| STN | **Inteligentné dopravné systémy (IDS). Kooperatívne systémy. Úlohy a zodpovednosti v kontexte kooperatívnych IDS založených na architektúre pre kooperatívne systémy (ISO/TS 17427: 2014).** | **STN P CEN ISO/TS 17427** |
| | | **01 8561** |

Intelligent transport systems - Cooperative systems - Roles and responsibilities in the context of cooperative ITS based on architecture(s) for cooperative systems (ISO/TS 17427:2014)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/14

Táto predbežná STN je určená na overenie. Pripomienky zasielajte ÚNMS SR najneskôr do 30. 6. 2016.

Obsahuje: CEN ISO/TS 17427:2014, ISO/TS 17427:2014

**119606**

# TECHNICAL SPECIFICATION

# SPÉCIFICATION TECHNIQUE

# TECHNISCHE SPEZIFIKATION

# CEN ISO/TS 17427

July 2014

ICS 03.220.01; 35.240.60

English Version

# Intelligent transport systems - Cooperative systems - Roles and responsibilities in the context of cooperative ITS based on architecture(s) for cooperative systems (ISO/TS 17427:2014)

Systèmes intelligents de transport - Systèmes coopératifs - Rôles et responsabilités dans le contexte des ITS fondés sur l'architecture de systèmes coopératifs (ISO/TS 17427:2014)

Intelligente Transportsysteme - Kooperative Systeme - Rollen und Verantwortlichkeiten im Zusammenhang von ITS basierten Architekturen von kooperativen Systemen (ISO/TS 17427:2014)

This Technical Specification (CEN/TS) was approved by CEN on 25 February 2014 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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**CEN-CENELEC Management Centre:  Avenue Marnix 17,  B-1000 Brussels**

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# Foreword

This document (CEN ISO/TS 17427:2014) has been prepared by Technical Committee ISO/TC 204 "Intelligent transport systems" in collaboration with Technical Committee CEN/TC 278 "Intelligent transport systems" the secretariat of which is held by DIN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Endorsement notice

The text of ISO/TS 17427:2014 has been approved by CEN as CEN ISO/TS 17427:2014 without any modification.

# TECHNICAL SPECIFICATION

## ISO/TS 17427

First edition
2014-07-01

# Intelligent transport systems — Cooperative systems — Roles and responsibilities in the context of cooperative ITS based on architecture(s) for cooperative systems

*Systèmes intelligents de transport — Systèmes coopératifs — Rôles et responsabilités dans le contexte des ITS fondés sur l'architecture de systèmes coopératifs*

**ISO/TS 17427:2014(E)**

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# Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 204, *Intelligent transport systems.*

# Introduction

Cooperative-ITS (C-ITS) are a promising and remarkable advancement of Intelligent Transport Systems (ITS). Numerous cooperative applications are specified that open up new possibilities to make traffic safer, more efficient and smarter. Technologies are developed and improved to realize and support those new services and applications. But, to finally implement C-ITS and to achieve the benefits of more safety and better mobility, various actors from different industries will have to cooperate with each other in a completely new way. Actors that did not collaborate so far will have to find a way to do so. This requires a precise definition and assignment of behaviours, responsibilities and liabilities. Therefore a general, abstract organizational architecture with the description of the single roles, their behaviour and the corresponding responsibilities is the essential basis for the deployment of C-ITS.

The organizational architecture itself with the description of the roles and responsibilities is a crucial part of the whole C-ITS architecture. The organizational architectural viewpoint has extensive influences on the deployment and implementation of C-ITS.

This document describes the high level roles and responsibilities that enable C-ITS Service provision.

**TECHNICAL SPECIFICATION**

ISO/TS 17427:2014(E)

# Intelligent transport systems — Cooperative systems — Roles and responsibilities in the context of cooperative ITS based on architecture(s) for cooperative systems

## 1 Scope

This Technical Specification describes the (non-actor specific) roles and responsibilities required to deploy and operate Cooperative-ITS (C-ITS). The organizational architecture described in this document is to be used for a fully operational system. The Technical Specification is couched in terms of an organizational or enterprise viewpoint, as defined in ISO/IEC 10746 Open Distributed Processing.[1]

This Technical Specification is applicable to all types of road traffic of all classes. The description of roles is completely technology agnostic and, in terms of C-ITS communication modes, embraces vehicle-vehicle communications, vehicle-infrastructure communications and infrastructure-infrastructure communications.

This Technical Specification provides a methodology for the identification of service specific roles and their corresponding responsibilities based on a process oriented approach. Additionally, the defined methodology is used to identify the roles and responsibilities for C-ITS, in general. Both the methodology, as well as, the roles and responsibilities for C-ITS are deduced from the reference model: Open Distributed Processing (ISO/IEC 10746).[1] Open Distributed Processing offers five viewpoints of which the enterprise viewpoint corresponds with the organizational architecture and the roles and responsibilities.

This Technical Specification separates C-ITS roles into 'external' and 'internal'. Those considered to be internal are all roles set up for the sole purpose of C-ITS and those considered to be external are all roles involved in C-ITS but not set up for the sole purpose of C-ITS.

This Technical Specification describes high-level architectural viewpoint on C-ITS. It can be used as a blueprint when implementing C-ITS and the corresponding organizational structures. The characteristics of C-ITS entail a huge number of data/information exchanges. Therefore, the implementation of the organizational architecture stringently needs to respect privacy and data protection, as defined in ISO/TR 12859 and in the national laws and regulations (where instantiated). Privacy and data protection affect all roles defined in this Technical Specification and due to these characteristics, all actors occupying roles in C-ITS need to respect the corresponding standards and regulations.

## 2 Normative references

The following referenced documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 10746:1996, *Information technology — Open Distributed Processing — Reference model*

ISO 14817:2002, *Transport information and control systems — Requirements for an ITS/TICS central Data Registry and ITS/TICS Data Dictionaries*

ISO/TS 17419, *Intelligent transport systems — Co-operative systems — Classification and management of ITS applications in a global context"*

ISO/TS 17931, *Intelligent transport systems — Extension of map database specifications for Local Dynamic Map for applications of Cooperative ITS*

**ISO/TS 17427:2014(E)**

ISO/IEC 19501:2005, *Information technology — Open Distributed Processing — Unified Modeling Language (UML) Version 1.4.2*

ISO 21217:2013, *Intelligent transport systems — Communications access for land mobiles (CALM) — Architecture*

ETSI/TS 102-637:2011, *Intelligent Transport Systems (ITS); Vehicular Communications Basic Set of Applications*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN