INTERNATIONAL **STANDARD**

ISO 17262

> First edition 2012-09-01

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

ème icules e Systèmes intelligents de transport — Identification automatique des véhicules et des équipements — Numérotation et structures des données





© ISO 2012

duced or utilized in any for a from either ISO at the e All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.org Web www.iso.org

Published in Switzerland

Contents Page Forewordiv Introduction v 1 2 Normative references 1 3 Terms and definitions 1 4 5 5.1 Context 3 5.2 General 3 Overview of data definitions 4 6 Data definitions 6 7.1 'Access Control Status' 6 7.2 'AEI Message Type' 6 7.3 CS9 :SwapBodyStructure 6 7.4 7.5 CS11: ITS consignment in UBL format 9 7.6 'Display Message Type'34 7.7 Message information 34 7.8 'Position'.......34 Geographic point location35 7.9 7.10 7.11 7.12 7.13 7.14 7.15 'Transport Object Message Type' 36 7.16 Annex A (normative) ASN.1 Module for intermodal goods transport numbering and data structures.....38 Annex B (informative) Examples of intermodal transport AEI applications 52 **B.1 B.2** AEI System architecture based on the European INTERPORT project.......53 Annex C (informative) Examples on the use of intermodal goods transport numbering and data structures 55 **C.1** ASN. 1 introduction and general explanation.......55 **C.2** Bibliography 58

2

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.

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

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.

eplaces 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.

or to it. and other, Annex C can be consulted prior to the main body of this International Standard for an overview of ASN.1. ISO/IEC 8824, ISO/IEC 8825 and other publications on ASN.1 can also be consulted for further information.

This document is a previous generated by tills

Intelligent transport systems — Automatic vehicle and equipment identification — 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.

© ISO 2012 – All rights reserved