

First edition
2013-07-01

AMENDMENT 1
2017-04

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

Part 1:

Local management

AMENDMENT 1

https://standards.iteh.ai/catalog/standards/sist/ca2b6476-e297-4389-8d13-988b6f177715/iso-24102-1:2013/amd-1-2017
988b6f177715/iso-24102-1:2013/amd-1-2017
Partie 1: Gestion locale

AMENDEMENT 1



Reference number
ISO 24102-1:2013/Amd.1:2017(E)

© ISO 2017

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 24102-1:2013/Amd 1:2017](https://standards.iteh.ai/catalog/standards/sist/ca2b6476-e297-4389-8d13-988b6f1867b4/iso-24102-1-2013-amd-1-2017)
<https://standards.iteh.ai/catalog/standards/sist/ca2b6476-e297-4389-8d13-988b6f1867b4/iso-24102-1-2013-amd-1-2017>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2017, Published in Switzerland

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
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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 on 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 the following URL: www.iso.org/iso/foreword.html.

Amendment 1 to ISO 24102-1:2013 was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*.

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

<http://www.iso.org/iso/24102-1-2013-amd-1-2017>
<http://www.iso.org/iso/24102-1-2013-amd-1-2017>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 24102-1:2013/Amd 1:2017](https://standards.iteh.ai/catalog/standards/sist/ca2b6476-e297-4389-8d13-988b6f1867b4/iso-24102-1-2013-amd-1-2017)

<https://standards.iteh.ai/catalog/standards/sist/ca2b6476-e297-4389-8d13-988b6f1867b4/iso-24102-1-2013-amd-1-2017>

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

Part 1: Local management

AMENDMENT 1

Page 20, Annex A

Replace the entire Annex A with the following:

Annex A (normative) **ASN.1 modules**

A.1 Overview

The following ASN.1 module is specified in this annex:

— CALMmanagement {ISO (1) standard (0) calm-management (24102) local (1) asnm-1 (1)}.

A.2 Module CALMmanagement

This module specifies ASN.1 type definitions together with useful ASN.1 value definitions.

Unaligned packed encoding rules (PER) as specified in ISO/IEC 8825-2 shall be applied for this ASN.1 module.

```
CALMmanagement {iso (1) standard (0) calm-management (24102) local (1) asnm-1 (1)}
```

```
DEFINITIONS AUTOMATIC TAGS ::= BEGIN
```

```
IMPORTS
```

```
CIstatus, Connect, DataRate, DataRatesNW, Directivity, KineVectOut, Link-ID, MACaddress,
MedType, PARAMS, UserPriority FROM CALMllsap {iso (1) standard (0) calm-ll-sap (21218)
asnm-1 (1)}
```

```
ITS-SCUtype FROM CALMiitsscu {iso (1) standard (0) calm-management (24102) iitsscu (4)
asnm-1 (1)}
```

```
ITSSappCPReqReg, MediumCost FROM CITSapplReq {iso (1) standard (0) cits-applReq (17423)
asnm-1 (1)}
```

```
LogicalChannelType FROM CITSapplMgmtComm {iso (1) standard (0) cits-applMgmt (17419) comm
(3)}
```

```
ITSaid FROM CITSapplMgmtITSaid {iso (1) standard (0) cits-applMgmt (17419) applRegistry
(2)}
```

```
;
```

```
-- End of IMPORTS
```

```
-- Types
```

```
ApplReqList ::= ITSSappCPReqReg -- from TS 17423
```

```
ApplicationID ::= SEQUENCE{
```

```

    itsaid      ITSaid,
    itsscu     ITS-scuId,
    instance   INTEGER(0..255) -- allows for 256 instances of this app in a single ITS-
SCU
}

```

```
CrCiPrioList ::= SEQUENCE (SIZE(0..255)) OF CrCiPrioReq
```

```

CrCiPrioReq ::= SEQUENCE{
    linkId      Link-ID, -- requesting CI
    timeout     INTEGER(0..255),
    request     CCPrequest,
    interferer  SEQUENCE OF CCPpotInt -- potential interferers
}

```

```

CCPrequest ::= SEQUENCE (SIZE(0..255)) OF SEQUENCE
{
    reqNo       INTEGER(0..255),
    priority    UserPriority,
    status      CCPstatus
}

```

```

CCPpotInt ::= SEQUENCE{
    linkID      Link-ID, -- interferer
    status      CCPstatus
}

```

```

CCPstatus ::= INTEGER{
    released (0),
    requestd (16),
    ignored (64),
    granted (128)
}

```

iTeh STANDARD PREVIEW
(standards.iteh.ai)

```

ITS-scuId ::= INTEGER{
    reserved (0),
    hosts (1),
    routers (2),
    testSystem (3),
    any (65535)
} (0..65535)

```

<https://standards.iteh.ai/catalog/standards/sist/ca2b6476-e297-4389-8d13-988b6f1867b4/iso-24102-1-2013-amd-1-2017>

```

ITS-scuList ::= SEQUENCE{
    ITS-scuId    ITS-scuId,
    ITS-scuType  ITS-SCUtype,
    time         GeneralizedTime,
    uniqueID     UTF8String
}

```

```

ITS-SSI ::= SEQUENCE{
    stationType  StationType,
    stationID    StationID,
    stationPosition KineVectOut
}

```

```
MPARAM ::= PARAMS
```

```

Param24102 ::= SEQUENCE{
    paramNo      MPARAM.&paramRef({M-Params}),
    parameter    MPARAM.&Parameter({M-Params}){@paramNo}
}

```

```

M-Params      MPARAM ::= {stationID | minPrioCrossCI | stationPosition | ITS-scuId |
vciList | crCiPrioList | timerITS-SSI | ITS-SSI | applReqList | vCIperformList | talive |
ITS-scuList, ...}

```

```

stationID      MPARAM ::= {&paramRef 0, &Parameter StationID}
minPrioCrossCI MPARAM ::= {&paramRef 1, &Parameter UserPriority}
stationPosition MPARAM ::= {&paramRef 2, &Parameter KineVectOut}
ITS-scuId      MPARAM ::= {&paramRef 3, &Parameter ITS-scuId}

```

```

vciList          MPARAM::={&paramRef 4, &Parameter VciList}
crCiPrioList     MPARAM::={&paramRef 5, &Parameter CrCiPrioList}
timerITS-SSI    MPARAM::={&paramRef 6, &Parameter INTEGER(0..65535)}
its-ssi         MPARAM::={&paramRef 7, &Parameter ITS-SSI}
applReqList     MPARAM::={&paramRef 8, &Parameter ApplReqList}
vCIperformList  MPARAM::={&paramRef 9, &Parameter VCIPerformList}
talive          MPARAM::={&paramRef 10, &Parameter Talive}
ITS-scuList     MPARAM::={&paramRef 11, &Parameter ITS-scuList}

```

```

Param24102No::=INTEGER{
    stationID      (0),
    minPrioCrossCI (1),
    stationPosition (2),
    ITS-scuId      (3),
    vciList        (4),
    crCiPrioList   (5),
    timerITS-SSI   (6),
    its-ssi        (7),
    applReqList    (8),
    vCIperformList (9),
    talive         (10),
    ITS-scuList    (11)
} (0..255)

```

```
Talive::=INTEGER(0..65535) -- time in ms
```

```
VciList::=SEQUENCE (SIZE(0..255)) OF VciListEntry
```

```

VciListEntry::=SEQUENCE{
    linkId      Link-ID,
    medType     MedType,
    status      CImstatus,
    connect     Connect,
    macAddress  MACaddress
}

```

ITh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 24102-1:2013/Amd 1:2017](https://standards.iteh.ai/catalog/standards/sist/ca2b6476-e297-4389-8d13-9856107b4382/ISO-24102-1-2013-Amd-1-2017)

[https://standards.iteh.ai/catalog/standards/sist/ca2b6476-e297-4389-8d13-](https://standards.iteh.ai/catalog/standards/sist/ca2b6476-e297-4389-8d13-9856107b4382/ISO-24102-1-2013-Amd-1-2017)

```
VCIPerformList::=SEQUENCE (SIZE(0..255)) OF VCIPerformance
```

```

VCIPerformance::=SEQUENCE{
    linkId      Link-ID,
    channelType LogicalChannelType,
    channelNo   INTEGER(0..255),
    minUserPrio UserPriority,
    dataRateNW  DataRate,
    dataRatesNW DataRatesNW,
    directivity Directivity,
    commRangeRef INTEGER(0..65535), -- in 1/10 m
    cost        MediumCost,
    reliability  INTEGER(0..255)
}

```

```
StationID::=OCTET STRING (SIZE(4))
```

```

StationType::= INTEGER{
    mobile      (0), -- vehicle
    fixed       (1), -- roadside
    portable    (2), -- portable
    infrastructure (254), -- central
    unknown     (255)
} (0..255)

```

```
-- Value definitions
```

```
version INTEGER(0..255)::=2
```

```
/*
```

The ASN.1 specification has been checked for conformance to the ASN.1 standards by OSS ASN.1 Syntax Checker, and by OSS ASN-1STEP

```
*/
```

END

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 24102-1:2013/Amd 1:2017](https://standards.iteh.ai/catalog/standards/sist/ca2b6476-e297-4389-8d13-988b6f1867b4/iso-24102-1-2013-amd-1-2017)
<https://standards.iteh.ai/catalog/standards/sist/ca2b6476-e297-4389-8d13-988b6f1867b4/iso-24102-1-2013-amd-1-2017>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 24102-1:2013/Amd 1:2017](https://standards.iteh.ai/catalog/standards/sist/ca2b6476-e297-4389-8d13-988b6f1867b4/iso-24102-1-2013-amd-1-2017)

<https://standards.iteh.ai/catalog/standards/sist/ca2b6476-e297-4389-8d13-988b6f1867b4/iso-24102-1-2013-amd-1-2017>