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TECHNICAL SPECIFICATION

**Intelligent Transport Systems (ITS);
Users and applications requirements;
Part 2: Applications and facilities layer
common data dictionary;
Release 2**

ETSI

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Intelligent Transport Systems (ITS).

The present document is part 2 of a multi-part deliverable covering the Intelligent Transport Systems (ITS); Users and applications requirements, as identified below:

Part 1: "Facility layer structure, functional requirements and specifications";

Part 2: "Applications and facilities layer common data dictionary".

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the ETSI Drafting Rules (Verbal forms for the expression of provisions).

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Introduction

ITS applications are enabled by the data exchanges among ITS Stations (ITS-Ss) via wireless or wired communications. Even though each message has specific requirements on the data being included and transmitted to other ITS-Ss, ETSI TC ITS has identified a set of data types which are commonly used in multiple ITS applications and facilities layer messages. A common data dictionary is therefore defined for this common set.

For each data type, this common dictionary includes a textual description of the semantic of the data type in question. It also includes the ASN.1 definition of the data type. Therefore, this common data dictionary can be imported by any message when necessary during the encoding and decoding procedure.

1   Scope

The present document specifies the syntax and semantics of data objects in the field of Intelligent Transport Systems (ITS). It represents a dictionary of common data objects that can be used to define applications and facilities layer Protocol Data Unit and Service Data Unit in ETSI TC ITS Release 2 documents.

The present document does not specify the syntax and semantics of data elements in the specific context of any message. Such syntax and semantics are specified in the corresponding message standards.

2   References

2.1   Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at https://docbox.etsi.org/Reference.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are necessary for the application of the present document.

[1]   Recommendation ITU-T X.680: "Information technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation".

2.2   Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.1]   ISO 1176:1990: "Road vehicles -- Masses -- Vocabulary and codes".

3   Definition of terms, symbols and abbreviations

3.1   Terms

For the purposes of the present document, the terms given in Recommendation ITU-T X.680 [1] and the following apply:

bounding box: rectangular shape covering all parts of an empty load vehicle projected from top view

NOTE: The empty load vehicle is defined in ISO 1176 [i.1], clause 4.6.

data element: data type that contains one single data

data frame: data type that contains more than one data element in a predefined order