SLOVENSKI STANDARD
SIST EN ISO 14906:2019/oprA1:2019

01-september-2019

Elektronsko pobiranje pristojbin - Definicija aplikacijskega vmesnika za posebne komunikacije kratkega dosega - Dopolnilo A1 (ISO 14906:2018/DAM 1:2019)

Electronic fee collection - Application interface definition for dedicated short-range communication - Amendment 1 (ISO 14906:2018/DAM 1:2019)

Elektronische Gebührenerhebung - Anwendungsschnittstelle zur dezidierten Nahbereich-Kommunikation - Änderung 1 (ISO 14906:2018/DAM 1:2019)

Perception du télépéage - Définition de l'interface d'application relative aux communications dédiées à courte portée - Amendement 1 (ISO 14906:2018/DAM 1:2019)

Ta slovenski standard je istoveten z: **EN ISO 14906:2018/prA1**

ICS:

03.220.20	Cestni transport	Road transport
35.240.60	Uporabniške rešitve IT v prometu	IT applications in transport

SIST EN ISO 14906:2019/oprA1:2019 **en,fr,de**

DRAFT AMENDMENT
ISO 14906:2018/DAM 1

ISO/TC **204**
Secretariat: **ANSI**

Voting begins on:
2019-07-08

Voting terminates on:
2019-09-30

Electronic fee collection — Application interface definition for dedicated short-range communication

AMENDMENT 1

Perception du télépéage — Définition de l'interface d'application relative aux communications dédiées à courte portée

AMENDEMENT 1

ICS: 03.220.20; 35.240.60

This document is circulated as received from the committee secretariat.

ISO/CEN PARALLEL PROCESSING

Reference number
ISO 14906:2018/DAM 1:2019(E)

COPYRIGHT PROTECTED DOCUMENT

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

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.

The committee responsible for this document is ISO/TC 204, *Intelligent transport systems*.

Electronic fee collection — Application interface definition for dedicated short-range communication

AMENDMENT 1

1 Amendment to ASN.1 Code, EngineCharacteristics

The ASN.1 code of this international standard is provided in ISO14906(2018)EfcDsrcApplicationv6.asn. Due to text formatting, the syntax of the ASN.1 code provided below may not be correct. The syntax of the ASN.1 code in the attached and updated file ISO14906(2018)EfcDsrcApplicationv7.asn is correct and the ASN.1 code in this attached file takes precedence.

In this file (on lines 248 to 260) replace

```
EngineCharacteristics::= INTEGER {
noEntry (0),
noEngine (1),
petrolUnleaded (2),
petrolLeaded (3),
diesel (4),
lPG (5),
battery (6),
solar (7),
hybrid (8),
hydrogen (9)
-- (10-255) are reserved for future CEN use
} (0..255)
with
```



```
EngineCharacteristics::= INTEGER {
noEntry (0),
noEngine (1),
petrolUnleaded (2),
petrolLeaded (3),
diesel (4),
lPG (5),
battery (6), -- kept for legacy compatibility, more differentiated values are available
solar (7),
hybrid (8), -- kept for legacy compatibility, more differentiated values are available
hydrogen (9),
multi-fuel (10), -- multi fuel engine
bivalent-petrol-lpg (11), -- bivalent operating engine with petrol or liquefied petroleum
gas
bivalent-petrol-cng (12), -- bivalent operating engine with petrol or compressed natural
gas
combined-petrol-electric (13), -- combined operation with petrol and electric engine
cng (14), -- compressed natural gas
lng (15), -- liquefied natural gas
combined-diesel-electric (16), -- combined operation of diesel and electric engine
combined-hydrogen-electric (17), -- combined operation of hydrogen and electric engine
bivalent-hydrogen-petrol (18), -- bivalent operating engine with hydrogen or petrol
bivalent-hydrogen-petrol-electric-engine (19), -- bivalent operating engine with hydrogen
or petrol combined with electric engine
fuel-cell-hydrogen (20), -- fuel cell with hydrogen as primary energy source and electric
engine
fuel-cell-petrol (21), -- fuel cell with petrol as primary energy source and electric
engine
fuel-cell-methanol (22), -- fuel cell with methanol as primary energy source and electric
engine
fuel-cell-ethanol (23), -- fuel cell with ethanol as primary energy source and electric
engine
fuel-cell-diesel (24), -- fuel cell with diesel as primary energy source and electric
```

```
engine
combined-multi-fuel-electric-engine (25), -- combined operation of multi fuel and electric
engine
combined-cng-electric-engine (26), -- combined operation with compressed natural gas and
electric engine
combined-lng-electric-engine (27), -- combined operation with liquefied natural gas and
electric engine
petrol-ethanol (28), -- fuel mix of petrol and mainly ethanol, e.g. E85
combined-lpg-electric-engine (29), -- combined operation of LPG and electric engine
hybrid-petrol-external-battery (30), -- hybrid drive with petrol and external rechargeable
battery (plug-in hybrid)
hybrid-diesel-external-battery (31), -- hybrid drive with diesel and external rechargeable
battery (plug-in hybrid)
hybrid-lpg-external-battery (32), -- hybrid drive with LPG and external rechargeable
battery (plug-in hybrid)
hybrid-hydrogen-external-battery (33), -- hybrid drive with hydrogen and external
rechargeable battery (plug-in hybrid)
hybrid-multi-fuel-external-battery (34), -- hybrid drive with multi fuel and external
rechargeable battery (plug-in hybrid)
hybrid-cng-external-battery (35), -- hybrid drive with compressed natural gas and external
rechargeable battery (plug-in hybrid)
hybrid-lng-external-battery (36), -- hybrid drive with liquefied natural gas and external
rechargeable battery (plug-in hybrid)
hybrid-bivalent-hydrogen-petrol-external-battery (37), -- hybrid drive with bivalent
operating hydrogen and petrol engine and external rechargeable battery (plug-in hybrid)
hydrogen-cng (38), -- fuel mix of hydrogen and compressed natural gas
hydrogen-lng (39), -- fuel mix of hydrogen and liquefied natural gas
hybrid-hydrogen-cng-external-battery (40), -- hybrid drive with hydrogen and compressed
natural gas and external chargable battery (plug-in hybrid)
hybrid-hydrogen-lng-external-battery (41), -- hybrid drive with hydrogen and liquefied
natural gas and external chargable battery (plug-in hybrid)
ethanol (42), -- ethanol or fuel mix of ethanol and other fuel (except petrol) or
additives, e.g. E95
hybrid-fuel-cell-hydrogen (43), -- hybrid drive with fuel cell (electric engine) and
hydrogen (combustion engine)
hybrid-fuel-cell-hydrogen-external-battery (44), -- hybrid drive with fuel cell (electric
engine) and hydrogen (combustion engine) and external chargable battery (plug-in hybrid)
dual-fuel-lng-diesel (45), -- dual operation with LNG and diesel
electric-external (46), -- electric engine with external power supply
biogas (47), -- mixture of different gases produced by the breakdown of organic matter
bioDiesel (48), --  vegetable oil- or animal fat-based diesel fuel
bioPetrol (49), -- petrol fully or partly based on vegetable sources
bivalent-petrol-biogas (50), -- bivalent operating engine with petrol or biogas
combined-biogas-electric-engine (51), --combined operation of biogas and electric engine
other (52)
-- (53-255) are reserved for future CEN use
} (0..255)
```


2 Amendment to Annex A

Change

“The actual ASN.1 module is contained in the attached files "ISO 14906, (2018)EfcDsrcApplicationv6.asn" and "ISO 14906, (2018)EfcDsrcGenericv7.asn", which can be directly imported in a compiler.

NOTE 1 The above referenced files (i.e. “ISO 14906, (2018)EfcDsrcApplicationv6.asn“ and “ISO 14906, (2018) EfcDsrcGenericv7.asn“) are freely available for download via a hyperlink at www.itsstandards.eu/index.php/efc#EFCstandards and also at http://standards.iso.org/iso/14906/ed-3/en.

Table A.1 provides the SHA-256 cryptographic hash digests for the referenced files, offering a means to verify the integrity of the referenced files. The SHA-256 algorithm is specified in NIST 180-4.

Table A.1 — SHA-256 cryptographic hash digests

File Name	SHA-256 cryptographic hash digest
ISO 14906, (2018)EfcDsrcApplicationv6.asn	035AF844670B9105838851E6B3C7DCF72645695222CF47EC2D45845DD867B476
ISO 14906, (2018)EfcDsrcGenericv7.asn	9BE140C8036215E332C2C8448827E159EF4F9114B1F460376C3AFCD4AC36EE05

NOTE 2 Be aware that pasting the text of the file into one of the hash digest computation pages available on the web may result in a non-matching hash digest due to changes in the underlying coding.

to

“The actual ASN.1 module is contained in the attached files "ISO 14906, (2018)EfcDsrcApplicationv7.asn" and "ISO 14906, (2018)EfcDsrcGenericv8.asn", which can be directly imported in a compiler.

NOTE 1 The above referenced files (i.e. “ISO 14906, (2018)EfcDsrcApplicationv7.asn“ and “ISO 14906, (2018) EfcDsrcGenericv8.asn“) are freely available for download via a hyperlink at www.itsstandards.eu/index.php/efc#EFCstandards and also at http://standards.iso.org/iso/14906/ed-3/en.

Table A.1 provides the SHA-256 cryptographic hash digests for the referenced files, offering a means to verify the integrity of the referenced files. The SHA-256 algorithm is specified in NIST 180-4.

Table A.1 — SHA-256 cryptographic hash digests

File Name	SHA-256 cryptographic hash digest
ISO 14906, (2018)EfcDsrcApplicationv7.asn	6131d18bec6811d45cfcf2f651f74c346ec6b3ab9b010fd3fd4bb6c779b9afd6
ISO 14906, (2018)EfcDsrcGenericv8.asn	ac595ef367155081b1ed0faa0029174b215dea1ad2965776e2beeb3f4f398741

NOTE 2 Be aware that pasting the text of the file into one of the hash digest computation pages available on the web may result in a non-matching hash digest due to changes in the underlying coding.