# **TECHNICAL REPORT**

# ISO/TR 17465-1

First edition 2014-10-15

# Intelligent transport systems — **Cooperative ITS** —

Part 1: Terms and definitions

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Termes et Systèmes intelligents de transport — Coopérative ITS —





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Published in Switzerland

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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.

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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*.

Jene. ISO/TR 17465 consists of the following parts, under the general title *Intelligent transport systems* — Cooperative-ITS:

- Part 1: Terms and definitions
- Part 2: Guidelines for standards documents
- Part 3: Release procedures for standards documents

### Introduction

This part of ISO/TR 17465 provides the definition of the term "Cooperative-ITS" (or "C-ITS" in its abbreviated form), and contains descriptions of C-ITS from several perspectives. It is anticipated that "C-ITS" will replace "cooperative systems" in all relevant ITS standards published after September 2012.

Although the concept of cooperative-TS is easy to understand, its implementation can be complex because of the need to provide several services using many applications, all potentially communicating with each other and sharing data in a structured manner (cf. OSI data communication model). As such, the set of standards required to implement a service will beneficially be composed of several parts. In order that nda
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se" procedu users can easily find the standards information that they require, ISO/TR 17465-2 provides the outline of the common structure to be used for these multi-part standards, and a detailed description of the reference standards to be used for the creation of each part and the content of each part. ISO/TR 17465-3 will describe the "release" procedure to be adopted for future Cooperative-ITS-related standards.

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# Intelligent transport systems — Cooperative ITS —

### Part 1:

## Terms and definitions

### 1 Scope

This part of ISO/TR 17465 provides a definition of the term "Cooperative-ITS". It is anticipated that "Cooperative-ITS" will be used in place of "cooperative systems" in all relevant ISO/CEN standards in the intelligent transport systems (ITS) domain. This definition is consistent with and heavily relies on the concept of an "ITS station" as specified in ISO 21217.1"

#### 2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 2.1

#### cooperative-ITS

DEPRECATED: cooperative systems

subset of overall ITS that communicates and shares information between ITS stations and ITS applications to give advice or facilitate actions with the objective of improving safety, sustainability, efficiency, and comfort beyond the scope of stand-alone systems

Note 1 to entry: See 4.2 for further details.

Note 2 to entry: As an alternative to a "subset", Cooperative-ITS could be viewed as a "paradigm" in overall ITS.

#### 2.2

#### cooperative-ITS environment

communications environment that enables ITS stations to communicate with other ITS stations supporting sharing of data between ITS applications using whatever communications networks are available at their current locations and, if necessary, to seamlessly switch between networks as their locations change

#### 2.3

#### intelligent transport system

transport system in which advanced information, communication, sensor, and control technologies, including the Internet, are applied to increase safety, sustainability, efficiency, and comfort

### 2.4

#### **ITS** application

instantiation of an ITS service that involves an association of two or more complementary ITS-S application processes

Note 1 to entry: Fragments of an application can also reside in nodes that are not ITS stations.

[SOURCE: ISO 21217:2014, 3.9]

<sup>1)</sup> The same definition can also be found in EN 302 665.