



CEN/TC 278

ITS standardization

**Developing Standards for Smart and
Sustainable Transport**



CEN/TC 278 Intelligent transport systems

After more than two decades of development Intelligent Transport Systems (ITS) are playing an ever greater role in increasing the efficiency of public and private transport, improving the driving experience and, most importantly, making a major contribution to road safety and reduction of energy consumption and pollution. ITS already control traffic flow, collect road tolls, provide timely traffic and guidance information, safety advisory information, crash notifications, emergency vehicle prioritization, and 'infotainment'.

CEN/TC 278 *Intelligent transport systems* is responsible for the development of European standards and technical specifications in the domain of Intelligent Transport Systems (ITS). ITS standards help to ensure interoperability across countries and harmonise technical solutions. The standardization areas include Cooperative ITS, Travel and Traffic Information, Route Guidance and Navigation, Public Transport, eCall and Electronic Fee Collection.

CEN/TC 278 Facts

- Established in 1991
- 33 national members
- 54 active work items, 128 adopted standards (June 2013)
- 10 active working groups with over 300 nominated experts
- Co-operation between market players: industries, service providers, governments
- Well connected to European R&D

CEN/TC 278 Success stories

- eCall standards for the deployment of eCall in Europe from 2015.
- Traffic Message Channel (TMC) standards for delivering traffic and travel information to drivers
- EFC and DSRC standards with outreach in Australia, South-Africa and Brazil
- DATEX II preferred by the EC for information exchange related to safety related messages

CEN/TC 278 Standardization Areas

CEN/TC 278 is responsible for managing the preparation of standards within the field of Intelligent Transport Systems. CEN/TC 278 has a number of Working Groups (WG) in which the actual work is carried out. Each of these groups is dedicated to a more specific aspect of the overall subject.

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| WG 1 Electronic Fee Collection | WG 9 <i>Dedicated Short Range Communications</i> |
| WG 2 Freight, Logistics and Com. Vehicle Operations | WG 10 Human-Machine Interfacing |
| WG 3 Public Transport | WG 12 Automatic Vehicles and Equipment Id. |
| WG 4 <i>Traffic and Travel Information</i> | WG 13 Architecture and Terminology |

WG 5 Traffic Control Systems

WG 7 Geographic Data Files

WG 8 Road Traffic Data

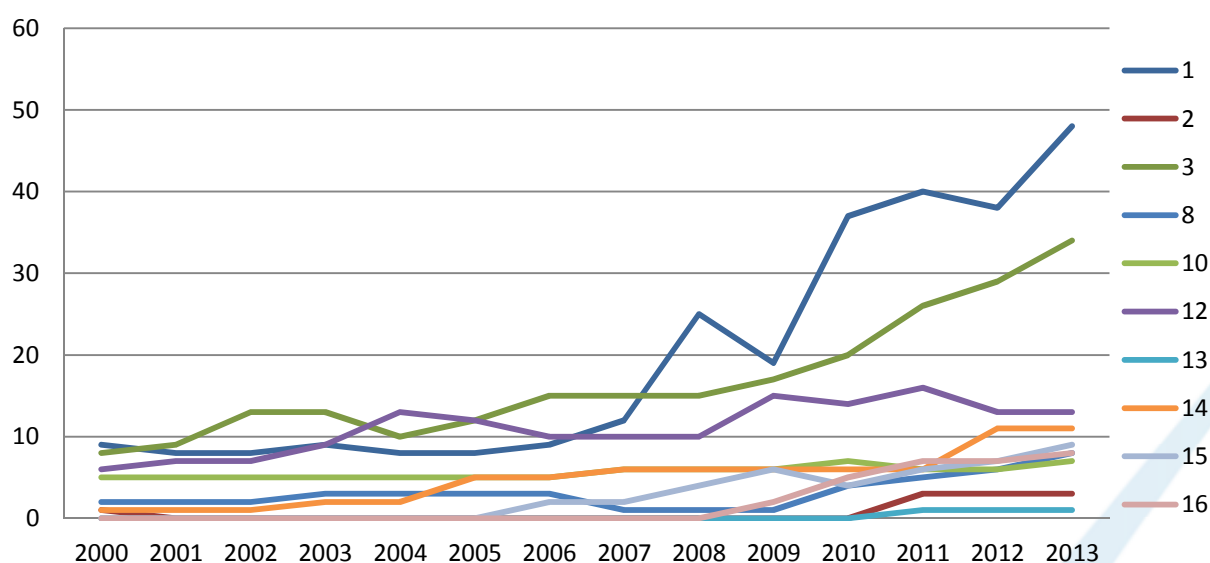
WG 14 Recovery of stolen vehicles

WG 15 eCall

WG 16 Cooperative ITS

CEN/TC 278 Programme of Work

Active projects per working group.



ITS Standardization environment

ISO/TC 204

CEN/TC 278 operates in **close cooperation** with ISO/TC 204 *Intelligent transport systems*, which is responsible for developing international standards. Many standards are developed in **joint working groups**, so that **expertise from around** the globe can be used to set the best standards for Europe.

ETSI/TC ITS

The European Telecommunications Standards Institute (ETSI) produces globally-applicable **standards for ICT**. In the area of ITS, these standards are **complementary** to the ones produced by CEN/TC 278; together they form a coherent set of ITS standards for Europe. The coordination of the work programmes is handled by the **ITS Coordination Group** (ITS-CG).

CEN/TC 278 Meetings

The members of CEN/TC 278 meet two times every year. Each CEN member selects up to three delegates to represent the member state interest in the TC meetings. In the TC plenary meeting they decide on starting new work items, comment and vote on draft standards and vote on final standards.

The actual development of standards takes place in the working groups of CEN/TC 278, all consisting of volunteer experts working together in a specific domain. The working groups report regularly to the TC on the progress made.

Environmental benefits from ITS

Intelligent Transport Systems (ITS) can significantly contribute to a cleaner, safer and more efficient transport system. The most important benefits from ITS are:

- Lower impact of traffic on the environment, improved energy efficiency and decreased dependency on fossil fuels
- Reduced congestion and optimal use of existing infrastructure
- increased use of environmental friendly transport modes
- Increased traffic safety and security
- Increased convenient of transport

CEN/TC 278 and European Legislation

ITS have become the focus of a number of policy and legislative initiatives in Europe. The European Commission has laid down the legal framework in order to accelerate the deployment of these innovative transport technologies across Europe. Furthermore, the European Commission has requested the European Standards Organizations to develop and adopt European standards in support of this legal framework. Not surprisingly there is considerable activity in this area by the standards organizations CEN, CENELEC and ETSI. The following documents are relevant for the standardization work in CEN/TC 278:

- *Directive 2004/52/EC* (EFC directive) on the interoperability of electronic road toll systems in the Community
- *Directive 2010/40/EU* (ITS directive) on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport
- *Commission Decision 2009/750/EC* on the definition of the European Electronic Toll Service and its technical elements
- *Mandate M/338* on Electronic Fee Collection in support of Interoperability of electronic road toll systems in the Community. There are currently 22 standards under development and 19 standards have been published in response to this mandate.
- *Mandate M/453* on Co-operative systems for Intelligent Transport in the field of information and communication technologies to support interoperability of cooperative systems for intelligent transport in the European Community

- *2010-2013 EC ICT standardization work programme*: promote the use of standards as a means to increase interoperability between services and applications. In response to this framework several standards are being developed, including in the area of *data harmonization* and *eCall*.
- The *ITS action plan* identifies priority areas where actions are necessary to lift the barriers hampering a wider and more coordinated deployment and use of ITS

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