BS ISO 24102-4:2013



BSI Standards Publication

Intelligent transport systems — Communications access for land mobiles (CALM) — ITS station management

Part 4: Station-internal management communications



BS ISO 24102-4:2013

This is a preview of "BS ISO 24102-4:2013". Click here to purchase the full version from the ANSI store.

This British Standard is the UK implementation of ISO 24102-4:2013. Together with BS ISO 24102-1:2013, BS ISO 24102-2, BS ISO 24102-3:2013 and BS ISO 24102-5:2013, it supersedes BS ISO 24102:2010, which will be withdrawn upon publication of BS ISO 24102-2 of this series.

The UK participation in its preparation was entrusted to Technical Committee EPL/278, Intelligent transport systems.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2013. Published by BSI Standards Limited 2013

ISBN 978 0 580 79275 5

ICS 03.220.01; 35.240.60

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 July 2013.

Amendments issued since publication

Date Text affected



First edition 2013-07-01

Intelligent transport systems — Communications access for land mobiles (CALM) — ITS station management —

Part 4:

Station-internal management communications

Systèmes intelligents de transport — Accès aux communicat ions des services mobiles terrestres (CALM) — Gestion des stations ITS —

Partie 4: Communications de gestion interne à la station



Reference number ISO 24102-4:2013(E)

BS ISO 24102-4:2013 **ISO 24102-4:2013(E)**

This is a preview of "BS ISO 24102-4:2013". Click here to purchase the full version from the ANSI store.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
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
Fore	eword	iv
Intr	oduction	v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Abbreviated terms	2
5	ITS station management	2
6	Reference architecture	
7	Protocol data units	
8	Communication procedures 8.1 Initialization 8.2 Transmission 8.3 Reception	5 5
9	Management procedures 9.1 General 9.2 ITS-SCU-ID assignment 9.3 Maintenance of ITS-SCU-ID 9.4 Shutdown of ITS-SCU	
10	Security	8
11	Conformance	8
12	Test methods	9
Ann	ex A (normative) ASN.1 module	10
Ann	ex B (normative) IIC PDUs	13
Bibliography		18

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. www.iso.org/directives

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received. www.iso.org/patents

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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

ISO 24102 consists of the following parts, under the general title *Intelligent transport systems — Communications access for land mobiles (CALM) — ITS station management*:

- Part 1: Local management
- Part 3: Service access points
- Part 4: Station-internal management communications
- Part 5: Fast service advertisement protocol (FSAP)

The following parts are under preparation:

- Part 2: Remote management
- Part 6: Path and flow management

Introduction

This International Standard is part of a family of International Standards for communications access for land mobiles (CALM). An introduction to the whole set of International Standards is provided in ISO 21217.

This part of ISO 24012 is part 4 of a multipart International Standard which determines the intelligent transport systems (ITS) station management - station-internal management communications.

The ITS station management entity provides functionality related to the management of communication protocol layers and the security entity presented in the ITS station reference architecture specified in ISO 21217 and presented in Figure 1, and in line with the general ITS architecture specified in ISO 21217.

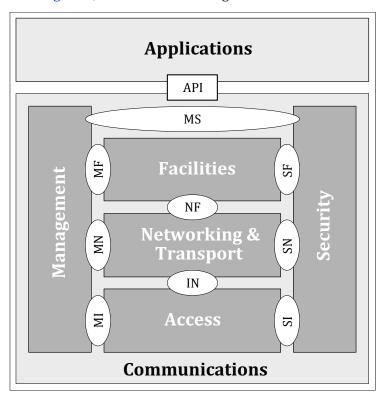


Figure 1 — ITS station reference architecture with named interfaces

ITS station management is specified as a distributed process, where no supervisory entity is employed.

Intelligent transport systems — Communications access for land mobiles (CALM) — ITS station management —

Part 4:

Station-internal management communications

1 Scope

This part of ISO 24102 provides specifications for secure ITS station-internal management communications.

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.

 ${\tt ISO/IEC\,8825-2}, Information\, technology\, -- ASN.1\, encoding\, rules: Specification\, of\, Packed\, Encoding\, Rules\, (PER)$

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

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

ISO 24102-1, Intelligent transport systems — Communications access for land mobiles (CALM) — ITS station management — Part 1: Local management

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

ETSI TS 102 797-1, Intelligent Transport Systems (ITS); Road Transport and Traffic Telematics (RTTT); Test specifications for Intelligent Transport Systems, Communications access for land mobiles (CALM), ITS station management (ISO 24102); Part 1: Protocol Implementation Conformance Statement (PICS) proforma

ETSI TS 102 797-2, Intelligent Transport Systems (ITS); Road Transport and Traffic Telematics (RTTT); Test specifications for Intelligent Transport Systems, Communications access for land mobiles (CALM), ITS station management (ISO 24102); Part 2: Test Suite Structure and Test Purposes (TSS & TP)

ETSI TS 102 797-3, Intelligent Transport Systems (ITS); Road Transport and Traffic Telematics (RTTT); Test specifications for Intelligent Transport Systems, Communications access for land mobiles (CALM), ITS station management (ISO 24102); Part 3: Abstract Test Suite (ATS) and partial PIXIT information

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 21217, ISO 21218, ISO 24102-1, and ISO 24102-3 and the following apply.

3.1

ITS-S communication unit

addressable instance of the ITS station reference architecture comprising as an access to the ITS station-internal network