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Road transport and traffic telematics — Automatic vehicle and equipment identification — System specifications

Télématique de la circulation et du transport routier — Identification automatique des véhicules et équipements — Spécification des systèmes

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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.

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 14815 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 278, *Road transport and traffic telematics*, in collaboration with Technical Committee ISO/TC 204, *Intelligent transport systems*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition cancels and replaces ISO/TS 14815:2000, which has been technically revised.

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Introduction

System specification

This International Standard is designed to enable users and suppliers of AVI/AEI systems to specify system specification that will enable a nominal interoperability based on a DSRC link.

The terms “AVI” and “AEI” are used both to describe “independently functioning AVI/AEI systems” and as “the function of identification within other RTTT/TICS systems”. This International Standard supports both such uses where no other application or sector standard applies.

Whilst it may be desirable to determine a single set of requirements for operation in all environments and under all operating conditions, this could impose unacceptable costs.

This International Standard therefore provides standard “classes” for different aspects of system specification, such that a system specifier may select the appropriate performance parameters to meet a particular requirement. Supporting informative annexes also provide a number of general use “categories” which may be used to specify the environmental and operating parameters to support interoperable applications.

The architecture descriptions provided in this International Standard are in compliance with the guidelines provided by CEN/TC 278 WG13 ISO/TC 204 WG1.

For the data structure elements, Abstract Syntax Notation One (ASN.1) Packed Encoding Rules (PER) (ISO 8825-2) are used. This usage provides maximum interoperability and conformance to existing standards.

For detailed information on the use of ASN.1 PER for AVI/AEI applications, reference is made to ISO 14816.

This International Standard provides classification procedures and details test requirements needed to support system definition. These requirements are, wherever possible, determined by reference to existing standards and established practices.

Test requirements

Test requirements are determined for AVI/AEI system components. The requirements to meet this International Standard encompass general performance measurement, operational, and environmental aspects.

How to use this International Standard

It is also an objective to provide users with different applications and in different environmental circumstances a useful tool that is flexible enough to serve the various different needs. The categorization and classification system in this International Standard provides for this.

A brief guide showing how to use this International Standard is provided at the end of Annex A.

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