each Member State shall inform the other Member States and the Commission of the following: - the bodies referred to in Article 5;

- the bodies which may establish the marks and certificates in accordance with the provisions of Article 10;

- the bodies which may make a report in accordance with the provisions of Article 8 or give an opinion in accordance with the provisions of Article 9;
- the place of publication referred to in Article 5 (2);

Any amendment to the above shall be notified by each Member State to the other Member States and to the Commission.

Article 12

This Directive shall not apply to electrical equipment intended for export to third countries.

Article 13

1. The Member States shall put into force the laws, regulations and administrative provisions necessary to comply with the requirements of this Directive within eighteen months of its notification and shall forthwith inform the Commission thereof.

However, in the case of Denmark, the time limit shall be extended to five years.

2. The Member States shall communicate to the Commission the texts of the main provisions of national laws which they adopt in the field covered by this Directive.

Article 14

This Directive is addressed to the Member States.

Done at Brussels, 19 February 1973.

For the Council

The President

A. LAVENS

ANNEX I

PRINCIPAL ELEMENTS OF THE SAFETY OBJECTIVES FOR ELECTRICAL EQUIPMENT DESIGNED FOR USE WITHIN CERTAIN VOLTAGE LIMITS

1. General conditions a) The essential characteristics, the recognition and observance of which will ensure that electrical equipment will be used safely and in applications for which it was made, shall be marked on the equipment, or, if this is not possible, on an accompanying notice.
b) The manufacturers or brand name or trade mark should be clearly printed on the electrical equipment or, where that is not possible, on the packaging.
c) The electrical equipment, together with its component parts should be made in such a way as to ensure that it can be safely and properly assembled and connected.
d) The electrical equipment should be so designed and manufactured as to ensure that protection against the hazards set out in points 2 and 3 of this Annex is assured providing that the equipment is used in applications for which it was made and is adequately maintained.

2. Protection against hazards arising from the electrical equipment

Measures of a technical nature should be prescribed in accordance with point 1, in order to ensure: a) that persons and domestic animals are adequately protected against danger of physical injury or other harm which might be caused by electrical contact direct or indirect;

b) that temperatures, arcs or radiation which would cause a danger, are not produced;

c) that persons, domestic animals and property are adequately protected against non-electrical dangers caused by the electrical equipment which are revealed by experience;

d) that the insulation must be suitable for foreseeable conditions.

3. Protection against hazards which may be caused by external influences on the electrical equipment

Technical measures are to be laid down in accordance with point 1, in order to ensure: a) that the electrical equipment meets the expected mechanical requirements in such a way that persons, domestic animals and property are not endangered;

b) that the electrical equipment shall be resistant to non-mechanical influences in expected environmental conditions, in such a way that persons, domestic animals and property are not endangered;

c) that the electrical equipment shall not endanger persons, domestic animals and property in foreseeable conditions of overload.

ANNEX II

EQUIPMENT AND PHENOMENA OUTSIDE THE SCOPE OF THE DIRECTIVE

Electrical equipment for use in an explosive atmosphere

Electrical equipment for radiology and medical purposes

Electrical parts for goods and passenger lifts

Electricity meters

Plugs and socket outlets for domestic use

Electric fence controllers

Radio-electrical interference

Specialized electrical equipment, for use on ships, aircraft or railways, which complies with the safety provisions drawn up by international bodies in which the Member States participate.

Annex G: EC Communication on eCall Implementation 2009

The following text is the verbatim text from the EC Communication. It is reprinted in "normal *italic*" font but the original format styles have been retained.

G.1 Text of EC Communication on eCall Implementation 2009

COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 21/VIII/2009

COM(2009) 434 final

**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

'eCall: Time for Deployment'

1. INTRODUCTION

*Road fatalities in the EU-27 have fallen by more than 27 % since 2001, when the Commission published its White Paper on European Transport Policy. [1] The European Road Safety Action Programme [2] and the **Intelligent Car Initiative** [3] have had a significant impact on this positive development, and are expected to continue to yield further benefits towards the goal of reducing fatalities.*

*However, with around 39 000 deaths and more than 1.7 million injured in 2008 on European roads, further action is needed. **The pan-European in-vehicle emergency call, 'eCall'**, is estimated to have the potential to **save up to 2 500 fatalities annually in EU-27** when fully deployed, to reduce the severity of injuries, bring significant savings to society in healthcare and other costs and reduce human suffering [4].*

*To help deploy the pan-European eCall, initially aimed for full-scale roll out in 2009, the Commission has already taken several steps. It supported a working group comprising all stakeholders, which agreed on **the definition of an interoperable eCall service which will work across borders in Europe**, and invited all stakeholders, including the Member States and industry, to sign a Memorandum of Understanding (MoU) which commits them to work together towards implementing eCall. The Commission also adopted **two communications** defining an implementation plan and recommending action by stakeholders [5]. Furthermore, the Commission adopted in December 2008 the ITS Action Plan [6], in which support to eCall deployment is one of the actions, and at the same time an ITS Directive [7] proposal, which provides for a legal instrument (i.e. a regulatory committee) to impose measures to the Member States, notably for the 'harmonised introduction of pan-European eCall'.*

***eCall enjoys widespread support from all stakeholders**, including the European Parliament, the Council, the Member States and the general public.*

***The European Parliament** has on several occasions pledged **its full support** to implementing eCall, and called on the Commission and the Member States to take all the necessary steps to deploy it in a harmonised way throughout Europe [8].*

- ***The Council** of the European Union considered it as a priority to define the measures needed to promote the harmonised introduction of an interoperable EU-wide eCall on the basis of co-operation and appropriate standardisation [9].*

- **Most of Member States** have signed the eCall MoU and support eCall implementation.
- More than eighty public and private organisations have also signed the MoU, including representatives of all stakeholders in the value chain.

More than 70 % of citizens responding to a Eurobarometer survey in Europe said they would like to have eCall installed in their next car [10].

Progress has, however, been too slow and the roll out of the pan-European eCall is severely delayed. The voluntary approach taken in previous communications and the Commission's efforts to standardise eCall and work with all stakeholders has not been sufficient. **Further measures are urgently needed.**

This Communication aims to inform the EU Institutions on the progress achieved, and proposes new measures to begin actually deploying the eCall service in Europe. The measures, directed to the stakeholders and the European Commission itself, include the option of setting up a regulatory framework for deploying eCall. **These measures will make the pan-European in-vehicle emergency call service a reality, and lead to eCall devices being installed in new type-approved vehicles in Europe.**

2. THE PAN-EUROPEAN IN-VEHICLE EMERGENCY CALL: HOW IT WORKS

Over 1.2 million accidents require medical help in Europe every year, and many more need other types of assistance. After an accident, the occupants in the vehicle may be in shock, not know their location, be unable to communicate or to use a mobile phone. In all these cases, wherever they are in Europe, eCall makes the difference: it can **drastically cut the emergency response times**, save lives and reduce the severity of injuries. When fully implemented in Europe, the socio-economic benefits of eCall will be huge [4]. eCall is a pan-European service that will operate in **all European Member States and states associated to the initiative**. It will be available in **all vehicles**, irrespective of brand, country and actual location of the vehicle. eCall is the only service providing **European-wide coverage**: no special agreements or additional devices will be needed, eCall will work at your holiday destination and during your business trip as well as at home.

When a serious accident occurs, in-vehicle sensors will automatically trigger an eCall. When activated, the **in-vehicle system establishes a 112-voice connection** and at the same time an emergency message, the **minimum set of data (MSD)** including key information about the accident, such as time, location, driving direction (resulting from accurate satellite-based data such as EGNOS [11] and, from 2013 on, Galileo [12]) and vehicle description is sent with the voice call. The eCall can also be activated manually.

The mobile network operator (MNO) identifies that the 112 call is an eCall from the 'eCall flag' inserted by the vehicle's communication module. The MNO handles the eCall like any other 112 call and **routes the call to the most appropriate emergency response centre** - Public Safety Answering Point (PSAP) - [13] as defined by the public authorities. The PSAP operator will receive both the voice call and the MSD.

The information provided by the MSD will be decoded and displayed in the PSAP operator screen. The **location and driving direction** of the vehicle can be shown in a Geographic Information System. At the same time, the operator will be able to hear what is happening in the vehicle and talk with the occupants of the vehicle if possible. This will help the operator ascertain which emergency services are needed at the accident scene (ambulance, firemen, police) and to rapidly dispatch the alert and all relevant information to the right service.

Furthermore, the PSAP operator will be able to immediately inform the road/traffic management centres that an incident has occurred in a specific location, facilitating rapid information to other road users and thus preventing secondary accidents, helping to clear the carriageway and therefore reducing congestion.

3. REPORT ON PROGRESS AND ACHIEVEMENTS

3.1. Progress of standardisation activities

The Commission requested the European Standardisation Organisations (ETSI [14], CEN [15]) to draft open standards for the eCall operation, based on the recommendations agreed by the stakeholders [16.] This work was accepted by the technical committees ETSI-MSG[17] in collaboration with 3GPP[18] for the standards related to the eCall transmission and CEN TC 278 WG 15 [19] for those related to the MSD structure and the operational requirements of the systems. The main milestones reached are:

- CEN approval of the structure of **eCall Minimum Set of Data ('MSD')**. The MSD includes important information to help send the services to the site of the incident and to speed up the response. The MSD enables the PSAP operator to respond to the eCall even without a voice exchange.

- 3GPP approval of the **eCall discriminator** ('eCall flag'), included in Release 8 of the technical specifications with which the mobile telecommunications systems must comply. This discriminator will differentiate between 112 calls from mobile terminals and eCalls, and also between manual and automatically triggered eCalls.

This will permit Member States to design the eCall response infrastructure in the way that best fits their emergency response infrastructure (i.e. centralised/decentralised, same PSAP that receives the 112 calls, or different PSAP with a filtering function, public organisation or private one recognised by the public authority). Member States must inform mobile network operators operating in the country of the most appropriate PSAP to route eCalls.

- **ETSI-MSG and 3GPP approval of the core technical specifications defining the protocols for sending the MSD** from the vehicle to the PSAP operator. The solution agreed is that the data will be transmitted via an in-band modem along with the voice call. It is an open standard and there will be no licence fees for using the in-band modem for the eCall service.

- **CEN approval of the core operating requirements for the Pan-European eCall service**, defining the general functional and operational principles. The operating requirements are expected to be completed with high-level application protocols by autumn 2009.

This set of standards will allow the deployment of a harmonised, reliable, interoperable, continuous eCall service in Europe, subject to their application by the stakeholders: vehicle and equipment manufacturers, mobile network operators and Member States. The updated list of standards may be consulted on:

http://ec.europa.eu/information_society/activities/esafety/ecallstandards/

3.2. Progress on the commitment of major stakeholders

3.2.1. Negotiations with the automotive industry

In 2008, the European Commission held negotiations with representatives of the automotive manufacturers associations (ACEA, JAMA and KAMA [20]) on the voluntary introduction of eCall in all new type-approved vehicles.

The automotive manufacturers (ACEA being one of the first signatories of the eCall MoU) confirmed their commitment to eCall and pledged to offer eCall as an option for new type-approved vehicles of certain categories[21] three years after approval of all relevant standards (communication standards, MSD, operating requirements), provided that Member States update their PSAP infrastructures to handle eCalls. **The automotive manufacturers also took the position that making eCall standard factory-equipped equipment in all vehicles would be possible only through regulation.**

Furthermore, the automotive industry advocates for the coexistence of the pan-European eCall and **proprietary emergency call solutions** developed by some manufacturers. The automotive industry is also interested in using the eCall platform to offer **added-value services** to boost their business.

3.2.2. Member States

To date, fifteen Member States have signed the eCall MoU: Austria, Cyprus, Czech Republic, Estonia, Finland, Germany, Greece, Italy, Lithuania, Portugal, Slovakia, Slovenia, Spain, the Netherlands and Sweden. Three other European countries have also signed: Iceland, Norway and Switzerland.

Other Member States have expressed their support for the initiative and their willingness to sign the MoU in the short term: Belgium, Bulgaria, Hungary, Luxembourg, Romania and Poland.

The reasons given by other Member States for not having signed up to the eCall deployment vary but essentially relate to the cost of the operation. Some Member States are unwilling to invest in upgrading their PSAPs to receive eCalls as this may increase the tax burden on all citizens, even those who do not have a car. However, eCall would benefit all citizens, including the users of public transport and vulnerable road users. While it is true that upgrading PSAPs and rescue infrastructure will not be without cost, deploying eCall throughout a Member State, and consequently across the European Union, would mean significant economies of scale.

Although some Member States are still hesitating, most are ready to go ahead and implement eCall. As the relevant core standards now exist, [22] Member States should start implementing the eCall function in their emergency rescue infrastructure. As well as saving lives, it would be an incentive for industry to install eCall systems on board vehicles and to achieve economies of scale through wider deployment.

3.2.3. Mobile Network Operators

Mobile telecommunications operators need to handle eCalls in the same way as they handle 112 calls. They must activate the eCall indicator in their networks, so that they can identify eCalls and route them to the most appropriate PSAP defined by national governments. GSM Europe, the association representing European Mobile Network Operators, has established a task force to develop strategies to deploy eCall in Europe, contribute to standardisation and participate in the work of the European eCall Implementation Platform.[23]

3.2.4. Emergency response services

Member States need to upgrade their emergency rescue service, the PSAP infrastructure to handle eCalls and the data contained in the MSD.

PSAP representatives have been active in defining eCall specifications. The final definition of the service corresponds to the needs of the emergency services.

For countries with state-of-the-art PSAP infrastructure capable of handling the location information of mobile calls to 112 (E112), this will represent a minimal investment. For countries with a less developed system, the design of eCall service including the eCall discriminator offers various options, such as setting up an intermediate platform. Nonetheless, upgrading the PSAP infrastructure is an essential investment for saving lives.

3.3. eCall is an opportunity to deploy added-value services

eCall builds on technical components (satellite positioning, processing and communication capabilities) that also provide the basis for several in-vehicle applications, including those required by existing or planned regulation applicable to commercial or private vehicles, such as the digital tachograph, electronic toll collection or provisions on the transport of dangerous goods and live animals.

A streamlining and integration of all these applications within a coherent, open-system architecture could yield better efficiency and usability, reduced costs and enhanced extensibility, enabling "plug and play" integration of future new or upgraded applications.

Such modular approach will easily allow the low cost integration of functionalities and applications that address road safety, personal mobility, logistics support or access to multimodal information. The definition of an 'open in-vehicle platform' concept is part of the ITS Action Plan, and the introduction of eCall based on this concept would positively contribute to its momentum.

The automotive and telecommunications industry and service providers will benefit from new services based on the introduction of the eCall telematics platform in all vehicles. This is particularly valuable in times of crisis.

Road operators will benefit from a more efficient incident management service due to immediate reporting of incidents provided by the eCall service.

Emergency services will benefit from the vehicle description included in the MSD. This will inform them of the exact structure of the vehicle, considerably reducing the intervention time to extract trapped occupants and avoiding possible accidents (i.e. by knowing the exact position of the vehicle batteries or the pyrotechnic systems).[24]

Furthermore it is expected that after-market equipment will be developed to provide the eCall service in vehicle models already present on the market. These after-market systems should comply with the standard pan-European eCall operational requirements.

3.4. Coexistence of pan-European eCall and proprietary eCall services

Proprietary in-vehicle emergency call services are offered in Europe and worldwide by different automobile branches and service providers (e.g., Volvo OnCall, GM OnStar, PSA, Fiat, BMW). They are typically bundled with other services, such as breakdown assistance, onboard mobile telephony, dynamic navigation, etc. Emergency calls are received by private call centres that transmit the calls and the accident data to PSAPs in an emergency. Each manufacturer needs to reach an agreement with PSAP authorities in every country in which they want to deploy the service, on a case-by-case basis.

Although these services, introduced more than 10 years ago, have shown their usefulness and confirm the benefits that eCall can provide, their penetration remains low in Europe (less than 0.4 % of the vehicle fleet). The service is normally offered only in high-end cars and does not cover all countries in Europe.

In Member States where there is an agreement to support proprietary eCall services with a similar quality of service as the pan-European eCall, the vehicle manufacturer would be free to choose the type of system supported (pan-European eCall or proprietary eCall service). For this purpose, CEN is developing standardised operational requirements for third party services providing eCall (TPS-eCall). In other Member States, vehicle manufacturers must implement the pan-European eCall system. If the buyer of a vehicle does not opt for the proprietary eCall solution, the automobile manufacturer must equip the vehicle with the pan-European eCall system.

Regardless of the solution chosen by the vehicle manufacturer, **an in-vehicle emergency call service, including voice link and provision of at least the eCall MSD, must be provided in a seamless way in all EU Member States.**

When eCall is fully deployed across Europe, the providers of proprietary eCall services can also migrate to using the pan-European eCall, i.e. in-vehicle emergency calls will call the 112 number while all other services provided stay intact.

4. RECOMMENDATIONS

4.1. Need for further action

*The initial target for eCall deployment was 2009. **Progress has, however, been too slow and roll out severely delayed, despite the availability of standards and the willingness of a majority of stakeholders.***

*A major problem in deploying eCall has been that simultaneous action by all stakeholders is needed, i.e. the automotive industry, mobile telecom operators, emergency services and Member States each have to implement part of the service. **To find a solution to this deadlock, the Commission is considering three possible policy options:** (1) not intervening and leaving the introduction to market forces; (2) supporting voluntary introduction by industry or (3) mandating introduction through regulatory measures.*

*(1) **Regarding the option of not intervening,** the proprietary in-vehicle emergency call services have proved their benefit, but their market penetration is very slow, restricted mainly to high-end cars and only certain countries in Europe. Moreover the emergency response services will need to liaise with different proprietary services, adding complexity to the service. Clearly, with what is at stake (saving lives), this option is unacceptable.*

*(2) **The voluntary approach** would lead to the introduction of the eCall service in Europe, but too slowly. The commitment of industry to offer eCall as an option in all vehicles of certain categories is a positive step forward, and would, with time, increase the penetration rate of the service, provided the emergency services are upgraded. However, by making eCall only an option there would not be the same economies of scale, which could increase its price, reduce demand and curb its penetration and consequently its benefits.*

*(3) **The regulatory approach** would mean making eCall standard equipment installed in all new vehicles in Europe, starting with certain categories [21] during a transition period, and would provide a framework for handling eCalls in telecommunications networks and PSAPs, based on existing regulations. This approach would make eCall available to all citizens in Europe, accelerate take-up and unlock the full potential of eCall to save lives and mitigate the severity of injuries. Furthermore it is expected that the certainty created by the regulatory approach will accelerate the introduction of eCall systems by automobile manufacturers, thus fostering the introduction of the service even before it becomes compulsory, and at the same time stimulating the telematics service market in Europe.*

4.2. Proposed action

The measures proposed below aim to make the pan-European eCall service a reality in Europe. Stakeholders should take the following steps:

(1) The Commission, Member States and all other stakeholders will actively support the work of the European eCall Implementation Platform (EeIP) [23] and its Task Forces, to ensure the timely issuing of all definitions, guidelines and good practise for effective and harmonised deployment of the eCall service in Europe.

(2) The Commission, along with the Member States and other stakeholders, will launch coordinated awareness campaigns to increase understanding of and demand for the service.

(3) The Member States, PSAP organisations, automotive and telecommunication industry, along with other stakeholders, will carry out pre-deployment pilots taking into account the standards being approved. The Commission may provide funding to support these pilots through the Competitiveness and Innovation Programme (CIP).

The final aim is to fully roll out the pan-European eCall service and make it standard equipment in all new type-approved vehicles in Europe. The Commission will monitor the effectiveness of the voluntary approach described above. If significant progress is not made by the end of 2009, both in the availability of the eCall device in vehicles, and the necessary investment in PSAP infrastructure, the Commission will plan to take the following regulatory measures in 2010:

(1) A Recommendation to the Member States targeting Mobile Network Operators on the transmission of eCall, including the MSD from the in-vehicle systems to the PSAPs.

The guidelines would be based on the single European emergency number enhanced with location capabilities (E112) [25] and the set of standards related to transmission of the eCall.

(2) A proposal for a regulation under the vehicle type-approval legislation [26] for the mandatory introduction of the in-vehicle part of the eCall service in new type-approved vehicles in Europe starting with certain categories, [21] based on the operating requirements approved by the European Standardisation Organisations.

(3) The assessment of a potential regulatory measure for the necessary upgrading of the PSAP infrastructure required for proper receipt and handling of eCalls, in the framework of the proposed Directive on the deployment of ITS in Europe [7]. The resulting Regulation, that would require Member States to take the necessary action for eCall implementation, would be based on the recommendations of the European eCall Implementation Platform (EeIP).

5. CONCLUSIONS

eCall has been identified as one of the most efficient, low-cost intelligent transport systems for road safety that can be deployed in the short term. The technology is mature and the European Standardisation Organisations have issued the standards needed to ensure a reliable and interoperable operation of the eCall service Europe-wide. Citizens recognise its value and want an affordable eCall with their next vehicle. The European Parliament and most Member States have pledged full support to the eCall service. Stakeholders have joined forces in the European eCall Implementation Platform to ensure a harmonised and timely deployment of the service in Europe.

It is time now to start deploying the systems in vehicles, communication mobile networks and emergency service infrastructures. In this Communication, the Commission proposes measures to accelerate the introduction of eCall as part of the equipment of all new vehicles in Europe. Saving 2500 lives per year and reducing the suffering of thousands of families should not be delayed any further. Should the voluntary approach not meet the objective of introducing the eCall service in Europe, the Commission will consider introducing in 2010 new regulatory measures for making the eCall system standard in new type-approved vehicles in Europe, to bring down the cost of the systems and to ensure it is deployed in all European countries.

Annex H:

ITS Implementation Directive

The following text is the verbatim text from the Directive. It is reprinted in "normal" font but the original format styles have been retained.

H.1 Text of the ITS Implementation Directive



COUNCIL OF THE EUROPEAN UNION

Brussels, 4 May 2010 (OR. en)

LEGISLATIVE ACTS AND OTHER INSTRUMENTS

Subject: Position of the Council at first reading with a view to the adoption of

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport

(Text with EEA relevance)

Text version. As approved at first reading, May 2010. (Second and final reading due June 2010)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION, Having regard to the Treaty on the Functioning of the European Union, and in particular Article 91 thereof,

Having regard to the proposal from the European Commission,

Having regard to the opinion of the European Economic and Social Committee¹, Having consulted the Committee of the Regions, Acting in accordance with the ordinary legislative procedure²,

¹ OJ C 277, 17.11.2009, p. 85.

² Position of the European Parliament of 23 April 2009 (not yet published in the

Official Journal), position of the Council of ... (not yet published in the Official Journal), position of the European Parliament of ... (not yet published in the Official Journal) (and decision of the Council of ...).

Whereas:

(1) The increase in the volume of road transport in the Union associated with the growth of the European economy and mobility requirements of citizens is the primary cause of increasing congestion of road infrastructure and rising energy consumption, as well as a source of environmental and social problems.

- (2) The response to those major challenges cannot be limited to traditional measures, inter alia the expansion of the existing road transport infrastructure. Innovation will have a major role to play in finding appropriate solutions for the Union.
- (3) Intelligent Transport Systems (ITS) are advanced applications which without embodying intelligence as such aim to provide innovative services relating to different modes of transport and traffic management and enable various users to be better informed and make safer, more coordinated and "smarter" use of transport networks.
- (4) ITS integrate telecommunications, electronics and information technologies with transport engineering in order to plan, design, operate, maintain and manage transport systems. The application of information and communication technologies to the road transport sector and its interfaces with other modes of transport will make a significant contribution to improving environmental performance, efficiency, including energy efficiency, safety and security of road transport, including the transport of dangerous goods, public security and passenger and freight mobility, whilst at the same time ensuring the functioning of the internal market as well as increased levels of competitiveness and employment. However, ITS applications should be without prejudice to matters concerning national security or which are necessary in the interest of defence.
- (5) Advances in the field of the application of information and communication technologies to other modes of transport should now be reflected in developments in the road transport sector, in particular with a view to ensuring higher levels of integration between road transport and other modes of transport.
- (6) In some Member States national applications of these technologies are already being deployed in the road transport sector. However, such deployment remains fragmented and uncoordinated and cannot provide geographical continuity of ITS services throughout the Union and at its external borders.
- (7) To ensure a coordinated and effective deployment of ITS within the Union as a whole, specifications, including, where appropriate, standards, defining further detailed provisions and procedures should be introduced. Before adopting any specifications, the Commission should assess their compliance with certain defined principles set out in Annex II. Priority should be given in the first instance to the four main areas of ITS development and deployment. Within those four areas, priority actions should be established for the development and use of specifications and standards. During further implementation of ITS the existing ITS infrastructure deployed by a particular Member State should be taken into account in terms of technological progress and financial efforts made.
- (8) When a legislative act is adopted as referred to in the second subparagraph of Article 6(2) of this Directive, the second sentence of Article 5(1) should be amended accordingly.
- (9) The specifications should, inter alia take into account and build upon the experience and results already obtained in the field of ITS, notably in the context of the eSafety initiative, launched by the Commission in April 2002. The eSafety Forum was established by the Commission under that initiative to promote and further implement recommendations to support the development, deployment and use of eSafety systems.
- (10) Vehicles which are operated mainly for their historical interest and were originally registered and/or type-approved and/or put into service before the entry into force of this Directive and of its implementing measures should not be affected by the rules and procedures laid down in this Directive.
- (11) ITS should build on interoperable systems which are based on open and public standards and available on a non-discriminatory basis to all application and service suppliers and users.
- (12) The deployment and use of ITS applications and services will entail the processing of personal data. Such processing should be carried out in accordance with Union law, as set out, in particular, in Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data¹ and in Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector².
- Inter alia, the principles of purpose limitation and data minimisation should be applied to ITS applications.

¹ OJ L 281, 23.11.1995, p. 31.

² OJ L 201, 31.7.2003, p. 37.

(13) Anonymisation as one of the principles of enhancing individuals' privacy should be encouraged. As far as data protection and privacy related issues in the field of ITS applications and services deployment are concerned, the Commission should, as appropriate, further consult the European Data Protection Supervisor and request an opinion of the Working Party on the Protection of Individuals with regard to the Processing of Personal Data established by Article 29 of Directive 95/46/EC.

(14) The deployment and use of ITS applications and services, and notably traffic and travel information services, will entail the processing and use of road, traffic and travel data forming part of documents held by public sector bodies of the Member States. Such processing and use should be carried out in accordance with Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information¹.

1 OJ L 345, 31.12.2003, p. 90.

(15) In appropriate cases, the specifications should include detailed provisions laying down the procedure governing assessment of conformity or suitability for use of constituents. Those provisions should be based on Decision No 768/2008/EC of the European Parliament and of the Council of 9 July 2008 on a common framework for the marketing of products¹, in particular concerning the modules for the various phases of the conformity assessment procedures. Directive 2007/46/EC² already establishes a framework for the type approval of motor vehicles and their parts or related equipment, and Directive 2002/24/EC³ and Directive 2003/37/EC⁴ lay down rules on the type approval of two or three-wheel motor vehicles, and agricultural or forestry tractors and their parts or related equipment. Therefore, it would be a duplication of work to provide for conformity assessment of equipment and applications falling within the scope of those Directives. At the same time, although those Directives apply to ITS-related equipment installed in vehicles, they do not apply to external road infrastructure ITS equipment and software. In such cases, the specifications could provide for conformity assessment procedures. Such procedures should be limited to what would be necessary in each separate case.

1 OJ L 218, 13.08.2008, p. 82.

2 OJ L 263, 09.10.2007, p. 1.

3 OJ L 124, 09.05.2002, p. 1.

4 OJ L 171, 09.07.2003, p. 1.

(16) For ITS applications and services for which accurate and guaranteed timing and positioning services are required, satellite-based infrastructures or any technology providing an equivalent level of precisions should be used, such as those provided for in Council Regulation (EC) No 1/2005 of 22 December 2004 on the protection of animals during transport and related operations¹ and Regulation (EC) No 683/2008 of the European Parliament and of the Council of 9 July 2008 on the further implementation of the European satellite navigation programmes (EGNOS and Galileo)².

(17) Innovative technologies such as Radio Frequency Identification Devices (RFID) or EGNOS/Galileo should be used for the realisation of ITS applications, notably for the tracking and tracing of freight along its journey and across modes of transport.

1 OJ L 3, 5.1.2005, p. 1.

2 OJ L 196, 24.7.2008, p. 1.

(18) Major stakeholders such as ITS service providers, associations of ITS users, transport and facilities operators, representatives of the manufacturing industry, social partners, professional associations and local authorities should have the possibility to advise the Commission on the commercial and technical aspects of the deployment of ITS within the Union. For this purpose the Commission, ensuring close cooperation with stakeholders and Member States, should set up an ITS advisory group. The work of the advisory group should be carried out in a transparent manner and the result should be made available to the Committee established by this Directive.

(19) Uniform conditions of implementation should be ensured for the adoption of guidelines and non-binding measures to facilitate Member's States cooperation in respect of priority areas on ITS as well as in respect of guidelines for reporting by the Member States and of a working programme.

(20) According to Article 291 of the Treaty on the Functioning of the European Union (TFEU), rules and general principles concerning mechanisms for the control by Member States of the Commission's exercise of implementing powers shall be laid down in advance by a regulation adopted in accordance with the ordinary legislative procedure. Pending the adoption of that new regulation, Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission¹ continues to apply, with the exception of the regulatory procedure with scrutiny, which is not applicable.

¹ OJ L 184, 17.7.1999, p. 23.

(21) The Commission should be empowered to adopt delegated acts in accordance with Article 290 of the TFEU in respect of the adoption of specifications. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level.

(22) In order to guarantee a coordinated approach, the Commission should ensure coherence between the activities of the Committee established by this Directive and those of the Committee established by Directive 2004/52/EC of the European Parliament and of the Council of 29 April 2004 on the interoperability of electronic road toll systems in the Community¹, the Committee established by Council Regulation (EEC) No 3821/85 on recording equipment in road transport², the Committee established by Directive 2007/46/EC and the Committee established by Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)³.

¹ OJ L 166, 30.04.2004, p. 124.

² OJ L 370, 31.12.1985, p. 8.

³ OJ L 108, 25.4.2007, p. 1.

(23) Since the objective of this Directive, namely to ensure the coordinated and coherent deployment of interoperable Intelligent Transport Systems throughout the Union cannot be sufficiently achieved by the Member States and/or the private sector and can therefore, by reason of its scale and effects, be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality as set out in that Article, this Directive does not go beyond what is necessary in order to achieve that objective.

(24) In accordance with point 34 of the Inter-institutional Agreement on better law-making, Member States are encouraged to draw up, for themselves and in the interest of the Union, their own tables, which will, as far as possible, illustrate the correlation between this Directive and the transposition measures, and to make them public.

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Subject matter and scope

1. This Directive establishes a framework in support of the coordinated and coherent deployment and use of Intelligent Transport Systems (ITS) within the Union, in particular across the borders between the Member States, and sets out the general conditions necessary for that purpose.
2. This Directive provides for the development of specifications for actions within the priority areas referred to in Article 2, as well as for the development, where appropriate, of necessary standards.
3. This Directive shall apply to ITS applications and services in the field of road transport and to their interfaces with other modes of transport without prejudice to matters concerning national security or necessary in the interest of defence.

Article 2

Priority areas

1. For the purpose of this Directive the following shall constitute priority areas for the development and use of specifications and standards:
 - I. Optimal use of road, traffic and travel data;
 - II. Continuity of traffic and freight management ITS services;
 - III. ITS road safety and security applications;
 - IV. Linking the vehicle with the transport infrastructure
2. The scope of the priority areas is specified in Annex I.

Article 3

Priority actions

Within the priority areas the following shall constitute priority actions for the development and use of specifications and standards, as set out in Annex I:

- (a) the provision of EU-wide multimodal travel information services;
- (b) the provision of EU-wide real-time traffic information services;
- (c) data and procedures for the provision, where possible, of road safety related minimum universal traffic information free of charge to users;
- (d) the harmonised provision for an interoperable EU-wide eCall;
- (e) the provision of information services for safe and secure parking places for trucks and commercial vehicles;
- (f) the provision of reservation services for safe and secure parking places for trucks and commercial vehicles.

Article 4

Definitions

For the purposes of this Directive, the following definitions shall apply:

- (1) "Intelligent Transport Systems" or "ITS" means systems in which information and communication technologies are applied in the field of road transport, including infrastructure, vehicles and users, and in traffic management and mobility management, as well as for interfaces with other modes of transport;
- (2) "interoperability" means the capacity of systems and the underlying business processes to exchange data and to share information and knowledge;
- (3) "ITS application" means an operational instrument for the application of ITS;
- (4) "ITS service" means the provision of an ITS application through a well-defined organisational and operational framework with the aim of contributing to user safety, efficiency, comfort and/or to facilitate or support transport and travel operations;
- (5) "ITS service provider" means any provider of an ITS service, whether public or private;
- (6) "ITS user" means any user of ITS applications or services including travellers, vulnerable road users, road transport infrastructure users and operators, fleet managers and operators of emergency services;

- (7) "Vulnerable road users" means non-motorised road users, such as pedestrians and cyclists as well as motor-cyclists and persons with disabilities or reduced mobility and orientation;
- (8) "nomadic device" means a portable communication or information device that can be brought inside the vehicle to support the driving task and/or the transport operations;
- (9) "platform" means an on-board or off-board unit enabling the deployment, provision, exploitation and integration of ITS applications and services;
- (10) "architecture" means the conceptual design that defines the structure, behaviour and integration of a given system in its surrounding context;
- (11) "interface" means a facility between systems which provides the media through which they can connect and interact;
- (12) "compatibility" means the general ability of a device or system to work with another device or system without modification;
- (13) "continuity of services" means the ability to ensure seamless services on transport networks across the Union;
- (14) "road data" means data on road infrastructure characteristics, including fixed traffic signs or their regulatory safety attributes;
- (15) "traffic data" means historic and real-time data on road traffic characteristics;
- (16) "travel data" means basic data such as public transport timetables and tariffs, necessary to provide multi-modal travel information before and during the trip to facilitate travel planning, booking and adaptation;
- (17) "specification" means a binding measure laying down provisions containing requirements, procedures or any other relevant rules;
- (18) "standard" means standard as defined in Article 1(6) of Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations¹.

¹ OJ L 204, 21.7.1998, p. 37.

Article 5

Deployment of ITS

1. Member States shall take the necessary measures to ensure that the specifications adopted by the Commission in accordance with Article 6 are applied to ITS applications and services, when these are deployed, in accordance with the principles in Annex II. This is without prejudice to the right of each Member State to decide on its deployment of such applications and services on its territory. This right is without prejudice to any legislative act adopted under the second subparagraph of Article 6(2).
2. Member States shall also make efforts to co-operate in respect of the priority areas, insofar as no specifications have been adopted.

Article 6

Specifications

1. The Commission shall first adopt the specifications necessary to ensure the compatibility, interoperability and continuity for the deployment and operational use of ITS for the priority actions.
2. The Commission shall aim at adopting specifications for one or more of the priority actions by ...*.

*Please insert the date: 30 months following the date of entry into force of this Directive.

At the latest 12 months after the adoption of the necessary specifications for a priority action, the Commission shall, where appropriate, after conducting an impact assessment including a cost-benefit analysis, present a proposal to the European Parliament and the Council in accordance with Article 294 of the TFEU on the deployment of that priority action.

3. Once the necessary specifications for the priority actions have been adopted, the Commission shall adopt specifications ensuring compatibility, interoperability and continuity for the deployment and operational use of ITS for other actions in the priority areas.
4. Where relevant, and depending on the area covered by the specification, the specification shall include one or more of the following types of provisions:
 - (a) functional provisions that describe the roles of the various stakeholders and the information flow between them;
 - (b) technical provisions that provide for the technical means to fulfil the functional provisions;
 - (c) organisational provisions that describe the procedural obligations of the various stakeholders;
 - (d) service provisions that describe the various levels of services and their content for ITS applications and services.
5. Without prejudice to the procedures under Directive 98/34/EC the specifications shall, where appropriate, stipulate the conditions in which Member States may, after notification to the Commission, establish additional rules for the provision of ITS services on all or part of their territory, provided that those rules do not hinder interoperability.
6. The specifications shall, where appropriate, be based on any standards referred to in Article 8.

The specifications shall, as appropriate, provide for conformity assessment in accordance with Decision No 768/2008/EC.

The specifications shall comply with the principles set out in Annex II.

7. The Commission shall conduct an impact assessment including a cost-benefit analysis prior to the adoption of the specifications.

Article 7

Delegated acts

1. The Commission may adopt delegated acts in accordance with Article 290 of the TFEU as regards specifications. When adopting such delegated acts the Commission shall act in accordance with the relevant provisions of this Directive, in particular Article 6 and Annex II.
2. A separate delegated act shall be adopted for each of the priority actions.
3. For the delegated acts referred to in this Article, the procedure set out in Articles 12, 13 and 14 shall apply.

Article 8

Standards

1. The necessary standards to provide for interoperability, compatibility and continuity for the deployment and operational use of ITS shall be developed in the priority areas and for the priority actions. To that effect, the Commission, after having consulted the Committee referred to in Article 15, shall request the relevant standardisation bodies in accordance with the procedure laid down in Directive 98/34/EC to make every necessary effort to adopt these standards rapidly.
2. When issuing a mandate to the standardisation bodies, the principles set out in Annex II shall be observed as well as any functional provision included in a specification adopted in accordance with Article 6.

Article 9

Non-binding measures

The Commission may adopt guidelines and other non-binding measures to facilitate Member States' co-operation relating to the priority areas in accordance with the advisory procedure referred to in Article 15(2).

Article 10

Rules on privacy, security and re-use of information

1. Member States shall ensure that the processing of personal data in the context of the operation of ITS applications and services is carried out in accordance with Union rules protecting fundamental rights and freedoms of individuals, in particular Directive 95/46/EC and Directive 2002/58/EC.
2. In particular, Member States shall ensure that personal data are protected against misuse, including unlawful access, alteration or loss.
3. Without prejudice to paragraph 1, in order to ensure privacy, the use of anonymous data shall be encouraged, where appropriate, for the performance of the ITS applications and services. Without prejudice to Directive 95/46/EC personal data shall, only be processed insofar as such processing is necessary for the performance of ITS applications and services.
4. With regard to the application of Directive 95/46/EC and in particular where special categories of personal data are involved, Member States shall also ensure that the provisions on consent to the processing of such personal data are respected.
5. Directive 2003/98/EC shall apply.

Article 11

Rules on liability

Member States shall ensure that issues related to liability, concerning the deployment and use of ITS applications and services set out in specifications adopted in accordance with Article 6, are addressed in accordance with Union law, including in particular Council Directive 85/374/EEC of 25 July 1985 on the approximation of the laws, regulations and administrative provisions of the Member States concerning liability for defective products¹ as well as relevant national legislation.

¹ OJ L 210, 7.8.1985, p. 29.

Article 12

Exercise of the delegation

1. The power to adopt the delegated acts referred to in Article 7 shall be conferred on the Commission for a period of seven years following ...*. The Commission shall make a report in respect of the delegated powers no later than six months before the end of a five year period following ...*.

* OJ: Please insert the date: the date of the entry into force of this Directive.

2. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
3. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in Articles 13 and 14.

Article 13

Revocation of the delegation

1. The delegation of powers referred to in Article 7 may be revoked by the European Parliament or by the Council.

2. The institution which has commenced an internal procedure for deciding whether to revoke the delegation of powers shall endeavour to inform the other institution and the Commission within a reasonable time before the final decision is taken, indicating the delegated powers which could be subject to revocation and possible reasons for a revocation.

3. The decision of revocation shall put an end to the delegation of the powers specified in that decision. It shall take effect immediately or at a later date specified therein. It shall not affect the validity of the delegated acts already in force. It shall be published in the Official Journal of the European Union

Article 14

Objections to delegated acts

1. The European Parliament or the Council may object to a delegated act within a period of two months from the date of notification.

At the initiative of the European Parliament or the Council this period shall be extended by two months.

2. If, on expiry of that period, neither the European Parliament nor the Council has objected to the delegated act, it shall be published in the Official Journal of the European Union and shall enter into force on the date stated therein.

The delegated act may be published in the Official Journal of the European Union and enter into force before the expiry of that period if the European Parliament and the Council have both informed the Commission of their intention not to raise objections.

3. If the European Parliament or the Council objects to a delegated act, it shall not enter into force. The institution which objects shall state the reasons for objecting to the delegated act.

Article 15

Committee procedure

1. The Commission shall be assisted by the European ITS Committee (EIC).

2. Where reference is made to this paragraph, Article 3 and Article 7 of

Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

Article 16

European ITS Advisory Group

The Commission shall establish a European ITS Advisory Group to advise it on business and technical aspects of the deployment and use of ITS in the Union. The group shall be composed of high level representatives from relevant ITS service providers, associations of users, transport and facilities operators, manufacturing industry, social partners, professional associations, local authorities and other relevant fora

Article 17

Reporting

1. Member States shall submit to the Commission by ...* a report on their national activities and projects regarding the priority areas.

* OJ: Please insert the date: 12 months following the entry into force of this Directive.

2. Member States shall provide the Commission by ...* with information on national ITS actions envisaged over the following five year period. Guidelines for reporting by the Member States shall be adopted in accordance with the advisory procedure referred to in Article 15(2).

3. Following the initial report, Member States shall report every three years on the progress made in the deployment of the actions referred to in paragraph 1.

4. The Commission shall submit a report every three years to the European Parliament and to the Council on the progress made for the implementation of this Directive. The report shall be accompanied by an analysis on the functioning and implementation, including the financial resources used and needed, of Articles 5 to 11 and Article 16, and shall assess the need to amend this Directive, where appropriate.

5. In accordance with the advisory procedure referred to in Article 15(2), the Commission shall adopt a working program by ...**. The working program shall include objectives and dates for its implementation every year and if necessary shall propose the necessary adaptations.

* OJ: Please insert the date: two years following the entry into force of this Directive.

** OJ: Please insert the date: six months following the entry into force of this Directive.

Article 18

Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by ... *

When Member States adopt those provisions, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference, and its wording, shall be laid down by Member States.

2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 19

Entry into force

This Directive shall enter into force on the twentieth day following its publication in the Official Journal of the European Union.

* OJ: Please insert the date: 18 months following the entry into force of this Directive.

Article 20

Addressees

This Directive is addressed to the Member States. Done at:

For the European Parliament

For the Council

The President

The President

ANNEX I

PRIORITY AREAS AND ACTIONS (as referred to in Articles 2 and 3)

– Priority area I: Optimal use of road, traffic and travel data

The specifications and standards for an optimal use of road, traffic and travel data shall include the following:

1. Specifications for priority action (a)

The definition of the necessary requirements to make EU-wide multimodal travel information services accurate and available across borders to ITS users, based on:

– the availability and accessibility of existing and accurate road and real-time traffic data used for multimodal travel information to ITS service providers without prejudice to safety and transport management constraints;

- the facilitation of the electronic data exchange between the relevant public authorities and stakeholders and the relevant ITS service providers, across borders;
- the timely updating of available road and traffic data used for multimodal travel information by the relevant public authorities and stakeholders;
- the timely updating of multimodal travel information by the ITS service providers.

2. Specifications for priority action (b)

The definition of the necessary requirements to make EU-wide real-time traffic information services accurate and available across borders to ITS users, based on:

- the availability and accessibility of existing and accurate road and real-time traffic data used for real-time traffic information to ITS service providers without prejudice to safety and transport management constraints;
- the facilitation of the electronic data exchange between the relevant public authorities and stakeholders and the relevant ITS service providers, across borders;
- the timely updating of available road and traffic data used for real-time traffic information by the relevant public authorities and stakeholders;
- the timely updating of real-time traffic information by the ITS service providers.

3. Specifications for priority actions (a) and (b)

3.1. The definition of the necessary requirements for the collection by relevant public authorities and/or, where relevant, by the private sector of road and traffic data (i.e. traffic circulation plans, traffic regulations and recommended routes, notably for heavy goods vehicles) and for their provisioning to ITS service providers, based on:

- the availability, to ITS service providers, of existing road and traffic data (i.e. traffic circulation plans, traffic regulations and recommended routes) collected by the relevant public authorities and/or the private sector;
- the facilitation of the electronic data exchange between the relevant public authorities and the ITS service providers;
- the timely updating, by the relevant public authorities and/or, where relevant, the private sector, of road and traffic data (i.e. traffic circulation plans, traffic regulations and recommended routes);
- the timely updating, by the ITS service providers, of the ITS services and applications using these road and traffic data.

3.2. The definition of the necessary requirements to make road, traffic and transport services data used for digital maps accurate and available, where possible, to digital map producers and service providers, based on:

- the availability of existing road and traffic data used for digital maps to digital map producers and service providers;
- the facilitation of the electronic data exchange between the relevant public authorities and stakeholders and the private digital map producers and service providers;
- the timely updating of road and traffic data for digital maps by the relevant public authorities and stakeholders;
- the timely updating of the digital maps by the digital map producers and service providers.

4. Specifications for priority action (c)

The definition of minimum requirements, for road safety related "universal traffic information" provided, where possible, free of charge to all users, as well as their minimum content, based on:

- the identification and use of a standardised list of safety related traffic events ("universal traffic messages") which should be communicated to ITS users free of charge;
- The compatibility and the integration of "universal traffic messages" into ITS services for real-time traffic and multimodal travel information.

– **Priority area II: Continuity of traffic and freight management ITS services**

The specifications and standards for the continuity and interoperability of traffic and freight management services, in particular on the TEN-T network, shall include the following:

1. Specifications for other actions

1.1. The definition of the necessary measures to develop an EU ITS Framework Architecture, addressing specifically ITS-related interoperability, continuity of services and multi-modality aspects, including for example multimodal interoperable ticketing, within which Member States and their competent authorities in cooperation with the private sector can develop their own ITS architecture for mobility at national, regional or local level.

1.2. The definition of the minimum necessary requirements for the continuity of ITS services, in particular for cross-border services, for the management of passenger transport across different modes of transport, based on:

- the facilitation of the electronic exchange for traffic data and information across borders, and where appropriate, regions, or between urban and inter-urban areas between the relevant traffic information/control centres and different stakeholders;
- the use of standardised information flows or traffic interfaces between the relevant traffic information/control centres and different stakeholders.

1.3. The definition of the minimum necessary requirements for the continuity of ITS services for the management of freight along transport corridors and across different modes of transport, based on:

- the facilitation of the electronic exchange for traffic data and information across borders, and where appropriate, regions, or between urban and inter-urban areas between the relevant traffic information/control centres and different stakeholders;
- the use of standardised information flows or traffic interfaces between the relevant traffic information/control centres and different stakeholders.

1.4. The definition of the necessary measures in the realisation of ITS applications (notably the tracking and tracing of freight along its journey and across modes of transport) for freight transport logistics (eFreight), based on:

- the availability of relevant ITS technologies to and their use by ITS application developers;
- the integration of positioning results in the traffic management tools and centres.

1.5. The definition of the necessary interfaces to ensure interoperability and compatibility between the urban ITS architecture and the European ITS architecture based on:

- the availability of public transport, travel planning, transport demand, traffic data and parking data to urban control centres and service providers;
- the facilitation of the electronic data exchange between the different urban control centres and service providers for public or private transport and through all possible modes of transport;
- the integration of all relevant data and information in a single architecture.

– **Priority area III: ITS road safety and security applications**

The specifications and standards for ITS road safety and security applications shall include the following:

1. Specifications for priority action (d)

The definition of the necessary measures for the harmonised provision of an interoperable EU-wide eCall, including:

- the availability of the required in-vehicle ITS data to be exchanged;
- the availability of the necessary equipment in the emergency call response centres receiving the data emitted from the vehicles;

- the facilitation of the electronic data exchange between the vehicles and the emergency call response centres.

2. Specifications for priority action (e)

The definition of the necessary measures to provide ITS based information services for safe and secure parking places for trucks and commercial vehicles, in particular in service and rest areas on roads, based on:

- the availability of the road parking information to users;
- the facilitation of the electronic data exchange between road parking sites, centres and vehicles.

3. Specifications for priority action (f)

The definition of the necessary measures to provide ITS based reservation services for safe and secure parking places for trucks and commercial vehicles based on:

- the availability of the road parking information to users;
- the facilitation of the electronic data exchange between road parking sites, centres and vehicles;
- the integration of relevant ITS technologies in both vehicles and road parking facilities to update the information on available parking space for reservation purposes

4. Specifications for other actions

4.1. The definition of the necessary measures to support the safety of road users with respect to their on-board Human-Machine-Interface and the use of nomadic devices to support the driving task and/or the transport operation, as well as the security of the in-vehicle communications.

4.2. The definition of the necessary measures to improve the safety and comfort of vulnerable road users for all relevant ITS applications.

4.3. The definition of necessary measures to integrate advanced driver support information systems into vehicles and road infrastructure which fall outside the scope of Directives 2007/46/EC, 2002/24/EC and 2003/37/EC.

– Priority area IV: Linking the vehicle with the transport infrastructure

The specifications and standards for linking vehicles with the transport infrastructure shall include the following:

1. Specifications for other actions

1.1. The definition of necessary measures to integrate different ITS applications on an open in-vehicle platform, based on:

- the identification of functional requirements of existing or planned ITS applications;
- the definition of an open-system architecture which defines the functionalities and interfaces necessary for the interoperability/interconnection with infrastructure systems and facilities;
- the integration of future new or upgraded ITS applications in a "plug and play" manner into an open in-vehicle platform;
- the use of a standardisation process for the adoption of the architecture, and the open in-vehicle specifications.

1.2. The definition of necessary measures to further progress the development and implementation of cooperative (vehicle-vehicle, vehicle-infrastructure, infrastructure-infrastructure) systems, based on:

- the facilitation of the exchange of data or information between vehicles, infrastructures and between vehicle and infrastructure;
- the availability of the relevant data or information to be exchanged to the respective vehicle or road infrastructure parties;

- the use of a standardised message format for the exchange of data or information between the vehicle and the infrastructure;
- the definition of a communication infrastructure for data or information exchange between vehicles, infrastructures and between vehicle and infrastructure;
- the use of standardisation processes to adopt the respective architectures

ANNEX II

PRINCIPLES FOR SPECIFICATIONS AND DEPLOYMENT OF ITS (as referred to in Articles 5, 6 and 8)

The adoption of specifications, the issuing of mandates for standards and the selection and deployment of ITS applications and services shall be based upon an evaluation of needs involving all relevant stakeholders, and shall comply with the following principles. These measures shall:

- (a) Be Effective – make a tangible contribution towards solving the key challenges affecting road transportation in Europe (e.g. reducing congestion, lowering of emissions, improving energy efficiency, attaining higher levels of safety and security including vulnerable road users);
- (b) Be Cost-efficient – optimise the ratio of costs in relation to output with regard to meeting objectives;
- (c) Be proportionate – provide, where appropriate, for different levels of achievable service quality and deployment, taking into account the local, regional, national and European specificities;
- (d) Support continuity of services – ensure seamless services across the Union, in particular on the trans-European network, and where possible at its external borders, when ITS services are deployed. Continuity of services should be ensured at a level adapted to the characteristics of the transport networks linking countries with countries, and where appropriate, regions with regions and cities with rural areas;
- (e) Deliver Interoperability – ensure that systems and the underlying business processes have the capacity to exchange data and to share information and knowledge to enable effective ITS service delivery;
- (f) Support backward compatibility – ensure, where appropriate, the capability for ITS systems to work with existing systems that share a common purpose, without hindering the development of new technologies;
- (g) Respect existing national infrastructure and network characteristics – take into account the inherent differences in the transport network characteristics, in particular in the sizes of the traffic volumes and in road weather conditions;
- (h) Promote equality of access – do not impede or discriminate against access to ITS applications and services by vulnerable road users;
- (i) Support maturity – demonstrate, after appropriate risk assessment, the robustness of innovative ITS systems, through a sufficient level of technical development and operational exploitation;
- (j) Deliver Quality of timing and positioning – use of satellite-based infrastructures, or any technology providing equivalent levels of precision for the purposes of ITS applications and services that require global, continuous, accurate and guaranteed timing and positioning services;
- (k) Facilitate Inter-modality – take into account the coordination of various modes of transport, where appropriate, when deploying ITS;
- (l) Respect Coherence – take into account existing Union rules, policies and activities which are relevant in the field of ITS, in particular in the field of standardisation

Annex I:

2009 ITS Action Plan

The following text is the verbatim text from the 2009 ITS Action Plan. It is reprinted in "normal" font but the original format styles have been retained.

I.1 Text of 2009 ITS Action Plan

COMMISSION OF THE EUROPEAN COMMUNITIES |

Brussels, 16.12.2008

COM(2008) 886 final

COMMUNICATION FROM THE COMMISSION

Action Plan for the Deployment of Intelligent Transport Systems in Europe

1. INTRODUCTION

The renewed Lisbon agenda on growth and jobs[1] aims at delivering stronger, lasting growth and creating more and better jobs. Furthermore, the mid-term review of the 2001 White Paper[2] stresses the key role of innovation in ensuring sustainable, efficient and competitive mobility in Europe.

Against this background several major challenges have to be overcome for Europe's transport system to play its full role in satisfying the mobility needs of the European economy and society:

- Road traffic congestion is estimated to affect 10 % of the road network, and yearly costs amount to 0.9-1.5 % of the EU GDP.[3]
- Road transport accounts for 72 % of all transport-related CO₂ emissions, which increased by 32 % (1990-2005).[4]
- Whilst road fatalities are in regression (-24 % since 2000 in EU27) their number (42 953 fatalities in 2006) is still 6 000 above the intended target of a 50 % reduction in fatalities in the period 2001-2010.[5]

These challenges are even more pressing with forecasted growth rates of 50 % for freight transport and 35 % for passenger transport in the period from 2000 to 2020.[6]

The main policy objectives arising from these challenges are for transport and travel to become:

- cleaner,
- more efficient, including energy efficient[7],
- safer and more secure.

It is however clear, that conventional approaches such as the development of new infrastructure, will not give the necessary results on the timescales required by the magnitude of these challenges. Innovative solutions are clearly needed if we are to achieve the rapid progress demanded by the urgency of the problems at hand. It is high time for Intelligent Transport Systems to play their due role in enabling tangible results to emerge.

2. INTELLIGENT TRANSPORT SYSTEMS

"Intelligent Transport Systems" mean applying Information and Communication Technologies (ICT) to transport. These applications are being developed for different transport modes and for interaction between them (including interchange hubs).

In air transport, SESAR[8] will be the framework for the implementation of a new generation of air traffic management. Inland waterways are introducing River Information Services (RIS) to manage waterway utilisation and the transport of freight. The railway network is gradually introducing the European Rail Traffic Management System (ERTMS) and Telematics Applications for Freight (TAF-TSI). Shipping has introduced SafeSeaNet and Vessel Traffic Monitoring and Information Systems (VTMIS) and is progressing towards an Automatic Identification System (AIS) and Long-Range Identification and Tracking (LRIT). Examples of Intelligent Transport Systems applications in road transport include urban and motorway traffic management and control systems, electronic toll collection and route navigation. But until now there has been no similar coherent European framework for interconnection between road and the other transport modes.

3. SCOPE

This Action Plan aims to accelerate and coordinate the deployment of Intelligent Transport Systems (ITS) in road transport, including interfaces with other transport modes.

The Action Plan outlines six priority areas for action. For each area a set of specific actions and a clear timetable are identified. Fulfilling them by setting a framework to define procedures and specification will call for the mobilisation of Member States and other stakeholders.

Finally, this Action Plan will help to combine the resources and instruments available to deliver a substantial added value for the European Union.

4. WHY A EUROPEAN APPROACH FOR ITS?

ITS can create clear benefits in terms of transport efficiency, sustainability, safety and security, whilst contributing to the EU Internal Market and competitiveness objectives.

In Europe, there have been a number of activities in this domain since the 1980s. These activities have traditionally focused, albeit often in an uncoordinated and fragmented manner, on specific areas such as clean and energy-efficient transport, road congestion, traffic management, road safety, security of commercial transport operations or urban mobility.

Despite these developments, some issues need to be addressed from a European perspective to avoid the emergence of a patchwork of ITS applications and services: geographical continuity, interoperability of services and systems and standardisation. They should facilitate pan-European applications, secure accurate and reliable real-time data and an adequate coverage of all travelling modes.

4.1. Greening of transport

ITS applications have an essential role to play in the greening of transport[9].

Differentiated charging of vehicles by Electronic Toll Collection systems for circulating on certain routes is a way to influence traffic demand.

ITS applications for journey planning, dynamic in-vehicle navigation and eco-driving support also contribute to congestion relief, to greener mobility and to less energy consumption.

The "Green transport corridors"[10] are an EU initiative to promote the concept of integrated freight transport, with transport modes complementing each other to enable more environmentally friendly alternatives for long-distance transport between logistics hubs. Reliance on advanced ITS technology is essential for achieving this goal.

4.2. Improving transport efficiency

Production and distribution of goods rely on efficient and cost-effective multi-modal logistic chains to organise their transport across the EU and beyond, especially when just-in-time requirements are at stake. ITS tools constitute a core enabler for the management of such logistic chains, notably in maintaining a paperless information trail in the management of the physical flow of goods (eFreight).

Real-time Traffic and Travel Information (RTTI) services, more and more combined with satellite navigation, are now being offered from both public and private sources to facilitate mobility.

In many parts of Europe ITS are already underpinning effective inter-urban and urban traffic management, fostering modal interchange at major hubs and transfer points.

In the longer term, cooperative systems based on vehicle-to-vehicle (V2V), vehicle-to-infrastructure (V2I) and infrastructure-to-infrastructure (I2I) communication and exchange of information and, when appropriate, a GNSS[11] positioning and time, will demonstrate their full potential.

4.3. Improving road safety and security

Research and initial deployment have shown the great potential for improving road safety of Driver Assistance Systems such as Electronic Stability Control (ESC), Adaptive Cruise Control (ACC), Lateral Support (lane departure warning and lane change assistant), Collision Warning and Emergency Braking Systems and other applications such as eCall (emergency call), driver hypo-vigilance systems, "speed alert" and "alcohol-lock". ESC and eCall alone[12] could save up to 6 500 lives per year in the EU if fully deployed.

Better use should be made of the newest active safety systems and advanced driver assistance systems with proven benefits in terms of in-vehicle safety for the vehicle occupants and other road users (including vulnerable road users). The European Statement of Principles on the Human Machine Interface (HMI)[13] should be extended to allow for the proliferation of nomadic devices.

Navigation and tracking and tracing systems can help in providing remote in-route monitoring of vehicles and cargo, e.g. for the transport of dangerous goods or living animals. They can guide truck drivers to secure parking areas, help to comply with existing regulations on driving times and rest periods, and should support a new generation of the digital tachograph.

4.4. The EU added value in ITS deployment

The potential of ITS can only be realised if its deployment in Europe is transformed from the limited and fragmented implementation that is observed today into an EU-wide one. In this respect, the removal of existing barriers to ITS deployment will be pivotal. The EU has a clear role to play in creating the right framework conditions for accelerated and coordinated deployment of ITS: the policy priorities, the choice of generic ITS components to be shared or re-used, and agreement on a clear timetable.

Common European action can directly contribute to:

- addressing the complexity of ITS deployment, with the large number of stakeholders involved and the need to ensure synchronisation both geographically and between the various partners
- supporting the market penetration of advanced mobility services for the citizens, whilst promoting public transport alternatives to private car use
- enabling the generation of scale-effects for a more cost-effective, faster and less risky deployment of ITS
- accelerating the current pace of ITS deployment in road transport, and assuring the continuity of services throughout the Community
- enhancing the leading role of the European ITS industry in worldwide markets by fostering the supply of innovative products and services to vehicle manufacturers, transport operators, logistics providers and users

To achieve these goals, the EU can make use of several instruments: financial support, standardisation initiatives, legislative and non-legislative measures.

5. CONSULTATIONS

This Action Plan was prepared on the basis of input provided by wide consultation of stakeholders. The input was collected via a fourfold approach: (i) interviews with high-level stakeholders from the private and public sector; (ii) workshops; (iii) an internet questionnaire; (iv) targeted discussions in existing stakeholder forums.

The interviews identified some principal needs. ITS deployment should be policy-led and responsibilities need to be clearly identified including the role for public-private cooperation. For stakeholder coordination, a high-level cross-sector group is necessary. Most consulted stakeholders think that the European Union should take more responsibility for further deployment of ITS.

Traffic management, congestion relief on freight corridors and in cities, promotion of co-modality, in-vehicle safety systems, real time traffic and travel information and an open in-vehicle platform to integrate applications were among the priority issues identified.

6. PRIORITY AREAS FOR ACTION AND RELATED MEASURES

The six priority areas suggested build on input from public and private stakeholders and assume that ITS applications to be deployed in the short-to-medium term should be mature, sufficiently interoperable, and able to create a catalytic effect across Europe.

The Action Plan draws on a series of ongoing European Commission initiatives such as the Action Plan on Freight Transport Logistics[14], the Action Plan on Urban Mobility[15], Galileo deployment[16], the Greening Transport Package[17], the i2010 initiative on Intelligent Cars[18], eSafety[19], the 7th Framework Programme for Research and Technological Development[20], eCall[21], European Technology Platforms[22] and their strategic research agendas, CARS 21[23].

The activities described here do not repeat or duplicate existing work but rather complement it, maximising synergies and focussing on outstanding priority issues in a concerted manner.

6.1. Action Area 1: Optimal use of road, traffic and travel data

Many state-of-the-art ITS applications rely on an accurate knowledge of both the characteristics of the road network and the traffic regulations applicable (e.g. one-way streets and speed limits). Whilst in the past the bulk of this knowledge was provided by authorities, there is a trend towards the utilisation of commercial sources. Where road safety is at stake it is essential that this information is validated and made available to all players on a fair and equitable basis, in view of ensuring a safe and orderly management of traffic. This applies, in particular, to digital mapping, including its inherent processes for data collection, validation and timely updating.

Similar considerations apply to the provision of (real-time) traffic and travel information services. Specific issues include the notion of "universal traffic messages", i.e. the type of messages to be provided free of charge to all road users as a public information service, the consistency of the information between the various sources, and the need to comply with prescriptions imposed by network management operations.

The following actions are proposed:

Action | Target date |

1.1 | Definition of procedures for the provision of EU-wide real-time traffic and travel information services, addressing notably the following aspects: provision of traffic information services by the private sector provision of traffic regulation data by the transport authorities guaranteed access by public authorities to safety-related information collected by private companies guaranteed access by private companies to relevant public data | 2010 |

1.2 | Optimisation of the collection and provision of road data and traffic circulation plans, traffic regulations and recommended routes (in particular for heavy goods vehicles) | 2012 |

Action | Target date |

1.4 | Definition of specifications for data and procedures for the free provision of minimum universal traffic information services (including definition of the repository of messages to be provided) | 2012 |

1.5 | Promotion of the development of national multimodal door-to-door journey planners, taking due account of public transport alternatives, and their interconnection across Europe | 2009 to 2012 |

6.2. Action Area 2: Continuity of traffic and freight management ITS services on European transport corridors and in conurbations

The need to accommodate rising traffic volumes, notably on the major European transport corridors and in conurbations, while promoting environmental sustainability and energy efficiency, calls for innovative transport and traffic management solutions. In this respect, seamless and dynamic traffic and transport management are beneficial for long-distance and urban freight transport and at the same time improve co-modality.

ITS technologies are essential for the introduction of eFreight[24], whereby "en route" information on the location and condition of transported goods (especially dangerous goods and live animals) is made available on-line in a secure way. This concept can be extended to encompass other supply-chain activities such as the exchange of content-related data for regulatory or commercial purposes, using innovative technologies such as radio frequency identification (RFID)[25] and building on applications of the EGNOS/Galileo satellite positioning system. In the future this may lead to a concept of "Intelligent Cargo", meaning that goods become self-, context- and location-aware as well as connected to a wide range of information services.

Charging vehicles to use certain routes or areas is increasingly based on a variety of parameters such as vehicle dimensions, emission levels, distance travelled or time of day. ITS solutions making use of satellite positioning and mobile communications offer new opportunities for implementing such types of infrastructure access and charging.

The following actions are proposed:

Action | Target Date |

2.1 | Definition of a set of common procedures and specifications to ensure the continuity of ITS services for passenger and freight in transport corridors and in urban/interurban regions. This work should include benchmarking and standardisation on door-to-door information flows, interfaces, traffic management and travel planning, and, in particular, event and emergency planning | 2011 |

2.2 | Identification of ITS services to be deployed in support of freight transport (eFreight) and development of appropriate measures to progress from concept to realisation. Particular attention will be given to applications for goods tracking and tracing using state-of-the-art technologies such as RFID and EGNOS/Galileo-based location devices | 2010 |

2.3 | Support for the wider deployment of an updated multi-modal European ITS Framework architecture for intelligent transport systems and definition of an ITS framework architecture for urban transport mobility, including an integrated approach for travel planning, transport demand, traffic management, emergency management, road pricing, and the use of parking and public transport facilities | 2010 |

2.4 | Implementation of the interoperability of electronic road toll systems[26] | 2012/2014 |

6.3. Action Area 3: Road safety and security

ITS-based road safety and security applications have proved their effectiveness, but the overall benefit for society depends on the scale of their deployment. Issues that require additional attention include designing a safe Human Machine Interface (HMI) (using the work done on the "European Statement of Principles"), integrating nomadic devices[27] and ensuring the safety of vulnerable road users (such as the elderly). Efforts to promote best practices in these areas are therefore crucial to address these issues.

Transport systems may also be under security threats. Transport security, especially the need to protect travellers and transport workers and to secure transport facilities and assets, must be taken into account without jeopardising efficient and effective transport operations.

The following actions are proposed:

Action | Target Date |

3.1 | Promotion of deployment of advanced driver assistance systems and safety and security-related ITS systems, including their installation in new vehicles (via type approval) and, if relevant, their retrofitting in used ones | 2009 to 2014 |

3.2 | Support the Implementation Platform for the harmonised introduction of pan-European eCall[28], including awareness campaigns, upgrading Public Service Access Points' infrastructures and an assessment of the need for regulation. | 2009 |

3.3 | Development of a regulatory framework on a safe on-board Human-Machine-Interface and the integration of nomadic devices, building on the European Statement of Principle[29] on safe and efficient in-vehicle information and communication systems | 2010 |

3.4 | Development of appropriate measures including best practice guidelines concerning the impact of ITS applications and services on the safety and comfort of vulnerable road users | 2014 |

3.5 | Development of appropriate measures including best practice guidelines on secure parking places for trucks and commercial vehicles and on telematics-controlled parking and reservation systems | 2010 |

6.4. Action Area 4: Integration of the vehicle into the transport infrastructure

The use of ITS components or systems is stipulated in several existing or planned legal acts and voluntary agreements applicable to commercial or private vehicles. Examples include the provisions on the transport of dangerous goods and live animals, digital tachograph [30], electronic toll collection and eCall. So far most of these acts and agreements have evolved independently of each other, so there has been little synergy even when needs are the same.

A streamlining and integration of these applications within a coherent, open-system architecture could yield better efficiency and usability, reduced costs and enhanced extensibility, enabling a "plug and play" integration of future new or upgraded applications such as those in nomadic devices and those utilising GNSS services for advanced positioning and timing. This open system architecture would be embodied in an open in-vehicle platform, guaranteeing interoperability/interconnection with infrastructure systems and facilities. With this modular approach, additional functionalities could be integrated later for in-vehicle safety and safe HMI, personal mobility, logistics support and access to multimodal information and possibly electronic vehicle identification.

This platform should be introduced in commercial vehicles first. Positive feedback from these applications would help speed up the uptake of integrated ITS applications in private vehicles, therefore stimulating a Europe-wide market for original and after-market in-vehicle products and services.

The development of cooperative systems, based on an exchange of information and communication between vehicles and with the road infrastructure, is also progressing rapidly, and needs to be further promoted.

The following actions are proposed:

Action | Target Date |

4.1 | Adoption of an open in-vehicle platform architecture for the provision of ITS services and applications, including standard interfaces. The outcome of this activity would then be submitted to the relevant standardisation bodies. | 2011 |

4.2 | Development and evaluation of cooperative systems in view of the definition of a harmonised approach; assessment of deployment strategies, including investments in intelligent infrastructure | 2010-2013 |

4.3 | Definition of specifications for infrastructure-to-infrastructure (I2I), vehicle-to-infrastructure (V2I) and vehicle-to-vehicle (V2V) communication in co-operative systems | 2010 (I2I) 2011 (V2I) 2013 (V2V) |

4.4 | Definition of a mandate for the European Standardisation Organisations to develop harmonised standards for ITS implementation, in particular regarding cooperative systems. | 2009-2014 |

6.5. Action Area 5: Data security and protection, and liability issues

The handling of data (notably personal and financial data) in ITS applications raises a number of issues, as citizens' data protection rights are at stake. At the same time, data integrity, confidentiality and availability must be ensured for all parties involved, especially citizens. Finally, the use of ITS applications creates additional requirements in terms of liability. These issues can be a major barrier to wide market penetration of some ITS services if citizens' rights are not shown to be fully protected.

The following actions are proposed:

Action | Target Date |

5.1 | Assess the security and personal data protection aspects related to the handling of data in ITS applications and services and propose measures in full compliance with Community legislation. | 2011 |

5.2 | Address the liability issues pertaining to the use of ITS applications and notably in-vehicle safety systems | 2011 |

6.6. Action Area 6: European ITS cooperation and coordination

Coordinated deployment of ITS in the EU calls for intensive and effective cooperation between all parties involved at European level, ideally leading to rapprochement on deployment requirements, better synchronisation of deployment activities and avoidance of national and proprietary silo solutions that constitute barriers to European integration.

Dissemination of the best available knowledge as to the costs and benefits of ITS projects from a full life-cycle perspective and feedback on relevant experience are needed to support informed investment decisions by public authorities across Europe. To make EU-wide deployment a reality, agreements on common assessment methods and uniform tools for decision support are therefore crucial.

Such coordinated deployment of ITS throughout Europe also requires greater involvement of cities and regional authorities, notably at urban and at inter-urban level. Guidance and technical support should be provided to facilitate and underpin consensus building and decision-making processes.

Finally, the implementation of the measures in this Action Plan will call for an adequate governance structure. Member States should aim at reaching agreement on a common ITS agenda and on methods to proceed from plans to coordinated implementation, for example by way of concerted investments or harmonisation initiatives.

The following actions are proposed:

Action | Target Date |

6.1 | Proposal for a legal framework for European coordination on the Europe-wide deployment of ITS | 2008 |

6.2 | Development of a decision-support toolkit for investment decisions in ITS applications and services. This should include a quantified evaluation of the economic, social, financial and operational impact and cover aspects such as user acceptance, life-cycle cost/benefit as well as the identification and evaluation of best practice for facilities procurement and deployment | 2011 |

6.3 | Development of guidelines for the public funding from both EU (e.g. TEN-T and Structural Funds) and national sources of ITS facilities and services based on an assessment of their economic, social and operational value | 2010 |

6.4 | Set-up of a specific ITS collaboration platform between Member States and regional/local governments to promote ITS initiatives in the area of urban mobility | 2010 |

7. LOOKING AHEAD

THIS ACTION PLAN PROPOSES An approach for a coherent and faster deployment of ITS across Europe, building on policy objectives. The priority areas of action and the enabling measures outlined above are designed to fulfil this goal. By integrating and complementing the various activities supported in the past at EU and national level, the approach will fully benefit from ongoing work and successful deployment of applications and services that have emerged. Such a blend will provide the best framework for a significant contribution of ITS to the achievement of more sustainable mobility in Europe.

While serving the short-to-medium term perspective in its effort to foster ITS deployment in the EU, this Action Plan aims at building a long-term vision clearly defining the role of ITS in tomorrow's transport system in Europe.

The European Commission will report on the progress in the implementation of this Action Plan in 2012. The present document will also review and, if necessary, extend the priority areas as well as the scope of the actions.

This Communication is accompanied by a proposal for a Directive on a framework for the coordination of the deployment of ITS.

[1] COM (2005) 24

[2] COM(2006) 314

[3] CEMT/ITF(2007): Congestion, a Global Challenge: The Extent of and Outlook for Congestion in Inland, Maritime and Air Transport

[4] DG TREN(2008): Energy and Transport in Figures 2007/08

[5] Cf. footnote 4

[6] Cf. footnote 2

[7] COM(2006) 545

[8] SESAR: Single European Sky Air Traffic Management Research

[9] COM(2008) 433 - Communication on Greening Transport

[10] COM(2007) 607

[11] Global Navigation Satellite System

[12] COM(2007) 541

[13] C(2008)1742

[14] COM(2007) 607

[15] To be adopted in December 2008

[16] http://ec.europa.eu/dgs/energy_transport/galileo

[17] COM(2008) 433

[18] COM(2007) 541

[19] www.esafetysupport.org

[20] <http://cordis.europa.eu/fp7>

[21] www.esafetysupport.org/en/ecall_toolbox

[22] <http://cordis.europa.eu/technology-platforms>

[23] COM(2007)22

[24] COM(2007) 607: Communication from the Commission - Freight Transport Logistics Action Plan

[25] COM(2007) 96

[26] Directive 2004/52/EC

[27] Nomadic devices are pieces of communication and information equipment that can be brought inside the vehicle by the driver to be used while driving: mobile phone, navigation system, pocket PC, etc.

[28] COM(2005) 431, COM(2003) 542

[29] C(2006) 7125

[30] Regulation (EC) 2135/98

I.1 2009

Annex J: Commission Policy Statement on the process of Comitology

The following text is the verbatim text of the Commission Policy Statement. It is reprinted in "normal" font but the original format styles have been retained.

NOTE: Bold text introduced to highlight particular relevance, and is not used in the original document.

J.1 Text of the Commission Policy Statement

EUROPEAN COMMISSION

Brussels, 9.12.2009

COM(2009) 673 final

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN

PARLIAMENT AND THE COUNCIL

Implementation of Article 290 of the Treaty on the Functioning of the European Union

(NOTE: Bold text introduced to highlight particular relevance, and is not used in the original document)

1. INTRODUCTION

Article 290 of the Treaty on the Functioning of the European Union, as laid down in the Treaty of Lisbon signed on 13 December 2007¹ (hereinafter "the new Treaty"), allows the legislator to delegate to the Commission the power to adopt non-legislative acts of general application to supplement or amend certain non-essential elements of a legislative act. Legal acts adopted by the Commission in this way are referred to in the terminology used by the new Treaty as "delegated acts" (Article 290(3)).

This provision does not require the adoption of any binding instrument of secondary legislation to ensure its implementation; it is sufficient in itself and contains all the elements required by the legislator for defining, case by case, the scope, content and practical arrangements for delegating power. However, the Commission believes it is useful and necessary to define the general framework within which such delegations of power should operate. The European Parliament, although stressing that this measure should preserve the freedom of the legislator, has reached a similar conclusion and has suggested that the institutions agree on a standard formula for delegations that would be regularly inserted by the Commission in the draft legislative act itself².

Without challenging the freedom of the European Parliament and the Council to set the limits and conditions of a delegation of powers at the point when a legislative act is adopted, the principles of better regulation and the smooth running of the inter-institutional process plead for a coordinated and coherent approach. Both the Commission, which is responsible for preparing and adopting delegated acts, and the European Parliament and Council, which are responsible for scrutinising them, should promote the introduction of a system that is as homogeneous and predictable as possible.

The purpose of this communication is to set out the Commission's views on the scope of the delegated acts, the framework for delegations of power, the working methods the Commission intends to use for preparing the adoption of delegated acts and, finally, the conditions under which the legislator might exercise control over the way the powers conferred on the Commission are implemented.

¹ OJ C 306, 17.12.2007.

² European Parliament resolution of 7 May 2009 on Parliament's new role and responsibilities in implementing the Treaty of Lisbon.

2. SCOPE OF DELEGATED ACTS

The scope of Article 290 cannot be determined simply by examining in detail the terms used by the authors of the new Treaty to define delegated acts; the provision also needs to be put into context, by looking in particular at its historical connection with the regulatory procedure with scrutiny and at its links with Article 291 on implementing acts. For it is around Articles 290 and 291 that the legal framework will have to be constructed to replace the comitology system established under the Treaty establishing the European Community.

A delegation of power within the meaning of Article 290 is possible only in a legislative act. However, it makes little difference whether or not the legislative act was adopted jointly by Parliament and the Council, because Article 290 does not distinguish between the ordinary legislative procedure (formerly codecision) and special legislative procedures.

2.1. Relations with the regulatory procedure with scrutiny

Purely in terms of the wording, the definition of delegated acts in Article 290(1) is very similar to that of acts which, under Decision 1999/468/EC3 ("the Comitology Decision"), are subject to the regulatory procedure with scrutiny introduced by Decision 2006/512/EC of 17 July 2006⁴. In both cases the acts in question are of general application and seek to amend or supplement certain non-essential elements of the legislative instrument.

However, the similarity of the criteria does not mean that they will be implemented in exactly the same way; in a new institutional context the scope of the delegated acts will not necessarily be identical to that of the regulatory procedure with scrutiny. Any automatic duplication of precedents is therefore to be avoided.

2.2. Relations with implementing acts

Before examining the idea of the delegated act in its own right we should consider it in relation to the implementing act, which is the subject of Article 291.

It is clear, first, that an act cannot be classified under two different headings at the same time:

an act based on Article 290 is by definition excluded from the scope of Article 291, and vice versa. The authors of the new Treaty clearly intended the two articles to be mutually exclusive, and indeed the resulting acts have different legal names.

Secondly, it should be noted that the authors of the new Treaty did not conceive the scope of the two articles in the same way. The concept of the delegated act is defined in terms of its scope and consequences – as a general measure that supplements or amends non-essential elements – whereas that of the implementing act, although never spelled out, is determined by its rationale - the need for uniform conditions for implementation. This discrepancy is due to the very different nature and scope of the powers conferred on the Commission by the two provisions.

When it receives the power to adopt delegated acts under Article 290 the Commission is authorised to supplement or amend the work of the legislator. Such a delegation is always discretionary: the legislator delegates its powers to the Commission in the interests of efficiency. In the system introduced by Article 291 the Commission does not exercise any "quasi-legislative" power; its power is purely executive. The Member States are naturally responsible for implementing the legally binding acts of the European Union, but because it is necessary to have uniform implementing conditions the Commission must exercise its executive power. Its intervention is not optional but compulsory, when the conditions of Article 291 are fulfilled

3 OJ L 184, 17.7.1999, p. 23. Consolidated version, as amended by Decision 2006/512/EC, published in OJ C 255, 21.10.2006, p. 4.

4 OJ L 200, 22.7.2006, p. 11.

Finally, it is important to stress that the fact that the acts adopted by the Commission are of general application is not in itself sufficient to trigger the application of the legal regime of delegated acts rather than that of implementing acts; Article 291 also allows the Commission to adopt implementing measures of general application.

In order to ensure the uniform implementation of a legally binding act of the European Union the Commission may use either individual measures or acts of general application. However, it is clear from the wording of Article 290 that the Commission may never adopt a delegated act relating to a measure of an individual nature.

2.3. Criteria for implementing Article 290

It is for the legislator alone to apply the criteria set out in Article 290 which, it should be noted, are cumulative: the act must not only be of general application but must also amend or supplement certain non-essential elements of the legislative act. If either of these conditions is not met Article 290 may not be applied.

The Commission does not intend to interpret these criteria in the abstract; the very wide range of measures that might be envisaged in a given situation precludes any attempt at classification. The Commission would, however, make two comments.

Firstly, it believes that by using the verb "amend" the authors of the new Treaty wanted to cover hypothetical cases in which the Commission is empowered formally to amend a basic instrument. Such a formal amendment might relate to the text of one or more articles in the enacting terms or to the text of an annex that legally forms part of the legislative instrument. **It makes little difference whether the annex contains purely technical measures; as soon as the Commission is empowered to amend an annex containing measures of general application, the regime of delegated acts must be applied.**

Secondly, the Commission wishes to stress the importance that should be attached to the verb "supplement", the meaning and scope of which are less specific than those of the verb "amend".

The Commission believes that in order to determine whether a measure "supplements" the basic instrument, the legislator should assess whether the future measure specifically adds new non-essential rules which change the framework of the legislative act, leaving a margin of discretion to the Commission. If it does, the measure could be deemed to "supplement" the basic instrument. Conversely, measures intended only to give effect to the existing rules of the basic instrument should not be deemed to be supplementary measures.

The legislator is entitled to enact full and comprehensive regulations governing a particular field of action, entrusting to the Commission the responsibility for ensuring their harmonised implementation through implementing acts; alternatively the legislator can choose to regulate the field in question only partially, leaving the Commission the responsibility for supplementing the regulations with delegated acts.

3. FRAMEWORK FOR DELEGATIONS OF POWER

When the legislator confers powers on the Commission, it must define the framework within which they are exercised in each legislative act. The second subparagraph of Article 290(1) of the new Treaty requires the legislator explicitly to define the objectives, content, scope and duration of the delegation of power. It thus defines two types of limits on the delegation of power: material limits and temporal limits.

3.1. Material limits

The delegation of power must be clear, precise and detailed. The legislator decides the objectives which the adoption of the delegated acts should make it possible to attain and, where appropriate, the limits which these acts may not exceed.

So in a case where the legislator wished to confer on the Commission the power to amend the annex to a regulation it should, for example, specify that the Commission may amend all or part of the annex in question by a delegated act, provided that certain conditions are fulfilled -scientific or technical progress has been made, a particular event has taken place or a certain amount of time has elapsed, etc. Similarly, limits might be imposed on the Commission for amending the annex; if the annex relates to setting quantitative values the Commission might be required by the legislator not to exceed certain thresholds.

3.2. Temporal limits

Article 290 states that the duration of the delegation of power is laid down by the legislator. The Commission does not believe that this requirement sanctions the practice of sunset clauses which when inserted into a legislative act automatically set a time limit on the powers conferred on the Commission, thus compelling it in practice to present a new legislative proposal when the time limit imposed by the legislator expires. Article 290 requires above all that a clear and predictable framework be established for the delegated powers; but it does not require the Commission to be subject to strict cut-off dates.

The legislator must be able to strike a balance between the need to establish a framework for the delegated powers and the need to ensure the continuity of the adoption of legal acts that are essential to the implementation of EU policies. Forcing the Commission periodically to present new legislative proposals to renew a delegation of power would be contrary to the very objectives of efficiency and speed that justify the use of delegated acts in the first place.

The Commission believes it is preferable not to increase the institutions' workload by introducing a binding system of short-term delegations. Delegations of power should in principle, therefore, be of indefinite duration. Such a practice would, moreover, be entirely consistent with the current situation. Experience shows that the legislator does not, as a general rule, wish to impose a time limit on the powers conferred on the Commission, even when conferring on it responsibility for taking quasi-legislative measures.

This is not to say that delegations of power should be immutable. It is important to note here that under Article 290(2)(a) the legislator can include in the basic instrument an option to revoke the delegation of power. Legally the effects of a revocation are exactly the same as those of a sunset clause; both put an end to the powers conferred on the Commission and the onus is then on the Commission to submit a legislative proposal if this is useful and necessary.

In other words, if the legislator feels that in certain fields it is necessary to avoid the delegation of powers becoming a permanent mandate, it can confer on itself the right to revoke it. This may prove to be a more flexible option than an automatic sunset clause.

This does not mean that revocation, as such, can be understood merely as a "substitute" for sunset clauses. As will be shown later (see point 5.2. below), revocation may serve other purposes. But, clearly, in this prerogative the legislator has at its disposal a mechanism whose practical effect is comparable to that of a sunset clause.

In specific cases it might, however, be appropriate for the legislator to set a precise date on which the delegation of power will expire. In such cases, and in order for the institutions not to have to resort to enacting legislation to renew the delegation of power, a mechanism for tacit renewal should be introduced, conditional on a report by the Commission and, of course, subject to the legislator being able to prevent such an automatic renewal.

4. PROCEDURE FOR ADOPTING DELEGATED ACTS

4.1. Autonomy of the Commission

Article 290 contains no provision referring directly or indirectly to the procedure for adopting delegated acts. Using the powers conferred on it by the legislator the Commission adopts the acts necessary to attain the objectives laid down by the basic instrument.

Article 290(1) on the framework for the delegation of power requires the Commission to comply with the material and temporal limits of the delegation which, in a sense, constitute the essence of the "mandate" issued by the legislator. This first paragraph therefore has an impact at an early stage, before the Commission has even started to prepare a delegated act.

Article 290(2), which deals with the control which may be exercised by the legislator, comes into play at a later stage, after the mandate has been exercised, by acting either on the delegation itself (which may be revoked if the legislator considers that it is being incorrectly used), or on the delegated acts, to which objections may be made once they have been adopted, thus preventing their entry into force.

However, neither of these provisions has anything to say about the procedure by which the Commission adopts a delegated act. Consequently, the Commission enjoys a large measure of autonomy in this matter.

4.2. Preparatory work for the adoption of delegated acts

The Commission intends to carry out the preparatory work it considers necessary in order to ensure, first, that from a technical and legal point of view the delegated acts comply fully with the objectives laid down by the basic instrument and, second, that from a political and institutional point of view everything possible is done to avoid any objections being made by Parliament or the Council.

Except in cases where this preparatory work does not require any new expertise, the Commission intends systematically to consult experts from the national authorities of all the Member States, which will be responsible for implementing the delegated acts once they have been adopted. This consultation will be carried out in plenty of time, to give the experts an opportunity to make a useful and effective contribution to the Commission. The Commission might form new expert groups⁵ for this purpose, or use existing ones.

The Commission attaches the highest importance to this work, which makes it possible to establish an effective partnership at the technical level with experts in the national authorities. **However, it should be made clear that these experts will have a consultative rather than an institutional role in the decision-making procedure. At the end of the consultations, the Commission will inform the experts of the conclusions it believes should be drawn from the discussions, its preliminary reactions and how it intends to proceed.**

In the specific area of financial services the Commission is also committed to continuing to consult experts appointed by the Member States in the preparation of its draft delegated acts, in accordance with its established practice (see Declaration No 39 annexed to the Final Act of the Intergovernmental Conference that adopted the Lisbon Treaty⁶).

In addition, and where necessary, the Commission will conduct any research, analysis, hearings and consultations required, in the form best suited to the fields in question and the time limits that have been laid down.

On a general level, the Commission plans to set up an early warning system to enable Parliament and the Council more effectively to plan how they exercise their prerogatives during a period of two months following the adoption of the delegated acts. This period may be extended by one month at the request of either Parliament or the Council (see point 5.3.1 below). In the case of sensitive dossiers, the Commission will also make a point of giving Parliament and Council additional information about the delegated acts it intends to adopt.

5. SCRUTINY OF DELEGATED ACTS

5.1. General considerations

Article 290(2) of the new Treaty specifies the two conditions to which the legislator may subject the delegation of power: firstly, the right to revoke the delegation of power, and secondly the right to express objections, that is the right of opposition. Whereas opposition is a specific motion of censure directed at a clearly defined delegated act, revocation is a general and absolute withdrawal of the delegated powers from the Commission. Opposition should thus be seen as the ordinary means of control exercised by the legislator over all delegated acts, whereas revocation appears to be a more exceptional measure, prompted for example by the occurrence of factors that undermine the very basis of the delegation of power.

⁶ OJ C 115, 9.5.2008, p. 350.

The legislator is not obliged to impose these two conditions cumulatively; they are independent of one another. The legislator might feel that it is not always necessary to provide for the possibility of revoking the delegation of power, in that this prerogative, in the case of an act adopted by the ordinary legislative procedure, gives one of the two branches of the legislature the unilateral power to render inoperative a provision that was adopted jointly. Similarly, the right of opposition might sometimes prove difficult to use, particularly when⁵ In line with the practice for all expert groups, the relevant information about the groups set up in this way will be made public via the register of expert groups the legislator wishes to confer on the Commission the power to adopt delegated acts with a particularly short deadline or strict timetable (see points 5.2 and 5.3.1 below). In order to exercise either of the powers of control granted to it by the Treaty, Parliament must act by a majority of its members and the Council by qualified majority, as provided for in the second subparagraph of Article 290(2).

5.2. Right of revocation

The right of revocation might particularly be envisaged in cases where the legislator wishes to have the possibility of withdrawing at any time the powers it has conferred on the Commission, in order to take account of new circumstances that would justify a legislative intervention.

The legislator might also want to have a right of revocation if it feels that a right of opposition would be ineffective or impractical, for example when the Commission is required to adopt delegated acts subject to time constraints that are incompatible with the exercise of a right of opposition by the legislator. Where the legislator is unable to exercise control over every single act adopted, because they are so numerous, it would retain overall control over the delegation of power through the right of revocation.

Where provided for in the legislative act, the exercise of the right of revocation should be accompanied by a duty to explain the reasons behind it and by an exchange of information between the institutions. The legal consequences should also be specified in advance.

The institution wishing to withdraw its confidence from the Commission should ideally explain its reasons for doing so. This would be useful for two reasons. Firstly, it would help the institution that was not exercising the right of revocation to understand the reasons why the other institution had decided unilaterally to amend the basic instrument. It would also have a preventive function: by explaining the reasons for its decision Parliament or the Council would clearly show the Commission what it had to do or not to do in order to avoid other revocations in the future.

The institution that intends to revoke the delegation should notify its intention not only to the Commission but also to the institution that is not exercising the right of revocation, so that an inter-institutional dialogue can be established before the revocation decision is taken. In addition, the institution that initiates the revocation should explicitly state which delegated powers it is seeking to revoke. Provision should be made, for example, for a situation in which

Parliament or the Council proposes to revoke only some of the powers delegated to the Commission. In other words a "partial revocation" should be possible.

Finally, the consequences of revocation should be explicitly set out in the basic instrument. It might be specified, for example, that the revocation decision terminates the delegation of powers by explicitly targeting the delegated powers that are revoked, but that it does not affect the delegated acts that are already in force.

5.3. Right of opposition

Where provided for in the legislative act, the right of opposition should fulfil certain requirements in terms of procedure. Once it has adopted a delegated act, the Commission will notify it to the legislator, i.e. simultaneously to Parliament and the Council, if the basic instrument is governed by the ordinary legislative procedure. The right of opposition would then be triggered and would act like a suspensive condition: the entry into force of the delegated act adopted by the Commission would be suspended for a period specified by the legislative act, during which the legislator would have the right to lodge objections.

The Commission will also take all the necessary measures to ensure that the delegated acts are published as soon as they are adopted.

5.3.1. Time limits

The period allowed for the legislator to examine the delegated act will be laid down in the basic instrument. The legislator will be free to decide how long it thinks it will need in each case. However, the Commission believes it would be best to avoid setting completely different time limits for the different areas involved, unless this were fully justified by the urgency of the measures to be taken - in which case shorter deadlines would have to be set – or, conversely, by the extreme complexity of the acts the Commission was empowered to adopt – in which case the review period ought to be extended.

The period for expressing objections would start to run from the moment the Commission transmitted the delegated act, adopted in all the EU official languages.

Experience with the regulatory procedure with scrutiny shows that the three months currently allowed for exercising the right of opposition is longer than required, in that Parliament and the Council are often able to establish more quickly whether the act in question is likely to pose problems. In most cases the three-month period is thus a simple procedural time limit, which delays the entry into force of the act without bringing any real added value.

Consequently, the Commission favours a system in which the period for expressing objections would be two months, but would automatically be extended by one month on the initiative of Parliament or the Council. This would help to increase the efficiency of the procedures without undermining the principle of a total period of three months. In specific cases, where the issues on which powers were delegated to the Commission were so complex or sensitive that the two-month period would not be long enough to allow Parliament and the Council to exercise their prerogatives, it might be necessary to provide for a fixed period of three months.

Provision should also be made for the possibility of the two institutions deciding to inform the Commission that they will not oppose the delegated act even before the legal deadline has expired, thus enabling the delegated act to enter into force immediately.

Obviously this standard formula would not suit every area of action. Some policies require the Commission to act very quickly, even when it is not an emergency. In such cases the legislator could be asked significantly to shorten the scrutiny period or even dispense with it altogether, if it also has a right of revocation (see point 5.2 above).

5.3.2. Grounds

Article 290 TFEU does not list the grounds on which the legislator may object to a delegated act. The right to express objections, which represents the ordinary type of scrutiny of the delegation of power by the legislator, should in principle fall under the discretionary power of Parliament and the Council.

However, the institution opposing the act should explain the reasons for its decision by setting them out in the Council decision or Parliamentary resolution formalising its objections. This will ensure that the Commission does not continue to pursue the course of action that prompted Parliament or the Council to express objections. If, for example, the institution that expressed objections shows clearly that the Commission has exceeded the framework of the delegation of power, this would enable the Commission, if necessary, to opt for legislation instead.

5.3.3. Consequences of opposition

A delegated act that Parliament or the Council has opposed cannot enter into force. The Commission will then have the possibility of either adopting a new delegated act, amended where necessary to take account of the objections expressed, or presenting a legislative proposal under the terms of the Treaties, if the objections were based on its having overstepped the powers delegated to it. It is also conceivable that the Commission will decide not to do anything at all.

5.3.4. Urgency procedure

The Commission believes that there might be some cases where a delegated act subject to the right of opposition had to be adopted and enter into force as a matter of particular urgency. At the height of the financial crisis in autumn 2008, for example, certain accounting rules had to be amended very quickly. The deadlines for the regulatory procedure with scrutiny, which applied in this case, had to be considerably shortened to enable the measures to be taken and implemented in the shortest possible space of time.

The normal exercise of the right of opposition may, therefore, prove incompatible with the urgency of the situation in question. Consequently, the Commission feels it is essential to introduce an urgency procedure for use by the legislator. Such a procedure could be organised in several ways. One would be to limit to the strict minimum the period allowed for expressing objections. Thus for overriding reasons of urgency a delegated act adopted by the Commission could, for example, enter into force eight days after being sent to Parliament and the Council. This approach has the advantage of being simple and of not altering the traditional procedural circuit. However, the danger is that it renders the legislator's right of opposition completely illusory; the legislator would have enormous difficulty formulating any objections in such a short time.

For this reason the Commission would recommend an alternative approach, which would allow it to adopt and implement immediately a delegated act which would nevertheless be subject to the right of opposition. This act would be notified immediately to the legislator and would apply provided no objection was expressed by Parliament or the Council during a period that might be fixed at six weeks. If objections were expressed, the delegated act would cease to apply.

6. CONCLUSION

This communication takes account of the exploratory contacts with the departments of the European Parliament and the discussions that took place with the Council in the weeks before its adoption. The Commission believes that this communication will enable the three institutions to organise the delegations of power conferred under Article 290 of the new Treaty in the most harmonious way possible.

In line with the ideas set out in this communication, the Commission encloses herewith several models for articles in future legislative acts conferring on it the power to adopt delegated acts.

ANNEX

Models

These models provide standard wording for the Articles of a basic instrument in which the legislator defines the limits of the delegation of power and lays down the conditions to which the delegation is subject. These models do not concern the delegated acts themselves.

Nevertheless, the Commission would already like to clarify that the delegated acts will contain specific recitals explaining the rationale of the acts. The delegated acts will also be accompanied by an explanatory memorandum setting out in a more detailed manner the grounds for the act and providing information about the preparatory work undertaken by the Commission, where relevant.

Recital

The Commission should be empowered to adopt delegated acts in accordance with Article 290 of the Treaty in respect of [...].

Article(s) delegating powers

(One or several provisions delegate powers to the Commission in the basic instrument. These provisions shall set out the objectives, content and scope of the delegated powers and shall make reference to Article A.)

Article A

Exercise of the delegation

1. The powers to adopt the delegated acts referred to in [Article(s) delegating powers] shall be conferred on the Commission for (...)

Option 1 an indeterminate period of time.

Option 2 a period of [X] years following the entry into force of [...]. The Commission shall make a report in respect of the delegated powers at the latest [X] months before the end of the [X] year period. The delegation of power shall be automatically extended for periods of an identical duration, unless the European Parliament or the Council revokes it in accordance with Article B.

2. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

3. The powers to adopt delegated acts are conferred on the Commission subject to the conditions laid down in Articles [B] [and] [C]. [Where imperative grounds of urgency so require, Article D shall apply]⁷.

Article B

Revocation of the delegation

1. The delegation of power referred to in [Article(s) delegating powers] may be revoked by the European Parliament or by the Council.

2. The institution which has commenced an internal procedure for deciding whether to revoke the delegation of power shall inform the other legislator and the Commission at the latest one month before the final decision is taken, stating the delegated powers which could be subject to revocation and the reasons for a revocation.

3. The decision of revocation shall put an end to the delegation of the powers specified in that decision. It shall take effect immediately or at a later date specified therein. It shall not affect the validity of the delegated acts already in force. It shall be published in the Official Journal of the European Union.

Article C

Objections to delegated acts

1. The European Parliament and the Council may object to the delegated act

Option 1 within a period of two months from the date of notification. At the initiative of the European Parliament or the Council this period shall be extended by one month.

Option 2 within a period of three months from the date of notification.

2. If, on expiry of that period, neither the European Parliament nor the Council has objected to the delegated act, or if, before that date, the European Parliament and the Council have both informed the Commission that they have decided not to raise objections, the delegated act shall enter into force at the date stated in its provisions.

3. If the European Parliament or the Council objects to the adopted delegated act, it shall not enter into force. The institution which objects shall state the reasons for objecting to the delegated act.

⁷ This last sentence shall be inserted only in basic acts which foresee an urgency procedure.

Article D

Urgency procedure

1. A delegated act adopted under the urgency procedure shall enter into force without delay and apply as long as no objection is expressed in accordance with paragraph 2.

The notification of the act to the European Parliament and to the Council shall state the reasons for the use of the urgency procedure.

2. The European Parliament and the Council may within a period of [six weeks] from the date of notification object to the delegated act. In such a case, the act shall cease to be applicable. The institution which objects shall state the reasons for objecting to the delegated act.

Annex K: Bibliography

K.1 Harmonised Standards

Summary list of titles and references to harmonised standards in relation to radio equipment and telecommunications terminal equipment.

The information contained in the summary list is a compilation of the references of standards which have been published in the Official Journal of the European Union OJ C 104 of 2004-04-30.

Although the list is updated regularly, it may not be complete and it does not have any legal validity; only publication in the Official Journal produces legal affect.

Further information on Harmonised Standards under Directive 1995/5/EC can be found at http://ec.europa.eu/enterprise/sectors/rte/documents/standards/index_en.htm.

K.1.1 Harmonised Standards related to R&TTE Directive 1999/5/EC

CENELEC EN 41003 (1998): "Particular safety requirements for equipment to be connected to telecommunication networks".

K.1.2 Harmonised Standards related to R&TTE Directive Art.3.1.a

CENELEC EN 55022 (1994): "Limits and methods of measurement of radio disturbance characteristics of information technology equipment".

K.1.3 Harmonised Standards related to R&TTE Directive Art.3.1.a (& Art.2 73/23/EEC)

CENELEC EN 50081-1 (1992): "Electromagnetic compatibility; Generic emission standard; Part 1: Residential, commercial and light industry".

CENELEC EN 50371 (2002): "Generic standard to demonstrate the compliance of low power electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (10 MHz - 300 GHz); General public".

CENELEC EN 50385 (2002): "Product standard to demonstrate the compliance of radio base stations and fixed terminal stations for wireless telecommunication systems with the basic restrictions or the reference levels related to human exposure to radio frequency electromagnetic fields (110 MHz - 40 GHz); General public".

CENELEC EN 60065 (2002): "Audio, video and similar electronic apparatus; Safety requirements".

CENELEC EN 60215 (1989): "Safety requirements for radio transmitting equipment".

CENELEC EN 60950 (1992): "Safety of information technology equipment".

CENELEC EN 61000-3-2 (2000): "Electromagnetic compatibility (EMC); Part 3-2: Limits; Limits for harmonic current emissions (equipment input current up to and including 16 A per phase)".

K.1.4 Harmonised Standards related to R&TTE Directive Art.3.1.b (& Art.4 89/336/EEC)

CENELEC EN 50081-2 (1993): "Electromagnetic compatibility; Generic emission standard; Part 2: Industrial environment".

CENELEC EN 50082-1 (1997): "Electromagnetic compatibility; Generic immunity standard; Part 1: Residential, commercial and light industry".

CENELEC EN 50360 (2001): "Product standard to demonstrate the compliance of mobile phones with the basic restrictions related to human exposure to electromagnetic fields (300 MHz - 3 GHz) ".

CENELEC EN 55022 (1998): "Information technology equipment; Radio disturbance characteristics; Limits and methods of measurement".

CENELEC EN 55024 (1998): "Information technology equipment; Immunity characteristics; Limits and methods of measurement".

CENELEC EN 60065 (1998): "Audio, video and similar electronic apparatus; Safety requirements".

CENELEC EN 61000-3-3 (1995): "Electromagnetic compatibility (EMC); Part 3-3: Limits; Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection".

CENELEC EN 61000-6-1 (2001): "Electromagnetic compatibility (EMC); Part 6-1: Generic standards; Immunity for residential, commercial and light-industrial environments".

CENELEC EN 61000-6-2 (1999): "Electromagnetic compatibility (EMC); Part 6-2: Generic standards; Immunity for industrial environments".

CENELEC EN 61000-6-3 (2001): "Electromagnetic compatibility (EMC); Part 6-3: Generic standards; Emission standard for residential, commercial and light-industrial environments".

CENELEC EN 61000-6-4 (2001): "Electromagnetic compatibility (EMC); Part 6-4: Generic standards; Emission standard for industrial environments".

CEN EN 12895 (2000): "Industrial trucks; Electromagnetic compatibility".

ETSI EN 300 341-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile service (RP 02); Radio equipment using an integral antenna transmitting signals to initiate a specific response in the receiver; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive".

ETSI EN 300 390-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Radio equipment intended for the transmission of data (and speech) and using an integral antenna; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 301 166-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land mobile service; Technical characteristics and test conditions for radio equipment for analogue and/or digital communication (speech and/or data) and operating on narrowband channels and having an antenna connector; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 301 489-01 (V1.3.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements".

ETSI EN 301 489-01 (V1.4.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements".

ETSI EN 301 489-03 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 40 GHz".

ETSI EN 301 489-03 (V1.3.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 40 GHz".

ETSI EN 301 489-03 (V1.4.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 40 GHz".

ETSI EN 301 489-04 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 4: Specific conditions for fixed radio links and ancillary equipment and services".

ETSI EN 301 489-04 (V1.3.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 4: Specific conditions for fixed radio links and ancillary equipment and services".

ETSI EN 301 489-05: "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 5: Specific conditions for Private land Mobile Radio (PMR) and ancillary equipment (speech and non-speech) ".

ETSI EN 301 489-05 (V1.3.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 5: Specific conditions for Private land Mobile Radio (PMR) and ancillary equipment (speech and non-speech) ".

ETSI EN 301 489-07 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 7: Specific conditions for mobile and portable radio and ancillary equipment of digital cellular radio telecommunications systems (GSM and DCS) ".

ETSI EN 301 489-07 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 7: Specific conditions for mobile and portable radio and ancillary equipment of digital cellular radio telecommunications systems (GSM and DCS) ".

ETSI EN 301 489-08 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 8: Specific conditions for GSM base stations".

ETSI EN 301 489-08 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 8: Specific conditions for GSM base stations".

ETSI EN 301 489-09 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 9: Specific conditions for wireless microphones and similar Radio Frequency (RF) audio link equipment".

ETSI EN 301 489-09 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 9: Specific conditions for wireless microphones, similar Radio Frequency (RF) audio link equipment, cordless audio and in-ear monitoring devices".

ETSI EN 301 489-09 (V1.3.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 9: Specific conditions for wireless microphones, similar Radio Frequency (RF) audio link equipment, cordless audio and in-ear monitoring devices".

ETSI EN 301 489-16 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 16: Specific conditions for analogue cellular radio communications equipment, mobile and portable".

ETSI EN 301 489-16 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 16: Specific conditions for analogue cellular radio communications equipment, mobile and portable".

ETSI EN 301 489-17 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Wideband data and HIPERLAN equipment".

ETSI EN 301 489-17 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment".

ETSI EN 301 489-23 (V1.1.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 23: Specific conditions for IMT-2000 CDMA Direct Spread (UTRA) Base Station (BS) radio, repeater and ancillary equipment".

ETSI EN 301 489-23 (V1.2.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 23: Specific conditions for IMT-2000 CDMA Direct Spread (UTRA) Base Station (BS) radio, repeater and ancillary equipment".

ETSI EN 301 489-24 (V1.1.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 24: Specific conditions for IMT-2000 CDMA Direct Spread (UTRA) for Mobile and portable (UE) radio and ancillary equipment".

ETSI EN 301 489-24 (V1.2.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 24: Specific conditions for IMT-2000 CDMA Direct Spread (UTRA) for Mobile and portable (UE) radio and ancillary equipment".

ETSI EN 301 489-25 (V2.0.0): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 25: Specific conditions for IMT-2000 CDMA Multi-carrier Mobile Stations and ancillary equipment".

ETSI EN 301 489-25 (V2.2.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 25: Specific conditions for IMT-2000 CDMA Multi-carrier Mobile Stations and ancillary equipment".

ETSI EN 301 489-26 (V1.1.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 26: Specific conditions for IMT-2000 CDMA Multi-carrier Base Stations and ancillary equipment".

ETSI EN 301 489-26 (V2.2.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 26: Specific conditions for IMT-2000 CDMA Multi-carrier Base Stations and ancillary equipment".

ETSI EN 301 502 (V8.1.2): "Harmonized EN for Global System for Mobile communications (GSM); Base Station and Repeater equipment covering essential requirements under article 3.2 of the R&TTE directive". (GSM 13.21 version 8.0.1 Release 1999).

ETSI EN 301 893 (V.1.2.3): "Broadband Radio Access Networks (BRAN); 5 GHz high performance RLAN; Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive".

ETSI ETS 300 683 (1997): "Radio equipment and systems (RES); Electromagnetic compatibility (EMC) standard for short-range devices (SRD) operating on frequencies between 9 kHz and 25 GHz".

K.1.5 Harmonised Standards related to R&TTE Directive Art.3.2

ETSI EN 300 113-2: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land mobile service; Radio equipment intended for the transmission of data (and speech) and having an antenna connector; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 113-2 (V1.3.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land mobile service; Radio equipment intended for the transmission of data (and/or speech) using constant or non-constant envelope modulation and having an antenna connector; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 219-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Radio equipment with an internal or external RF connector intended primarily for analogue speech; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 220-3 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment to be used in the 25 MHz to 1 000 MHz frequency range with power levels ranging up to 500 mW; Part 3: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 224-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); On-site paging service; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive".

ETSI EN 300 279 (V1.2.1): "Electromagnetic compatibility and radio spectrum matters (ERM); Electromagnetic compatibility (EMC) standard for private land mobile radio (PMR) and ancillary equipment (speech and/or non speech)".

ETSI EN 300 296-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Radio equipment using integral antennas intended primarily for analogue speech; Part 2: Harmonised EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 328 (V1.4.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 328-2 (V1.1.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 328-2 (V1.2.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 339 (1998): "Electromagnetic compatibility and radio spectrum (ERM); General electromagnetic compatibility (EMC) for radio communications equipment".

ETSI EN 300 113-2: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land mobile service; Radio equipment intended for the transmission of data (and speech) and having an antenna connector; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 113-2 (V1.3.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land mobile service; Radio equipment intended for the transmission of data (and/or speech) using constant or non-constant envelope modulation and having an antenna connector; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 219-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Radio equipment with an internal or external RF connector intended primarily for analogue speech; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 220-3 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment to be used in the 25 MHz to 1 000 MHz frequency range with power levels ranging up to 500 mW; Part 3: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 224-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); On-site paging service; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive".

ETSI EN 300 279 (V1.2.1): "Electromagnetic compatibility and radio spectrum matters (ERM); Electromagnetic compatibility (EMC) standard for private land mobile radio (PMR) and ancillary equipment (speech and/or non speech)".

ETSI EN 300 296-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Radio equipment using integral antennas intended primarily for analogue speech; Part 2: Harmonised EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 328 (V1.4.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 328-2 (V1.1.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 328-2 (V1.2.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 339 (1998): "Electromagnetic compatibility and radio spectrum (ERM); General electromagnetic compatibility (EMC) for radio communications equipment".

ETSI EN 300 422-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Wireless microphones in the 25 MHz to 3 GHz frequency range; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive".

ETSI EN 300 440-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short range devices; Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive".

ETSI EN 300 454-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Wide band audio links; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive".

ETSI EN 300 471-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Access protocol, occupation rules and corresponding technical characteristics of radio equipment for the transmission of data on shared channels; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

EN 300 720-2 (V1.1.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); Ultra-High Frequency (UHF) on-board communications systems and equipment; Part 2: Harmonised EN under article 3.2 of the R&TTE Directive".

EN 301 025-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC); Part 2: Harmonized EN under article 3.2 of the R&TTE Directive".

ETSI EN 301 025-3 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC); Part 3: Harmonized EN under article 3.3e of the R&TTE Directive".

ETSI EN 301 357-2 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Cordless audio devices in the range 25 MHz to 2000 MHz; Consumer radio microphones and in-ear monitoring systems operating in the CEPT harmonized band 863 MHz to 865 MHz; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive".

ETSI EN 301 419-2 (V5.1.1): "Digital cellular telecommunications system (Phase 2+); Attachment requirements for Global System for Mobile communications (GSM); High Speed Circuit Switched Data (HSCSD) Multislot Mobile Stations; Access".

ETSI EN 301 419-3 (V5.0.2): "Digital cellular telecommunications system (Phase 2+); Attachment requirements for Global System for Mobile communications (GSM); Advanced Speech Call Items (ASCI); Mobile Stations; Access (GSM 13.68 version 5.0.2 Release 1996)". (Applicable parts: 26.14.5.2, 26.14.7.3, 26.14.8.1).

ETSI EN 301 419-7 (V5.0.2): "Digital cellular telecommunications system (Phase 2+); Attachment requirements for Global System for Mobile communications (GSM); Railways Band (R-GSM); Mobile Stations; Access (GSM 13.67 version 5.0.2)". (Applicable parts: 12.3.1, 12.3.2, 12.4.1, 12.4.2, 13.9, 14.7.3, 20.21.1, 20.21.2, 20.21.3, 20.21.4, 20.21.5, 20.21.6, 20.21.7, 20.21.8, 20.21.9, 20.21.10, 20.21.11, 20.21.12, 20.21.13, 20.21.15, 20.21.16, 20.21.18, 26.10.2.2, 26.10.2.3, 26.10.2.4.1, 26.10.2.4.2).

ETSI EN 301 489-01 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements".

ETSI EN 301 511 (V7.0.1): "Global System for Mobile communications (GSM); Harmonized standard for mobile stations in the GSM 900 and DCS 1800 bands covering essential requirements under article 3.2 of the R&TTE directive (1999/5/EC)". (GSM 13.11 version 7.0.0 Release 1998).

ETSI EN 301 511 (V9.0.2): "Global System for Mobile communications (GSM); Harmonized standard for mobile stations in the GSM 900 and DCS 1800 bands covering essential requirements under article 3.2 of the R&TTE directive (1999/5/EC)".

ETSI EN 301 840-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Digital wireless microphones operating in the CEPT harmonized band 1785 MHz to 1 800 MHz; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive".

ETSI EN 301 843-1 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for marine radio equipment and services; Part 1: Common technical requirements".

ETSI EN 301 908-10 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS) and User Equipment (UE) for IMT-2000 Third Generation cellular networks; Part 10: Harmonized EN for IMT-2000, FDMA/TDMA (DECT) covering essential requirements of article 3.2 of the R&TTE Directive".

ETSI EN 301 908-10 (V2.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS) and User Equipment (UE) for IMT-2000 Third Generation cellular networks; Part 10: Harmonized EN for IMT-2000, FDMA/TDMA (DECT) covering essential requirements of article 3.2 of the R&TTE Directive".

ETSI EN 301 997-2 (V.1.1.1): "Transmission and Multiplexing (TM); Multipoint equipment; Radio equipment for use in Multimedia Wireless Systems (MWS) in the frequency band 40,5 GHz to 43,5 GHz; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI ETS 300 113/A1 (1997): "Radio equipment and systems (RES); Land mobile group; Technical characteristics and test conditions for radio equipment intended for the transmission of data (and speech), and having an antenna connector".

K.1.6 Harmonised Standards related to Art.3.3

ETSI EN 300 086-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Radio equipment with an internal or external RF connector intended primarily for analogue speech; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".

ETSI EN 300 385 (1999): "Electromagnetic compatibility and radio spectrum matters (ERM); Electromagnetic compatibility (EMC) standard for fixed radio links and ancillary equipment".

History

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