



BSI Standards Publication

Intelligent transport systems - Automatic vehicle and equipment identification - Numbering and data structures

National foreword

This British Standard is the UK implementation of EN ISO 17262:2012+A1:2019. It is identical to ISO 17262:2012, incorporating corrigendum December 2013 and amendment 1:2019. It supersedes BS EN ISO 17262:2012, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to ISO text carry the number of the ISO amendment. For example, text altered by ISO amendment 1 is indicated by A1 A1.

The UK participation in its preparation was entrusted to Technical Committee EPL/278, Intelligent transport systems.

A list of organizations represented on this committee can be obtained on request to its secretary.

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31 March 2014	Implementation of ISO corrigendum 18 December 2013: English and French titles amended
31 March 2019	Implementation of ISO amendment 1:2019 with CEN endorsement A1:2019

English Version

**Intelligent transport systems - Automatic vehicle and
equipment identification - Intermodal goods transport numbering
and data structures**

Systèmes intelligents de transport -
Identification Numérotation du transport de
marchandises intermodal et structures des
données

Intelligente Transportsysteme - Automatische
Fahrzeug- und Ausstattungsidentifizierung -
Nummerierung und Datenstruktur

This European Standard was approved by CEN on 31 August 2012.

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European foreword

This document (EN ISO 17262:2012) has been prepared by Technical Committee CEN/TC 278 "Road transport and traffic telematics", the secretariat of which is held by NEN, in collaboration with Technical Committee ISO/TC 204 "Intelligent transport systems".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2013, and conflicting national standards shall be withdrawn at the latest by March 2013.

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Endorsement notice

The text of ISO 17262:2012 has been approved by CEN as a EN ISO 17262:2012 without any modification.

Foreword to amendment A1

This document (EN ISO 17262:2012/A1:2019) 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 NEN.

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Endorsement notice

The text of ISO 17262:2012/Amd 1:2019 has been approved by CEN as EN ISO 17262:2012/A1:2019 without any modification.

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 17262 was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*, in collaboration with Technical Committee CEN/TC 278, *Road transport and traffic telematics*.

This first edition of ISO 17262 cancels and replaces the first edition of ISO/TS 17262:2003, which has been technically revised.

Introduction

Within the context of Intelligent transport systems (ITS) (previously known as RTTT/TICS), intermodal goods transport AVI/AEI systems have the specific objective of achieving a unique or unambiguous positive identification of equipment, and to make that identification automatically. this International Standard defines data to achieve this particular objective.

This International Standard specifies data that enable future upward integration and expansion for intermodal goods transport AVI/AEI systems. The standard is thus designed to be flexible and enabling rather than prescriptive.

For the definition of data, “Abstract Syntax Notation One” (ASN.1) is applied. This usage provides maximum interoperability and conformance to existing Standards within the ITS sector.

 *Text deleted* 

Intelligent transport systems — Automatic vehicles and equipment identification — Intermodal goods transport numbering and data structures

1 Scope

This International Standard defines generic numbering and data structures for unambiguous identification of equipment used for Intermodal goods transport. These data are known as “Intermodal Goods Transport Numbering and Data Structures”.

This International Standard defines data independently of the data carrier. The modelling of data is based on Abstract Syntax Notation One (ASN.1) as defined in ISO/IEC 8824. This International Standard excludes any physical aspects such as interfaces, dimensions etc. Data that form part of transmission or storage protocols (headers, frame markers and checksums) are excluded.

Data defined in this International Standard require a system for control and distribution of number series independent of the different AVI/AEI systems. This is required in order to avoid ambiguity and to provide the necessary level of security where appropriate. For this reason the registration authority defined in ISO 14816 applies for this International Standard.

This International Standard enables the use of optimised encoding schemes such as ASN.1 Packed Encoding Rules (PER).

2 Normative references

The following 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.

EN 13044, *Swap bodies — Coding, identification and marking*

ISO/IEC 8824-1, *Information technology — Abstract Syntax Notation One (ASN.1): Specification of basic notation*

ISO/IEC 8824-2, *Information technology — Abstract Syntax Notation One (ASN.1): Information object specification*

ISO/IEC 8824-3, *Information technology — Abstract Syntax Notation One (ASN.1): Constraint specification*

ISO/IEC 8824-4, *Information technology — Abstract Syntax Notation One (ASN.1): Parameterization of ASN.1 specifications*

ISO 14816:2005, *Road traffic and transport telematics — Automatic vehicle and equipment identification — Numbering and data structure*

ISO 17621, *Intelligent transport systems — Automatic vehicle and equipment identification — Intermodal goods transport architecture and terminology*

ISO 26683-2, *Intelligent transport systems — Freight land conveyance content identification and communication — Part 2: Application interface profiles*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 17621 and the following apply.

3.1

AEI manager

component, which receives data from 'AEI Readers' and compares it with information in a data base at which point an ok or error message is generated and transferred to the message display component

3.2

reader

complete set of equipment even if it consists of more than one components required to interrogate, receive and interpret the data in the TAG in order to present the identification

3.3

AEI system

AEI application in a RTTT/TICS system either as a stand-alone system or as part of a RTTT/TICS application

3.4

component

type, class or any other work-product that has been specifically engineered to be reusable

EXAMPLE TAG, reader, AEI manager

3.5

conveyance

means of transport

3.6

intermodal transport

movement of goods in one and the same loading unit or vehicle that uses successively several modes of transport without handling of the goods themselves when changing modes

3.7

load unit

cargo transportation unit, which may be loaded on a transport means

NOTE Synonyms: package, container.

3.8

message display

receives data from AEI manager, and display the data on a variable message sign to the driver

3.9

terminal monitoring point

terminal access control point

point administered by the AEI manager where the monitoring of transport objects is performed

3.10

transport object

transport means, load unit or goods item

4 Symbols and abbreviated terms

AEI	Automatic Equipment Identification
ASN.1	Abstract Syntax Notation number One
DSRC	Dedicated Short Range Communication
ITS	Intelligent Transport System(s)
RTTT	Road Transport and Traffic Telematics (CEN/TC 278)
NOTE	Legacy European name for ITS