BS ISO 24102-3:2013



BSI Standards Publication

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

Part 3: Service access points



This British Standard is the UK implementation of ISO 24102-3:2013. Together with BS ISO 24102-1:2013, BS ISO 24102-2, BS ISO 24102-4:2013 and BS ISO 24102-5:2013, it supersedes BS ISO 24102:2010, which will be withdrawn upon publication of BS ISO 24102-2 of this series.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 79274 8

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

ISO

This is a preview of "BS ISO 24102-3:2013". Click here to purchase the full version from the ANSI store.

First edition 2013-07-01

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

Part 3: **Service access points**

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

Partie 3: Points d'accès au service



Reference number ISO 24102-3:2013(E)

BS ISO 24102-3:2013 **ISO 24102-3:2013(E)**

This is a preview of "BS ISO 24102-3:2013". 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	word		v
Intro	oductio	n	vi
1	Scop	e	1
2	Norn	native references	1
3	Tern	ns and definitions	2
4	Abbr	reviated terms	2
5	Requ	irements	3
6	MI-SAP		3
	6.1	General	3
	6.2	MI-SET	
	6.3	MI-GET	
	6.4	MI-COMMAND	
	6.5 6.6	MI-REQUESTMI-NOTIFY	
7		5AP	
	7.1 7.2	General MN-COMMAND	
	7.2	MN-REQUEST	
8	MF-S 8.1	APGeneral	
	8.2	MF-COMMAND	
	8.3	MF-REQUEST	
9	SI-SAP		
	9.1	General	
	9.2	SI-COMMAND	
	9.3	SI-REQUEST	15
10	SN-SAP		16
	10.1	General	16
	10.2	SN-COMMAND	
	10.3	SN-REQUEST	17
11	SF-SAP		
	11.1	General	
	11.2 11.3	SF-COMMANDSF-REQUEST	
12	MS-SAP		
12	12.1	General	
	12.1	MS-COMMAND	
	12.3	MS-REQUEST	
13	Conf	ormance	
Ann		ormative) ASN.1 modules	
	•	ormative) MF-COMMANDs	
	•	ormative) MF-REQUESTs	
	•	ormative) MN-COMMANDs	
		ormative) MN-REQUESTs	
Ann	ex F (no	ormative) MI-COMMANDs	47

iii

BS ISO 24102-3:2013 **ISO 24102-3:2013(E)**

This is a preview of "BS ISO 24102-3:2013". Click here to purchase the full version from the ANSI store.

Annex G (normative) MI-REQUESTs	52
Annex H (normative) SF-COMMANDs	56
Annex I (normative) SF-REQUESTs	57
Annex J (normative) SN-COMMANDs	58
Annex K (normative) SN-REQUESTs	59
Annex L (normative) SI-COMMANDs	60
Annex M (normative) SI-REQUESTs	61
Annex N (normative) MS-COMMANDs	62
Annex O (normative) MS-REQUESTs	63
Annex P (normative) Error/return codes	64
Bibliography	65

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: ITS 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 24102 is part 3 of a multipart International Standard which determines the intelligent transport systems (ITS) station management service access points.

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.

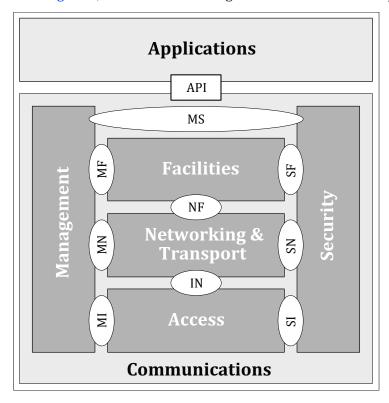


Figure 1 — ITS station reference architecture with named interfaces

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 3:

Service access points

1 Scope

This part of ISO 24102 specifies the management service access points, i.e. the service access points of

- the interfaces between the ITS-S management entity and
 - the ITS-S access layer (MI-SAP),
 - the ITS-S networking and transport layer (MN-SAP),
 - the ITS-S facilities layer (MF-SAP),
- the interfaces between the ITS-S security entity and
 - the ITS-S access layer,
 - the ITS-S networking and transport layer,
 - the ITS-S facilities layer,
- the interface between the ITS-S management entity and the ITS-S security entity (MS-SAP).

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/IEC 8825-2, Information technology — ASN.1 encoding rules: Specification of Packed Encoding Rules (PER) — Part 2

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

 $ISO\ 24102-4, Intelligent\ transport\ systems -- Communications\ access\ for\ land\ mobiles\ (CALM)\ -- \ ITS\ station\ management\ -- \ Part\ 4:\ Station\ -- internal\ management\ communications$

ISO 24102-5, Intelligent transport systems — Communications access for land mobiles (CALM) — ITS station management — Part 5: Fast service advertisement protocol (FSAP)