
**Intelligent transport systems — ITS
station management —**

**Part 3:
Service access points**

Systèmes intelligents de transport — Gestion des stations ITS —

Partie 3: Points d'accès au service

iTech Standards
(<https://standards.iteh.ai>)
Document Preview

ISO 24102-3:2018

<https://standards.iteh.ai/catalog/standards/iso/13245e26-1db8-4be9-804d-070f83f923dd/iso-24102-3-2018>



iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO 24102-3:2018

<https://standards.iteh.ai/catalog/standards/iso/13245e26-1db8-4be9-804d-070f83f923dd/iso-24102-3-2018>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, 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
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols and abbreviated terms	2
5 Service access points	2
6 XY-COMMAND service	2
6.1 Terminology	2
6.2 XY-COMMAND	3
6.2.1 XY-COMMAND.request service primitive	3
6.2.2 XY-COMMAND.confirm service primitive	4
6.3 XY-REQUEST service	4
6.3.1 XY-REQUEST.request service primitive	4
6.3.2 XY-REQUEST.confirm service primitive	5
7 MI-SAP	5
7.1 General	5
7.2 MI-SET service	6
7.2.1 MI-SET.request service primitive	6
7.2.2 MI-SET.confirm service primitive	6
7.3 MI-GET service	7
7.3.1 MI-GET.request service primitive	7
7.3.2 MI-GET.confirm service primitive	8
7.4 MI-COMMAND service	9
7.5 MI-Request service	9
8 MN-SAP	9
8.1 General	9
8.2 MN-COMMAND service	9
8.3 MN-REQUEST service	9
9 MF-SAP	10
9.1 General	10
9.2 MF-COMMAND service	10
9.3 MF-REQUEST service	10
10 SI-SAP	10
10.1 General	10
10.2 SI-COMMAND service	10
10.3 SI-REQUEST service	10
11 SN-SAP	10
11.1 General	10
11.2 SN-COMMAND service	11
11.3 SN-REQUEST service	11
12 SF-SAP	11
12.1 General	11
12.2 SF-COMMAND service	11
12.3 SF-REQUEST service	11
13 MS-SAP	11
13.1 General	11
13.2 MS-COMMAND service	11
13.3 MS-REQUEST service	12

14	Interfaces towards the ITS-S application entity	12
14.1	SAPs and API	12
14.2	MA-COMMAND service	12
14.3	MA-REQUEST service	12
14.4	SA-COMMAND service	12
14.5	SA-REQUEST service	12
14.6	FA-SAP	12
14.6.1	General	12
14.6.2	FA-COMMAND and FA-REQUEST service	13
15	Service primitive functions	13
16	Conformance	13
Annex A	(normative) ASN.1 modules	14
Annex B	(normative) Error/return codes	51
Annex C	(informative) Service primitive functions snapshot	52
Bibliography		61

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

ISO 24102-3:2018

<https://standards.itih.ai/catalog/standards/iso/13245e26-1db8-4be9-804d-070f83f923dd/iso-24102-3-2018>

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).

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 (see 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.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*.

This second edition cancels and replaces the first edition (ISO 24102-3:2013), which has been technically revised. It also incorporates the Amendment ISO 24102-3:2013/Amd1:2017.

A list of all parts in the ISO 24102 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

NOTE The former ISO 24102-5 has been converted into a separate standard ISO 22418, as it is not a station management standard.

Introduction

This document is part of a family of International Standards for communications in intelligent transport systems (ITS) based on the ITS station and communications architecture specified in ISO 21217 and illustrated in [Figure 1](#).

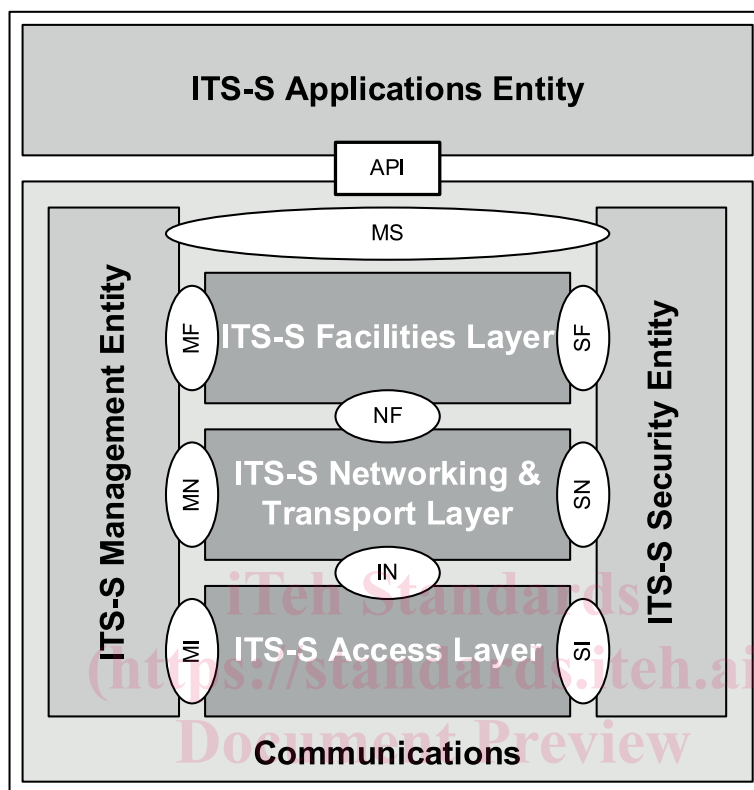


Figure 1 — ITS station reference architecture with named interfaces

This document is Part 3 of a multipart 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](#).

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

Intelligent transport systems — ITS station management —

Part 3: Service access points

1 Scope

This document 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 & 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 & transport layer,
 - the ITS-S facilities layer;
- the interface between the ITS-S management entity and the ITS-S security entity (MS-SAP)
- the interfaces between the ITS-S application entity and
 - the ITS-S management entity (MA-SAP),
 - the ITS-S security entity (SA-SAP).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 21217, *Intelligent Transport Systems — Communications access for land mobiles (CALM) — Architecture*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 21217 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>