

English version

**Automatic vehicle and equipment identification – Intermodal
goods transport – Numbering and data structures (ISO/TS
17262:2003)**

Identification automatique des véhicules et des
équipements – Transport intermodal de marchandises –
Structures de données et numérotation (ISO/TS
17262:2003)

This Technical Specification (CEN/TS) was approved by CEN on 25 Novembre 2002 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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Foreword

This document (CEN ISO/TS 17262:2003) 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, "Transport information and control systems".

This is the second part of a series of Technical Specifications defining Intermodal Goods Transport for AVI/AEI, and is the result from CEN/TC278 Work Item 00278088. The following parts form a series of Standards for AVI/AEI in intermodal goods transport AVI/AEI:

CEN ISO/TS 17261	Architecture and terminology (under preparation)
CEN ISO/TS 17262	Numbering and data structures
CEN ISO/TS 17263	System parameters
CEN ISO/TS 17264	AVI/AEI interfaces (under preparation)

Annex A forms normative part of this Technical Specification. Annexes B and C are informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovak Republic, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

Within the context of 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 Technical Specification defines data to achieve this particular objective.

This Technical Specification 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 RTTT/TICS sector.

Readers who want to familiarise themselves with ASN.1 are advised to read ANNEX C before reading the main body of this Standard. Readers may also read ISO/IEC 8824, ISO/IEC 8825 and other publications on ASN.1.

NOTE: An normative annex on data modelling may be added in the final version

1 Scope

This Technical Specification 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 Technical Specification 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 Technical Specification 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 Technical Specification 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 ENV ISO 14816 applies for this Technical Specification.

This Technical Specification enables the use of optimised encoding schemes such as ASN.1 Basic Packed Encoding Rules (PER).

This Technical Specification provides interoperability, not only between simple AVI/AEI and more complex RTTT/TICS functions, but also with pre-existing Standards such as container (ISO 10374). Specifications for protecting against changes, classifying and qualifying security aspects of the data are out of scope of this Technical Specification.

This Technical Specification relates to AVI/AEI units, but not to smaller containers and units being transported. For smaller units (pallet loads, trays, parcels etc.) please refer to ISO/IEC SC31 standards, ISO 18000 series. The Numbering Structure defined in this Standard is designed to enable combinations with the data definitions from ISO 18000 series. This combination will be covered in CEN ISO/TS 17264 (under preparation).

This Technical Specification provides the capability to carry application data, associated with the identification, to be carried as part of the AVI/AEI message. Within this Technical Specification this is provided as a “black box” facility. The definition of the structure and contents of such messages are outside the scope of this Technical Specification (examples will be shown in CEN ISO/TS 17264).