



Intelligent Transport Systems

Smart and Sustainable Transport



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 provides solutions to improve 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 in the domain of Intelligent Transport Systems (ITS). ITS standards help to ensure interoperability across countries and harmonise technical solutions.

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, improve energy efficiency and decrease dependency on fossil fuels
- Reduce congestion and optimise the use of existing infrastructure
- Increase traffic safety and security
- Increase convenient of transport

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 IN A NUTSHELL

- Co-operation between market players: industries, service providers, governments
- Well connected to European R&D
- Involvement of over 300 experts
- Established in 1991
- 33 national members
- 54 active work items, 128 adopted standards (June 2016)

CEN/TC 278 ORGANIZATION

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.

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 10 Human-Machine Interfacing |
| WG 2 Freight, Logistics and Com. Vehicle Operations | WG 12 Automatic Vehicles and Equipment Id. |
| WG 3 Public Transport | WG 13 <i>Architecture and Terminology</i> |
| WG 4 <i>Traffic and Travel Information</i> | WG 14 <i>Recovery of stolen vehicles</i> |
| WG 5 <i>Traffic Control Systems</i> | WG 15 eCall |
| WG 7 <i>Geographic Data Files</i> | WG 16 Cooperative ITS |
| WG 8 Road Traffic Data | WG 17 Urban ITS |
| WG 9 <i>Dedicated Short Range Communications</i> | |

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 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
- *Mandate M/546* on ITS in Urban areas
- The *Rolling Plan on ICT Standardisation plan* identifies priority areas where actions are necessary to lift the barriers hampering a wider and more coordinated deployment and use of ITS

Chair

Lex Eggink
lex.eggink@rws.nl
+31 88 798 2316

Secretary

Maarten Peelen
maarten.peelen@nen.nl
+31 15 2690 378

