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Intelligent transport systems — Communications access for land mobiles (CALM) — Evolved Universal Terrestrial Radio Access Network (E-UTRAN) —

Part 1: General usage

Systèmes intelligents de transport — Accès aux communications des services mobiles terrestres (CALM) — Réseau d'accès à la radio terrestre universelle évoluée (E-UTRAN) —

Partie 1: D'usage général

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 204, *Intelligent transport systems*.

ISO 17515 consists of the following parts, under the general title *Intelligent transport systems — Communications access for land mobiles (CALM) — Evolved Universal Terrestrial Radio Access Network (E-UTRAN)*:

— *Part 1: General usage*

Additional parts, dealing with direct communications and routing functionalities, are under preparation.

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Introduction

This International Standard is a member of the set of International Standards developed under the acronym “Communications Access for Land Mobiles” (CALM) that refers to ISO/TC 204 work items. An introduction to this set of International Standards is provided in ISO 21217.

This part of ISO 17515 is part 1 of a multipart standard which determines usage of technology developed under the acronym E-UTRAN for usage as a communication interface in an ITS station unit.

The term long-term evolution (LTE) is commonly used to refer to the set of standards containing the E-UTRAN technical specifications. In this part of ISO 17515, the term “E-UTRAN” is used to refer to these specifications and can be treated as a synonym for “LTE”.

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Intelligent transport systems — Communications access for land mobiles (CALM) — Evolved Universal Terrestrial Radio Access Network (E-UTRAN) —

Part 1: General usage

1 Scope

This part of ISO 17515 enables usage of the E-UTRAN cellular network technology as an ITS access technology in an ITS station by specifying details of the "Communication Adaptation Layer" (CAL) and the "Management Adaptation Entity" (MAE) of communication interfaces specified in ISO 21218, and session management by reference to ISO 25111.

Wherever practicable, this part of ISO 17515 has been developed by reference to suitable extant standards, adopted by selection.

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.

ISO 21217:2014, *Intelligent transport systems — Communications access for land mobiles (CALM) — Architecture*

ISO 21218:2013, *Intelligent transport systems — Communications access for land mobiles (CALM) — Access technology support*

ISO 24102-3:2013, *Intelligent transport systems — Communications access for land mobiles (CALM) — ITS station management — Part 3: Service access points*

ISO 25111:2009, *Intelligent transport systems — Communications access for land mobiles (CALM) — General requirements for using public networks*

3GPP TS 36.331, *Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC); Protocol specification (Release 10)*

ETSI/TS 102 760-1, *Intelligent Transport Systems (ITS); Communications Access for Land Mobiles (CALM); Test specifications for Access Technology Support (ISO 21218); Part 1: Implementation Conformance Statement (ICS) proforma*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
I-Parameter
parameter of a CI

[SOURCE: ISO 21218]

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3.2
Link-ID
identifier of a link given by the address of a VCI

[SOURCE: ISO 21218]

3.3
MI-COMMAND
command issued by the ITS-S management entity and sent to the ITS-S access layer via the MI-SAP

[SOURCE: ISO 24102-3]

3.4
MI-REQUEST
command issued by the ITS-S access layer and sent to the ITS-S management entity via the MI-SAP

[SOURCE: ISO 24102-3]

4 Abbreviated terms

For the purposes of this document, the following abbreviated terms apply.

3GPP	3rd Generation Partnership Project
CAL	Communication Adaptation Layer (see ISO 21217)
CI	Communication Interface (see ISO 21217)
E-UTRAN	Evolved Universal Terrestrial Radio Access Network
IN-SAP	Communication SAP as offered by the CAL to the ITS-S networking and transport layer (see ISO 21218)
ITS-S	ITS Station (see ISO 21217)
LTE	Long Term Evolution
MAE	Management Adaptation Entity (see ISO 21217)
MI-SAP	Management SAP as offered by the ITS-S management towards the MAE (see ISO 21218)
UC-VCI	VCI for reception from and transmission to a unicast MAC address (see ISO 21218)
UE	User Equipment

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