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**AMENDMENT 1**  
2017-04

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

Part 4:  
**Station-internal management  
communications**

**AMENDMENT 1**

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

*Partie 4: Communications de gestion interne à la station*

*AMENDEMENT 1*



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Amendment 1 to ISO 24102-4:2013 was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*.

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

## Part 4: Station-internal management communications

### AMENDMENT 1

Page 4, Figure 3

Replace Figure 3 by the following.

*IIC-Request:*

SourceITS-SCU-ID	DestinationITS-SCU-ID	PDU-Counter	PDU-ID (0)	Data	Sec
------------------	-----------------------	-------------	------------	------	-----

*IIC-Response:*

SourceITS-SCU-ID	DestinationITS-SCU-ID	PDU-Counter	PDU-ID (1)	Data	Error Status	Sec
------------------	-----------------------	-------------	------------	------	--------------	-----

*Data in IIC-Request:*

RqDataID	Length of RqData	RqData
----------	------------------	--------

*Data in IIC-Response:*

RsDataID	Length of RsData	RsData
----------	------------------	--------

*Sec in IIC-Response:*

SecRqID	Length of SecRequest	SecRequest
---------	----------------------	------------

*Sec in IIC-Request:*

SecRsID	Length of SecResponse	SecResponse
---------	-----------------------	-------------

**Figure 3 — IIC PDU structure**

Page 4, Table 1

Replace Table 1 by the following.

PDU element	IIC-Request	IIC-Response
<b>SourceITS-SCU-ID</b>	ITS-SCU-ID of source ITS-SCU, which produces the request. See parameter "ITS-scuId" specified in ISO 24102-1.	ITS-SCU-ID of ITS-SCU, which produces the response.
<b>DestinationITS-SCU-ID</b>	ITS-SCU-ID of destination ITS-SCU, which shall evaluate the request.	Same as SourceITS-SCU-ID of related request if not requested otherwise in this document.
<b>PDU-Counter</b>	Even number generated from a cyclic counter at the ITS-SCU, which produces the request.	PDU-Counter of related request incremented by one.
<b>PDU-ID</b>	One octet INTEGER value 0.	One octet INTEGER value 1.
<b>Data</b>	Data type identifier RqDataID followed by length of RqData in Integer multiples of an octet and RqData.	Data type identifier RsDataID followed by length of RsData in Integer multiples of an octet and RsData.
<b>ErrorStatus</b>	Not existent.	Existent. 0: No error happened > 0: Number indicating type of error.
<b>Seq</b>	Security type identifier SecRqID followed by the length of SecRequest in Integer multiples of an octet and SecRequest.	Security type identifier SecRsID followed by the length of SecResponse in Integer multiples of an octet and SecResponse.

Page 5, Table 2

Replace Table 2 by the following.

SourceITS-SCU-ID	Destination-ITS-SCU-ID	Description
0		Reserved. Used to indicate "own/local ITS-SCU". Must not be used in communications with other ITS-SCUs.
n.a.	1	ITS-SCU-ID identifying ITS-SCUs with ITS-S host role.
n.a.	2	ITS-SCU-ID identifying ITS-SCUs with ITS-S router role.
3	3	ITS test system (using IICP for upper tester access).
4 - 7		ITS-SCU-ID identifying ITS-SCUs with an implementation specific role.
8 .. 65534		ITS-SCU-ID identifying uniquely a specific ITS-SCU in an ITS station.
n.a.	65535	ITS-SCU-ID identifying all ITS-SCUs.

Page 10, Annex A

Replace Annex A with the following:

**Annex A**  
(normative)

**ASN.1 module**

**A.1 Overview**

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

— CALMiitsscu { ISO (1) standard (0) calm-management (24102) iitsscu (4) asnm-1 (1)}

**A.2 Module CALMiitsscu**

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.

In order to achieve octet alignment enabling cheap implementations, "fill" bits were defined. All fill bits shall be set to the value '0'b.

```

CALMiitsscu { iso (1) standard (0) calm-management (24102) iitsscu (4) asnm-1 (1)}
DEFINITIONS AUTOMATIC TAGS ::= BEGIN

IMPORTS
  CIaClass, CIclass, CIcondition, Directivity, Link-ID, LLserviceAddr, MACaddress, MedType FROM
  CALMllsap {iso(1) standard(0) calm-ll-sap(21218) asnm-1 (1)}

ITS-scuId, Param24102No, Param24102 FROM CALMmanagement { iso (1) standard (0)
  calm-management (24102) local (1) asnm-1 (1)}

SimFUTcmd, SimFUTreq, SimFLTcmd, SimNUTcmd, SimNLTCmd, SimIUTcmd, SimFLTreq, SimNUTreq,
SimNLTCmd, SimIUTreq, ErrStatus, MF-Command-request, MF-Request-request, MN-Command-
request, MN-Request-request, MI-Command-request, MI-Request-request, MA-Command-request,
MA-Request-request, MS-Command-request, MS-Request-request, MI-Get-request, MI-Set-
request, MF-Command-confirm, MF-Request-confirm, MN-Command-confirm, MN-Request-confirm,
MI-Command-confirm, MI-Request-confirm, MA-Command-confirm, MA-Request-confirm, MS-Command-
confirm, MS-Request-confirm, MI-Get-confirm, MI-Set-confirm FROM CALMmsap {iso (1) standard
(0) calm-management (24102) msap (3) asnm-1 (1)}

-- Details on SecRq and SecRs to be provided by a standard on security
;
-- End of IMPORTS

-- Types

-- PDUs --
-- IIC-Request PDU
IIC-Request ::= SEQUENCE {
    sourceITS-scuId          ITS-scuId,
    destinationITS-scuId    ITS-scuId,
    pduCounter              PduCounter,
    requestID               RequestID, -- value zero
    pduRequest              PduRequest,
    secRq                   SecRq
}

RequestID ::= INTEGER {
    request (0)
} (0..255)

SECIICP ::= CLASS {
    &ref                    INTEGER(0..255), -- security type identifier

```

```

    &SecIICP
  }

SecIICPs SECIICP::={noSecurity | octString, ...}

noSecurity          SECIICP::={&ref 0, &SecIICP NULL}
octString           SECIICP::={&ref 1, &SecIICP OCTET STRING (SIZE(0..65535))}

SecRq::=SEQUENCE{
  secRqRef          SECIICP.&ref({SecIICPs}),
  secRq             SECIICP.&SecIICP({SecIICPs}){@secRqRef}
}

IICPREQ::=CLASS{
  &ref              INTEGER(0..255), -- data type identifier
  &IICPrequest
}

IICPrequests IICPREQ::={aliveRq | mFRcmdRq | mFRreqRq | mnRcmdRq | mnRreqRq | miRcmdRq |
miRreqRq | miRgetRq | miRsetRq | mCmdRq | maRcmdRq | maRreqRq | msRcmdRq | msRreqRq |
simFutCmdRq | simFutReqRq | simNutCmdRq | simNutReqRq | simIutCmdRq | simIutReqRq |
simFltCmdRq | simFltReqRq | simNltCmdRq | simNltReqRq, ...}

PduRequest::=SEQUENCE{
  reqRef            IICPREQ.&ref({IICPrequests}), -- data type identifier
  iicpReq           IICPREQ.&IICPrequest({IICPrequests}){@reqRef}
}

aliveRq             IICPREQ::={&ref 0, &IICPrequest ITS-SCUalive}
mFRcmdRq           IICPREQ::={&ref 1, &IICPrequest MF-Command-request}
mFRreqRq           IICPREQ::={&ref 2, &IICPrequest MF-Request-request}
mnRcmdRq           IICPREQ::={&ref 3, &IICPrequest MN-Command-request}
mnRreqRq           IICPREQ::={&ref 4, &IICPrequest MN-Request-request}
miRcmdRq           IICPREQ::={&ref 5, &IICPrequest MI-Command-request}
miRreqRq           IICPREQ::={&ref 6, &IICPrequest MI-Request-request}
miRgetRq           IICPREQ::={&ref 7, &IICPrequest MI-Get-request}
miRsetRq           IICPREQ::={&ref 8, &IICPrequest MI-Set-request}
mCmdRq             IICPREQ::={&ref 9, &IICPrequest McmdRq}
maRcmdRq           IICPREQ::={&ref 10, &IICPrequest MA-Command-request}
maRreqRq           IICPREQ::={&ref 11, &IICPrequest MA-Request-request}
msRcmdRq           IICPREQ::={&ref 12, &IICPrequest MS-Command-request}
msRreqRq           IICPREQ::={&ref 13, &IICPrequest MS-Request-request}
-- simAutCmdRq     IICPREQ::={&ref 242, &IICPrequest SimAUTcmd}
-- simAutReqRq     IICPREQ::={&ref 243, &IICPrequest SimAUTreq}
simFutCmdRq        IICPREQ::={&ref 244, &IICPrequest SimFUTcmd}
simFutReqRq        IICPREQ::={&ref 245, &IICPrequest SimFUTreq}
simNutCmdRq        IICPREQ::={&ref 246, &IICPrequest SimNUTcmd}
simNutReqRq        IICPREQ::={&ref 247, &IICPrequest SimNUTreq}
simIutCmdRq        IICPREQ::={&ref 248, &IICPrequest SimIUTcmd}
simIutReqRq        IICPREQ::={&ref 249, &IICPrequest SimIUTreq}
-- simAltCmdRq     IICPREQ::={&ref 250, &IICPrequest SimALTcmd}
-- simAltReqRq     IICPREQ::={&ref 251, &IICPrequest SimALTreq}
simFltCmdRq        IICPREQ::={&ref 252, &IICPrequest SimFLTcmd}
simFltReqRq        IICPREQ::={&ref 253, &IICPrequest SimFLTreq}
simNltCmdRq        IICPREQ::={&ref 254, &IICPrequest SimNLTcmd}
simNltReqRq        IICPREQ::={&ref 255, &IICPrequest SimNLTreq}

ITS-SCUalive::=SEQUENCE{
  message           AliveMessage,
  its-scuType       ITS-SCUtype
}

AliveMessage::= INTEGER{
  alive (0),
  delete (1),
  new (255)
} (0..255)

ITS-SCUtype::= INTEGER{
  unknown (0),

```

```

host (1),
router (2),
itsTestSystem (3),
any (255)
} (0..255)

```

**-- General OBJECT CLASS for management commands**

```

MCMD ::= CLASS {
    &refMcmd      INTEGER(0..255), -- allows for 256 commands
    &Mcmd
}

MCMDREQ ::= MCMD

McmdRq ::= SEQUENCE {
    mcmdRef      MCMDREQ.&refMcmd ({McmdReqs}),
    mcmd         MCMDREQ.&Mcmd  ({McmdReqs}{@mcmdRef})
}

McmdReqs MCMDREQ ::= {pingRq | vCIinfoRq | vCIupdateRq | getParam24102Rq | setParam24102Rq |
testIicpRq | testConfigRq, ...}

pingRq          MCMDREQ ::= {&refMcmd 0, &Mcmd PingIICP}
vCIinfoRq      MCMDREQ ::= {&refMcmd 1, &Mcmd VCI-info-req}
vCIupdateRq    MCMDREQ ::= {&refMcmd 2, &Mcmd VCI-update-req}
getParam24102Rq MCMDREQ ::= {&refMcmd 3, &Mcmd Param24102No}
setParam24102Rq MCMDREQ ::= {&refMcmd 4, &Mcmd Param24102}
testIicpRq     MCMDREQ ::= {&refMcmd 254, &Mcmd TestIicp}
testConfigRq  MCMDREQ ::= {&refMcmd 255, &Mcmd TestConfigIICP}

PingIICP ::= OCTET STRING (SIZE(0..255))

VCI-info-req ::= SEQUENCE {
    medType      MedType,
    ciaClass     CIaClass,
    ciClass      CIclass
}

VCI-update-req ::= SEQUENCE (SIZE(0..255)) OF VCI-Info

VCI-Info ::= SEQUENCE {
    linkId      Link-ID,
    medType     MedType,
    ciaClass    CIaClass,
    ciClass     CIclass,
    status      Cistatus
}

TestIicp ::= SEQUENCE {
    fill        BIT STRING (SIZE(6)), -- all bits set to '0'
    action      CHOICE {
-- simulation of a trigger event in the ITS-S management entity of the SUT
-- to perform remote COMMAND access to an MX-SAP in the ITS test system
-- request to send MF-Command-request to ITS test system
        mfrCmd   MFrcmd,
-- request to send MN-Command-request to ITS test system
        mnRcmd   MNrcmd,
-- request to send MI-Command-request to ITS test system
        miRcmd   MIRcmd,
-- request to send MS-Command-request to ITS test system
        msRcmd   MSrcmd,
-- request to send MA-Command-request to ITS test system
        maRcmd   MARcmd
    }
}

-- Upper Tester TX: remote COMMAND accesses to an MX-SAP

-- MSrcmd ::= SEQUENCE {

```

```
-- destination ITS-scuId,
-- cmd MS-Command-request
-- }
MArcmd ::= SEQUENCE {
    destination ITS-scuId,
    cmd MA-Command-request
}
MFrCmd ::= SEQUENCE {
    destination ITS-scuId,
    cmd MF-Command-request
}
MNrcmd ::= SEQUENCE {
    destination ITS-scuId,
    cmd MN-Command-request
}
MIrcmd ::= SEQUENCE {
    destination ITS-scuId,
    cmd MF-Command-request
}

TestConfigIICP ::= SEQUENCE {
    location BIT STRING (SIZE(6)),
    lowerLayers BIT STRING (SIZE(1)),
    testMode BIT STRING (SIZE(1))
}
```

**-- IIC-Response PDU**

```
IIC-Response ::= SEQUENCE {
    sourceITS-scuId ITS-scuId,
    destinationITS-scuId ITS-scuId,
    pduCounter PduCounter,
    responseID ResponseID, -- value 1
    pduResponse PduResponse,
    errorStatus PduErrStatus,
    secRs SecRs
}

ResponseID ::= INTEGER {
    response (1)
} (0..255)

SecRs ::= SEQUENCE {
    secRsRef SECIICP.&ref({SecIICPs}),
    secRs SECIICP.&SecIICP({SecIICPs}{@secRsRef})
}
```

```
IICPRES ::= CLASS {
    &ref INTEGER(0..255),
    &IICResponse
}
```

```
IICResponses IICPRES ::= {aliveRs | mFrCmdRs | mFrReqRs | mnRcmdRs | mnRreqRs | miRcmdRs |
miRreqRs | miRgetRs | miRgetRs | miRsetRs | mCmdRs | maRcmdRs | maRreqRs | msRcmdRs |
msRreqRs | simAutCmdRs | simAutReqRs | simFutCmdRs | simFutReqRs | simNutCmdRs |
simNutReqRs | simIutCmdRs | simIutReqRs | simAltCmdRs | simAltReqRs | simFltCmdRs |
simFltReqRs | simNltCmdRs | simNltReqRs, ...}
```

```
PduResponse ::= SEQUENCE {
    resRef IICPRES.&ref({IICResponses}), -- data type identifier
    iicpRes IICPRES.&IICResponse({IICResponses}{@resRef})
}
```

```
aliveRs IICPRES ::= {&ref 0, &IICResponse ITS-SCUalive}
mFrCmdRs IICPRES ::= {&ref 1, &IICResponse MF-Command-confirm}
mFrReqRs IICPRES ::= {&ref 2, &IICResponse MF-Request-confirm}
mnRcmdRs IICPRES ::= {&ref 3, &IICResponse MN-Command-confirm}
mnRreqRs IICPRES ::= {&ref 4, &IICResponse MN-Request-confirm}
miRcmdRs IICPRES ::= {&ref 5, &IICResponse MI-Command-confirm}
miRreqRs IICPRES ::= {&ref 6, &IICResponse MI-Request-confirm}
```

```

miRgetRs          IICPRES::={&ref 7, &IICResponse MI-Get-confirm}
miRsetRs          IICPRES::={&ref 8, &IICResponse MI-Set-confirm}
mCmdRs           IICPRES::={&ref 9, &IICResponse McmdRs}
maRcmdRs         IICPRES::={&ref 10, &IICResponse MA-Command-confirm}
maRreqRs         IICPRES::={&ref 11, &IICResponse MA-Request-confirm}
msRcmdRs         IICPRES::={&ref 12, &IICResponse MS-Command-confirm}
msRreqRs         IICPRES::={&ref 13, &IICResponse MS-Request-confirm}
simAutCmdRs      IICPRES::={&ref 242, &IICResponse NULL}
simAutReqRs      IICPRES::={&ref 243, &IICResponse NULL}
simFutCmdRs      IICPRES::={&ref 244, &IICResponse NULL}
simFutReqRs      IICPRES::={&ref 245, &IICResponse NULL}
simNutCmdRs      IICPRES::={&ref 246, &IICResponse NULL}
simNutReqRs      IICPRES::={&ref 247, &IICResponse NULL}
simIutCmdRs      IICPRES::={&ref 248, &IICResponse NULL}
simIutReqRs      IICPRES::={&ref 249, &IICResponse NULL}
simAltCmdRs      IICPRES::={&ref 250, &IICResponse NULL}
simAltReqRs      IICPRES::={&ref 251, &IICResponse NULL}
simFltCmdRs      IICPRES::={&ref 252, &IICResponse NULL}
simFltReqRs      IICPRES::={&ref 253, &IICResponse NULL}
simNltReqRs      IICPRES::={&ref 255, &IICResponse NULL}
simNltCmdRs      IICPRES::={&ref 254, &IICResponse NULL}

MCMGRES::=MCMD

McmdRess MCMGRES::={pingRs | vCIinfoRs | vCIupdateRs | getParam24102Rs | setParam24102Rs |
testIicpRs | testConfigRs, ...}

McmdRs::=SEQUENCE{
    mCmdRef          MCMGRES.&refMcmd ({McmdRess}),
    mcmd             MCMGRES.&Mcmd ({McmdRess}){@mCmdRef}
}

pingRs            MCMGRES::={&refMcmd 0, &Mcmd PingIICP}
vCIinfoRs         MCMGRES::={&refMcmd 1, &Mcmd VCI-info-res}
vCIupdateRs       MCMGRES::={&refMcmd 2, &Mcmd NULL}
getParam24102Rs   MCMGRES::={&refMcmd 3, &Mcmd Param24102}
setParam24102Rs   MCMGRES::={&refMcmd 4, &Mcmd ErrStatus}
testIicpRs        MCMGRES::={&refMcmd 254, &Mcmd NULL}
testConfigRs      MCMGRES::={&refMcmd 255, &Mcmd NULL}

PduErrStatus::=INTEGER{
    success (0),
    pduUnknown (1),
    duplicateITS-scuId (2),
    invalidAliveMessage (3),
    invalidITSScuType (4),
    unspecFailure (255)
} (0..255)

VCI-info-res::=SEQUENCE (SIZE(0..255)) OF VCI-Info

-- MF-SAP --
-- MF-COMMANDS --

IICrequestTX::=IIC-Request
IICresponseTX::=IIC-Response

-- MF-REQUESTS --

IICrequestRX::=IIC-Request
IICresponseRX::=IIC-Response

-- General types --

PduCounter::=INTEGER(0..65535)

-- Values

```

version INTEGER(0..255)::=2 -- version of this ASN.1 module

```
/*
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

Page 13, Annex B

Replace Annex B with the following:

**Annex B**  
(normative)

**IIC PDUs**

**B.1 List of PDUs**

Table B.1 presents an overview of all ICC PDUs. Further details are specified in the next subclauses of this annex. The column “Response” indicates whether a response PDU is mandatory (yes) or prohibited (no). A response may contain an empty Data field. See also Table 1. The column “Registration ID” indicates the reference number of the PDU type. Further PDU types may apply as being registered without the need to be listed in this document.

NOTE A registry of IICP PDU types is under preparation at ISO.

**Table B.1 — PDU-ID**

Type of PDU	Response	Registration ID	Comment
ITS-SCUalive	yes	0	Used to assign, maintain and delete unique ITS-SCU-ID values in a station.
MF-rcmd	yes	1	A management command MF-COMMAND issued by the ITS station management entity of the local ITS-SCU, to be forwarded to the MF-SAP of one or several remote ITS-SCUs.
MF-rreq	yes	2	A command MF-REQUEST issued by the local facilities layer, to be forwarded to the ITS station management entity in one or several remote ITS-SCUs.
MN-rcmd	yes	3	A management command MN-COMMAND issued by the ITS station management entity of the local ITS-SCU, to be forwarded to the MN-SAP of one or several remote ITS-SCUs.
MN-rreq	yes	4	A command MN-REQUEST issued by the local networking and transport layer, to be forwarded to the ITS station management entity in one or several remote ITS-SCUs.
MI-rcmd	yes	5	A management command MI-COMMAND issued by the ITS station management entity of the local ITS-SCU, to be forwarded to the MI-SAP of a remote ITS-SCUs.
MI-rreq	yes	6	A command MI-REQUEST issued by the local access layer, to be forwarded to the ITS station management entity in one or several remote ITS-SCUs.
MI-rget	yes	7	A command MI-GETPARAM issued by the ITS station management entity, to be forwarded to the MI-SAP of a remote ITS-SCU.

Table B.1 (continued)

Type of PDU	Response	Registration ID	Comment
MI-rset	yes	8	A command MI-SETPARAM issued by the ITS station management entity, to be forwarded to the MI-SAP of a remote ITS-SCU.
Mc cmd	—	9	Request executing of a management command in the ITS-S management entity of a remote ITS-SCU. See details in the rows below.
Mc cmd.Ping	yes	9	Octet string with random data to be replied.
Mc cmd.VCI-info	yes	9	Request to all ITS-SCUs containing a router, to report about existing VCIs. Information to be stored in VCI list.
Mc cmd.VCI-update	no	9	Information on change of VCI information to be stored in VCI list. Broadcasted to all ITS-SCUs.
Mc cmd.GET-Param24102	yes	9	Retrieves the value of a management parameter Param24102 specified in ISO 24102-1 from another ITS-SCU.
Mc cmd.SET-Param24102	yes	9	Set the value of a management parameter Param24102 specified in ISO 24102-1 from another ITS-SCU.
Mc cmd.Testlicp	yes	9	Used for test purposes only. Simulation of a trigger event in the ITS-S management entity of the SUT to perform remote COMMAND access to an MX-SAP in the ITS test system.
Mc cmd.TestConfigIICP	yes	9	Used to program the test mode in an ITS-SCU.
—	—	10 - 241	To be assigned by the registry.
SimAUTcmd	yes	242	See ISO 24102-3.
SimAUTreq	yes	243	See ISO 24102-3.
SimFUTcmd	yes	244	See ISO 24102-3.
SimFUTreq	yes	245	See ISO 24102-3.
SimNUTcmd	yes	246	See ISO 24102-3.
SimNUTreq	yes	247	See ISO 24102-3.
SimIUTcmd	yes	248	See ISO 24102-3.
SimIUTreq	yes	249	See ISO 24102-3.
SimALTcmd	yes	250	See ISO 24102-3.
SimALTreq	yes	251	See ISO 24102-3.
SimFLTcmd	yes	252	See ISO 24102-3.
SimFLTreq	yes	253	See ISO 24102-3.
SimNLTcmd	yes	254	See ISO 24102-3.
SimNLTreq	yes	255	See ISO 24102-3.

## B.2 PDU details

### B.2.1 ASN.1

ASN.1 details of all PDUs shall be as presented in Annex A.

### B.2.2 ITS-SCUalive

Table B.2 shows details of the “Data” element in the IIC-Request PDU.

**Table B.2 — ITS-SCU-id request PDU**

Name	Description
AliveMessage	Indicates type of alive message: “alive” “delete” “new”
ITS-SCUtype	Indicates role of ITS-SCU: ITS-S Host ITS-S Router ITS-S Host and ITS-S Router

This request shall always be transmitted to all ITS-SCUs.

Table B.3 shows details of the “Data” element in the IIC-Response PDU.

**Table B.3 — ITS-SCU-id response PDU**

Name	Description
Alive Message	Same as in related request
ITS-SCUtype	Same as in related request

With “Alive Message” = “delete” no IIC-Response PDU shall be transmitted.

**B.2.3 Remote SAP access**

The “Data” element in the IIC-Request PDUs shall contain the SAP service primitives.

- MF-Command-request
- MN-Command-request
- MI-Command-request
- MF-Request-request
- MN-Request-request
- MI-Request-request
- MI-Get-request
- MI-Set-request

specified in ISO 24102-3. See Annex A.

The “Data” element in the IIC-Response PDUs shall contain the SAP service primitives.

- MF-Command-confirm
- MN-Command-confirm
- MI-Command-confirm
- MF-Request-confirm
- MN-Request-confirm
- MI-Request-confirm
- MI-Get-confirm
- MI-Set-confirm