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Intelligent transport systems~~-~~ — Vocabulary

~~**CD stage**~~

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Foreword

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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~~document 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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This document was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*.

This second edition ~~adds or modifies~~cancels and replaces the first edition (ISO/TS 14812:2022), which has been technically revised. The main changes are as follows:

the following terms and groups of terms~~:~~

— have been modified:

  - information security terms ~~(3.1.14)~~(3.1.14)
  - ~~connected vehicle (3.2.3.7)~~
  - ~~device component terms (3.2.10)~~
  - connected vehicle roadside equipment ~~(3.2.3.3)~~(3.2.3.3)

— connected vehicle (3.2.3.7)

— device component terms (3.2.10)

  - carriageway ~~(3.3.1.5)~~(3.3.1.5)
  - single carriageway ~~(3.3.1.7)~~(3.3.1.7)

— gross vehicle mass ~~(3.7.2.9)~~(3.7.2.9)

— gross vehicle mass rating ~~(3.7.2.10)~~(3.7.2.10)

— payment terms ~~(3.8.1)~~(3.8.1)

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at ~~www.iso.org/members.html~~www.iso.org/members.html.

Introduction

The definitions found in this document have been formulated in accordance with ~~major~~ ISO International Standards such as ISO 704 and are based on a consistent concept model. It is recognized that the contents of this document are not exhaustive and that terminology evolves over time.

In most cases, the definitions provided within this document are suitable for general application throughout intelligent transport systems (ITS). In those circumstances where a term is intended for a specific domain of discourse or where the term can be used in multiple domains, the intended context is indicated at the beginning of the definition as bracketed text (e.g. "<ITS-S>").

In addition to a Bibliography, this document provides an index that provides an alphabetical listing of all preferred, admitted~~,~~ and deprecated terms contained in this document.

Other standardization groups and organizations are encouraged to adopt the terminology in this document to promote better understanding of terms among ITS professionals worldwide. The terms and definitions contained within this document can be searched online at ISO's Online Browsing Platform available at ~~https://www.iso.org/obp~~.

https://www.iso.org/obp.

Additional related terms can be found in ISO/IEC/IEEE 24765.

Intelligent transport systems — Vocabulary

1 Scope

This document defines terms relating to intelligent transport systems (ITS).

2 Normative references

~~The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.~~

~~ISO/IEC 24765:2017 *Systems and software engineering — Vocabulary*~~

There are no normative references in this document.

3 Terms and definitions

~~For the purposes of this document, the terms and definitions given in ISO 24765 and the following apply.~~

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ~~—~~ISO Online browsing platform: available at ~~https://www.iso.org/obp~~ https://www.iso.org/obp

— ~~—~~IEC Electropedia: available at ~~https://www.electropedia.org/~~ https://www.electropedia.org/

~~3.1~~A.1 Core terms

~~3.1.1~~A.1.1 Entity terms

3.1 Core terms

3.1.1 Entity terms

NOTE ~~Figure A.1~~Figure A.1 depicts the concept model for the terms defined in this subclause.

3.1.1.1 ~~3.1.1.1~~
entity
concrete or abstract thing that exists, did exist, or can possibly exist, including associations among these things

EXAMPLE *Person* ~~(3.1.1.6),~~(3.1.1.6), object, event, idea, process, etc.

3.1.1.2 ~~3.1.1.2~~
immaterial entity
~~***entity* (3.1.1.1)~~
entity (3.1.1.1) that does not occupy three-dimensional space

EXAMPLE Idea, process, organization, etc.

3.1.1.3 ~~3.1.1.3~~
material entity
~~***entity* (3.1.1.1)~~
entity (3.1.1.1) that occupies three-dimensional space

Note 1 to entry: All material entities have certain characteristics that can be described and therefore this concept is important for ontology purposes.

3.1.1.4 ~~3.1.1.4~~
non-biological entity
material entity ~~(3.1.1.3)~~(3.1.1.3) that is not and has never been a living organism

3.1.1.5 ~~3.1.1.5~~
biological entity
material entity ~~(3.1.1.3)~~(3.1.1.3) that was or is a living organism

3.1.1.6 ~~3.1.1.6~~
person
biological entity ~~(3.1.1.5)~~(3.1.1.5) that is a human being

~~**3.1.2A.1.1 General system terms**~~

3.1.2 General system terms

NOTE ~~Figure A.2~~Figure A.2 depicts the concept model for the terms defined in this subclause.

3.1.2.1 ~~3.1.2.1~~
system
combination of interacting *elements* ~~(3.1.3.10)~~(3.1.3.10) organized to achieve one or more stated purposes

~~[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.46, modified — Notes to entry removed.]~~

3.1.2.2 ~~3.1.2.2~~
transport system
~~*system* (3.1.2.1)~~*system* (3.1.2.1) of infrastructure *elements* ~~(3.1.3.10)~~(3.1.3.10) and optionally *vehicles* ~~(3.7.1.1)~~(3.7.1.1) that are jointly designed to move *material entities* ~~(3.1.1.3)~~(3.1.1.3) from an origin to a destination

Note 1 to entry: Transport systems can also include any supporting system, such as information and control systems.

3.1.2.3 ~~3.1.2.3~~
surface transport system
transport system
transport system ~~(3.1.2.2)~~(3.1.2.2) designed to move *material entities* ~~(3.1.1.3)~~(3.1.1.3) across the surface or near-surface of the Earth

Note 1 to entry: A surface transport system can include tunnels, *bridges* (3.3.7.3) and similar *elements* ~~(3.1.3.10).~~(3.1.3.10).

Note 2 to entry: There is not complete agreement on the precise limitations of a "surface transport system" within the ITS community. Currently, the term is almost exclusively applied to ground-based travel of goods and people over significant distances. The term is viewed as including ferry systems, which often form an integral part of a local surface transport system; it is less clear if it includes long-distance sea-fairing ships. The term "surface transport systems" is also generally limited to transport systems that cover a considerable distance (e.g. factory conveyance technologies are not often referred to as "surface transport systems"). It has been suggested that air travel, which is arguably a transport system designed to move physical entities between points on the surface of the ~~earth~~Earth, ought to be included in the scope of the term, but this perspective is not universally accepted. It is expected that the exact limitations of the term will be further refined as ITS matures.

Note 3 to entry: Due to the defined scope of ITS, the term "transport system" is intended to be interpreted as being synonymous with the term "surface transport system" unless explicitly specified otherwise.

3.1.2.4 ~~3.1.2.4~~
intelligent transport system
ITS
intelligent transportation system
~~*system* (3.1.2.1)~~*system* (3.1.2.1) comprised of information, communication, sensor and control technologies and that is designed to benefit a *surface transport system* ~~(3.1.2.3)~~(3.1.2.3)

Note 1 to entry: "Intelligent transportation system" is the American English equivalent.

Note 2 to entry: Benefits potentially include, but are not limited to, increased safety, sustainability, efficiency and comfort.

Note 3 to entry: The full term (i.e. "intelligent transport system") is often used when the noun is used as a subject, whereas the ~~abbreviation~~abbreviated term (i.e. "ITS") is often used to modify another noun (e.g. "Intelligent transport systems provide ITS services.").

3.1.2.5 ~~3.1.2.5~~
cooperative ITS
C-ITS
subset of ~~*ITS* (3.1.2.4)~~*intelligent transport systems* (3.1.2.4) where information is shared among *ITS stations* ~~(3.2.7.3)~~(3.2.7.3) in a manner that enables its use by multiple *ITS services* ~~(3.5.3.1)~~(3.5.3.1)

3.1.3 General architecture terms

NOTE ~~Figure A.3~~Figure A.3 depicts the concept model for the terms defined in this subclause.