



Intelligent Transport Systems (ITS); Application Object Identifier (ITS-AID); Registration list

Reference

DTR/ITS-0020042

Keywords

ITS, registration, service

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

Individual copies of the present document can be downloaded from:
<http://www.etsi.org>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status.
Information on the current status of this and other ETSI documents is available at
<http://portal.etsi.org/tb/status/status.asp>

If you find errors in the present document, please send your comment to one of the following services:
http://portal.etsi.org/chaircor/ETSI_support.asp

Copyright Notification

No part may be reproduced except as authorized by written permission.
The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2013.
All rights reserved.

DECT™, PLUGTESTS™, UMTS™ and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.
3GPP™ and **LTE™** are Trade Marks of ETSI registered for the benefit of its Members and
of the 3GPP Organizational Partners.

GSM® and the GSM logo are Trade Marks registered and owned by the GSM Association.

Contents

Intellectual Property Rights	4
Foreword.....	4
Introduction	4
1 Scope	5
2 References	5
2.1 Normative references	5
2.2 Informative references.....	5
3 Definitions and abbreviations.....	5
3.1 Definitions	5
3.3 Abbreviations	5
4 ITS-AID registration list	6
4.1 Online registry.....	6
4.2 Registration procedure	6
4.3 Registration data.....	6
Annex A: Template for ITS-AID registration request.....	8
Annex B: Snap-shot of ITS-AID registry.....	10
History	14

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://ipr.etsi.org>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Intelligent Transport System (ITS).

Introduction

The present document is in support of a preliminary global registration list for ITS-AID values for purposes of ETSI TC ITS. Entries in this list are set up in a coordinated way with other SDOs to consider the needs of all SDOs and regions of the world. Other SDOs may maintain copies of the ITS-AID registration list such that all copies show identical entries.

The technical issue of globally unique identifiers and addresses, one of which is ITS-AID, is under further development at CEN TC278 WG16, conducted in Project Team PT1601 funded by the European Commission under mandate M/453. This work may include a refinement of ITS-AID as initially developed at ETSI TC ITS WG2 and presented in [i.1].

1 Scope

The present document:

- refers to an online registry showing all harmonized entries of the globally applicable ITS-AID registration list,
 - provides a snap-shot of this online registry,
 - provides a template to request a new entry in the list.
-

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication ETSI cannot guarantee their long term validity.

2.1 Normative references

The following referenced documents are necessary for the application of the present document.

Not applicable.

2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ETSI TS 102 860: "Intelligent Transport Systems (ITS); Classification and management of ITS application objects".
-

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in [i.1] apply.

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in [i.1] and the following apply:

- SDO Standards Development Organization

4 ITS-AID registration list

4.1 Online registry

The purpose of ITS-AID is specified and illustrated in [i.1].

It is intended to establish a registration authority. In order to be able to proceed with standardization of ITS and procurement of related equipment, a preliminary registration list is maintained at:

<http://aid.its-standards.info/ITS-AID%20Registry/ITSaidRegistrationIndex.html>.

As soon as the registration authority is established and working, preliminary registration will stop and the registration list will be handed over to the registration authority.

4.2 Registration procedure

Annex A contains a template to be used by an applicant to request a value of ITS-AID for a new ITS application object as specified in [i.1]. The template has to be forwarded to the address given in the template. The operator of the registration list will consult other SDOs involved in standardization of ITS, and will achieve an agreement on assignment of a number. Then the applicant will be informed about the assigned value.

An assignment will be preliminary as long as the applicant does not present a proof from an ITS security authority that the ITS application object is certified.

4.3 Registration data

Table 1 explains entries to be provided in a registration request.

Table 1: Elements of a registration entry

Registration entry element	Description
ITSAid	ITS application identifier (ITS-AID) value to be assigned by the registration authority. Numbers may be presented in one, two three, four or more octets applying ASN.1 PER as specified in [i.1]. Number range: One octet: 0 to 127 Two octets: 128 to 16 511 Three octets: 16 512 to 2 113 663 Four octets: 2 113 664 to 270 549 119
ITSapObName	Human-readable name of the ITS application object.
ITSapObType	Indicates whether ITS-AID refers to an ITS application or to an ITS application class (or to an ITS message set) (0) ITS application class (1) ITS application (2) ITS message set <small>(Deprecated as an ITS application object. Will be subject of a different registry)</small>
ITSapObOwner	Indicates whether the specification of the ITS application object is given by a standard or by a private specification. The owner is identified by a human readable name and by a universal object identifier. (0) standard (1) private
ITSapObPriority	This priority indicates the maximum allowed priority of messages produced by the ITS application object. Lowest priority 0 Highest priority 256

Registration entry element	Description
ITSapObCertificate	<p>This element uniquely identifies whether the registered ITS application object is certified or not, which is the issuing ITS security authority, and when the certificate will expire.</p> <ul style="list-style-type: none"> CertStartDate <ul style="list-style-type: none"> [0] inactive [1] <yyyymmdd> CertEndDate <ul style="list-style-type: none"> [0] inactive [1] <yyyymmdd> [2] never CertStatus <ul style="list-style-type: none"> [0] active [1] inactive [2] testActive [3] blocked

Table 2 shows OIDs to be used for some SDOs.

Table 2: OIDs of some SDOs

SDO	OID
CEN	{iso(1) identified-organization(3) cen(162)}
ETSI	{itu-t(0) identified-organization(4) etsi(0)}
IEEE	{iso(1) identified-organization(3) ieee(3)}
ISO	{iso(1) standard(0)}
SAE	{iso(1) identified-organization(3) dod(6) internet(1)(4) enterprise(1) 21431}

Annex A: Template for ITS-AID registration request

This template is to be used by an applicant to request assignment of a value of ITS-AID for an ITS application object as specified in [i.1].

Applicant data:

Name of organization: _____

Family name: _____

Christian name: _____

Title: _____

Address 1: _____

Address 2: _____

ZIP: _____

City: _____

Country: _____

Email: _____

Phone: _____

Fax: _____

Web site URL: _____

Registry address:

Please send a scanned copy of the signed registration sheet to:

itsaidRegistry@its-standards.info

Page 1 of 2 of template

Registration entry data**ITSaid:**

preferred size in octets _____

ITSapObName:_____
_____**ITSapObType (0) / (1):**

ITSapObOwner:

Type (0) / (1): _____

Name: _____

OID: _____

ITSapObPriority (0 - 255):

ITSapObCertificate: (not needed for preliminary registration)

Name of security authority: _____

OID of security authority _____

CertStartDate [0] / [1] _____

CertEndDate [0] / [1] / [2] _____

CertStatus [0] / [1] / [2] / [3] _____

Please provide proof of certification from the ITS security authority, otherwise status (CertStatus) will be [0]. Proof can be provided after preliminary assignment of an ITS-AID value.

Date: _____

Signature and stamp _____

Page 2 of 2 of template

Annex B:

Snap-shot of ITS-AID registry

Below a snap-shot of the online ITS-AID registry at <http://aid.its-standards.info/ITS-AID%20Registry/ITSaidRegistrationIndex.html>.

Date	iTSaid	Numerical value	Hex value for unaligned PER	Size	iTSapObName	iTSapObType	iTSapObOwner	iTSapObPrio	iTSapObCert	issuingSA name	saOID	start Date	end Date	status
v 11.1.2012														
15.05.2011	0	0x00	1	system	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	1	0x01	1	electronic-fee-collection	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	2	0x02	1	freight-fleet-management	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	3	0x03	1	public-transport	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	4	0x04	1	traffic-traveller-information	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	5	0x05	1	traffic-control	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	6	0x06	1	parking-management	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	7	0x07	1	geographic-road-database	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	8	0x08	1	medium-range-preinformation	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	9	0x09	1	man-machine-interface	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	10	0x0a	1	intersystem-interface	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	11	0x0b	1	automatic-vehicle-identification	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	12	0x0c	1	emergency-warning	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	13	0x0d	1	private	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	14	0x0e	1	multi-purpose-payment	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	15	0x0f	1	dsrc-resource-manager	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	16	0x10	1	after-theft-systems	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628) dsrcData(0) version (1)}		unknown	{}	[0]	[0]	[1]
15.05.2011	17	0x11	1	cruise-assist-highway-system	(0)	CEN / ISO	(0)	{iso(1) standard(0) dsrc(15628)}		unknown	{}	[0]	[0]	[1]

Date	iTSaid			iTSapObName	iTSapObType	iTSapObOwner			iTSapObPrio	iTSapObCert				
v 11.1.2012	Numerical value	Hex value for unaligned PER	Size			ownerName	ownerType	ownerOID		issuingSA name	saOID	start Date	end Date	status
						dsrcData(0) version {1}}								
15.05.2011	18	0x12	1	multi-purpose-information-system	(0)	CEN / ISO	(0)	{iso{1} standard(0) dsrc(15628)}	unknown	{}	[0]	[0]	[1]	
15.05.2011	19	0x13	1	multi-mobile-information-system	(0)	CEN / ISO	(0)	{iso{1} standard(0) dsrc(15628)}	unknown	{}	[0]	[0]	[1]	
15.05.2011	20	0x14	1	efc-compliance-check-communication-applications	(0)	CEN / ISO	(0)	{iso{1} standard(0) dsrc(15628)}	unknown	{}	[0]	[0]	[1]	
15.05.2011	21	0x15	1	efc-localisation-augmentation-communication-applications	(0)	CEN / ISO	(0)	{iso{1} standard(0) dsrc(15628)}	unknown	{}	[0]	[0]	[1]	
15.05.2011	22	0x16	1	reserved for ISO/CEN DSRC applications	(0)	CEN / ISO	(0)	{iso{1} standard(0) dsrc(15628)}	unknown	{}	[0]	[0]	[1]	
15.05.2011	23	0x17	1	reserved for ISO/CEN DSRC applications	(0)	CEN / ISO	(0)	{iso{1} standard(0) dsrc(15628)}	unknown	{}	[0]	[0]	[1]	
15.05.2011	24	0x18	1	reserved for ISO/CEN DSRC applications	(0)	CEN / ISO	(0)	{iso{1} standard(0) dsrc(15628)}	unknown	{}	[0]	[0]	[1]	
15.05.2011	25	0x19	1	reserved for ISO/CEN DSRC applications	(0)	CEN / ISO	(0)	{iso{1} standard(0) dsrc(15628)}	unknown	{}	[0]	[0]	[1]	
15.05.2011	26	0x1a	1	reserved for ISO/CEN DSRC applications	(0)	CEN / ISO	(0)	{iso{1} standard(0) dsrc(15628)}	unknown	{}	[0]	[0]	[1]	
15.05.2011	27	0x1b	1	reserved for ISO/CEN DSRC applications	(0)	CEN / ISO	(0)	{iso{1} standard(0) dsrc(15628)}	unknown	{}	[0]	[0]	[1]	
15.05.2011	28	0x1c	1	reserved for ISO/CEN DSRC applications	(0)	CEN / ISO	(0)	{iso{1} standard(0) dsrc(15628)}	unknown	{}	[0]	[0]	[1]	
15.05.2011	29	0x1d	1	reserved for private use	(0)	CEN / ISO	(0)	{iso{1} standard(0) dsrc(15628)}	unknown	{}	[0]	[0]	[1]	
15.05.2011	30	0x1e	1	reserved for private use	(0)	CEN / ISO	(0)	{iso{1} standard(0) dsrc(15628)}	unknown	{}	[0]	[0]	[1]	
15.05.2011	31	0x1f	1	reserved for ISO/CEN DSRC applications	(0)	CEN / ISO	(0)	{iso{1} standard(0) dsrc(15628)}	unknown	{}	[0]	[0]	[1]	
13.07.2011	32	0x20	1	Vehicle to vehicle safety and awareness	(1) ITS application	SAE	(1)	{iso{1} identified-organization(3) dod(6) internet(1)(4) enterprise(1) 21431}						
13.07.2011	33	0x21	1	Limited sensor vehicle to vehicle safety awareness	(1) ITS application	SAE	(1)	{iso{1} identified-organization(3) dod(6) internet(1)(4) enterprise(1) 21431}						
13.07.2011	34	0x22	1	Tracked vehicle safety awareness	(1) ITS application	SAE	(1)	{iso{1} identified-organization(3) dod(6) internet(1)(4) enterprise(1) 21431}						

Date	iTSaid	Numerical value	Hex value for unaligned PER	Size	iTSapObName	iTSapObType	iTSapObOwner			iTSapObPrio	iTSapObCert				
							ownerName	owner Type	ownerOID		issuingSA name	saOID	start Date	end Date	status
v 11.1.2012															
13.07.2011	35	0x23	1	WAVE Security Management	(1) ITS application	IEEE	(0)		{ iso(1) iso-identified-organization(3) ieee(111) standards-association-numbered-series-standards(2) wave-stds(1609) dot12(12) }						
	36	0x24	1												
			1												
	126	0x7e	1												
13.07.2011	127	0x7f	1	Testing	-										
13.07.2011	128	0x80.00	2	Differential GPS corrections, uncompressed	(1) ITS application	SAE	(1)		{iso(1) identified-organization(3) dod(6) internet(1)(4) enterprise(1) 21431}						
13.07.2011	129	0x80.01	2	Differential GPS corrections, compressed	(1) ITS application	SAE	(1)		{iso(1) identified-organization(3) dod(6) internet(1)(4) enterprise(1) 21431}						
13.07.2011	130	0x80.02	2	Intersection safety and awareness	(1) ITS application	SAE	(1)		{iso(1) identified-organization(3) dod(6) internet(1)(4) enterprise(1) 21431}						
13.07.2011	131	0x80.03	2	Traveler information and roadside signage	(1) ITS application	SAE	(1)		{iso(1) identified-organization(3) dod(6) internet(1)(4) enterprise(1) 21431}						
13.07.2011	132	0x80.04	2	Mobile probe exchanges	(1) ITS application	SAE	(1)		{iso(1) identified-organization(3) dod(6) internet(1)(4) enterprise(1) 21431}						
13.07.2011	133	0x80.05	2	Emergency and erratic vehicles present in roadway	(1) ITS application	SAE	(1)		{iso(1) identified-organization(3) dod(6) internet(1)(4) enterprise(1) 21431}						
			2												
13.07.2011	16000 ... 16415	0xbe.00 ... 0xbf.9f	2	reserved		IEEE	(0)		{ iso(1) iso-identified-organization(3) ieee(111) standards-association-numbered-series-standards(2) wave-stds(1609) dot12(12) }						
13.07.2011	16416 ... 16479	0xbf.a0 ... 0xbf.df	2	Private Use	-										
13.07.2011	16480 ... 16511	0xbf.e0 ... 0xbf.ff	2	Testing	-										

Date	iTSaid			iTSapObName	iTSapObType	iTSapObOwner			iTSapObPrio	iTSapObCert				
v 11.1.2012	Numerical value	Hex value for unaligned PER	Size			ownerName	owner Type	ownerOID		issuingSA name	saOID	start Date	end Date	status
31.05.2012	16512	0xc0.00.00	3	CAM processor	(1) ITS application	ETSI	(0)	{itu-t(0) identified-organization(4) etsi(0)}		unknown	{}	[0]	[0]	[1]
31.05.2012	16513	0xc0.00.01	3	DENM processor	(1) ITS application	ETSI	(0)	{itu-t(0) identified-organization(4) etsi(0)}		unknown	{}	[0]	[0]	[1]
			3											
	2113663	0xdf.ff.ff	3											
	2113664	0xe0.00.00.00	4											
	2113665	0xe0.00.00.01	4											
			4											
	270549119	0xef.ff.ff.ff	4											
	270549120	0xf0.410.20.40.80	>4											
	270549121	0xf0.410.20.40.81												

History

Document history		
V1.1.1	March 2013	Publication