



**INTERNATIONAL STANDARD ISO 14906:2011**  
**TECHNICAL CORRIGENDUM 1**

Published 2013-04-01

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

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

### **TECHNICAL CORRIGENDUM 1**

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

*RECTIFICATIF TECHNIQUE 1*

Technical Corrigendum 1 to ISO 14906:2011 was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*, in collaboration with Technical Committee CEN/TC 278, *Road transport and traffic telematics*.

---

*Page 45, Table 39*

In the "Information remarks" column, replace

'ISO 1176 Code ISO-M18 maximum design mass of vehicle combination'

with

'ISO 1176 Code ISO-M19 maximum authorized mass of vehicle combination'.

*Page 46, Table 39*

In the "VehicleSpecificCharacteristics" row and "Definition" column, replace

'Further vehicle characteristics. Each enumerated value has a specific meaning assigned. The meaning of some values are defined in this International Standard, others are reserved for future needs'

with

'Further vehicle characteristics. Each enumerated value has a specific meaning assigned. The meaning of some values are reserved for future CEN / ISO use (i.e. 1-50), whereas as others are reserved for private use (i.e. 51-255).'

*Page 46, Table 39*

In the "VehicleSpecificCharacteristics" row, delete the text in the "Informative remarks" column (i.e. delete 'Assignment of meaning to the unassigned enumerated values is subject to registration according to the registration procedure specified in EN 12834/ISO 15628.').

Page 47 , Table 39

Replace the ExhaustEmissionValues and DieselEmissionValues

<b>EFC Attribute</b>	<b>Data element</b>	<b>Definition</b>	<b>Type</b>	<b>Length in octet</b>	<b>Value range</b>	<b>Informative remarks</b>
<b>Exhaust EmissionValues</b>	EmissionCO	Exhaust emission of CO, according to vehicle registration documents, in 10 <sup>-3</sup> g/km or g/kWh.	INTEGER (0...32766)			If the emissions are measured directly on the engine test bed the value is declared in g/kWh
	EmissionHC	Exhaust emission of HC, according to vehicle registration documents, in 10 <sup>-3</sup> g/km or g/kWh.	INT 2	2	0...65535	If the emissions are measured directly on the engine test bed the value is declared in g/kWh
	EmissionNOX	Exhaust emission of NOX, according to vehicle registration documents, in 10 <sup>-3</sup> g/km or g/kWh.	INT 2	2	0...65535	If the emissions are measured directly on the engine test bed the value is declared in g/kWh
	EmissionHCNOX	Exhaust emission of HCNOX, according to vehicle registration documents, in 10 <sup>-3</sup> g/km or g/kWh.	INT 2	2	0...65535	If the emissions are measured directly on the engine test bed the value is declared in g/kWh
	Particulate	Particulates for diesel, according to vehicle registration documents, in 10 <sup>-3</sup> g/km or g/kWh.	INTEGER (0...32766)	2		If the emissions are measured directly on the engine test bed the value is declared in g/kWh
<b>DieselEmission Values</b>	AbsorptionCoeff	Corrected absorption coefficient for diesel, according to vehicle registration documents, in 10 <sup>-3</sup> m <sup>-1</sup> .	INT 2	2	0...65535	

with

EFC Attribute	Data element	Definition	Type	Length in octet	Value range	Informative remarks
<b>Exhaust EmissionValues</b>	UnitType	The unit type of the exhaust emissions of CO, HC, NOX and HCNOX, in mg/km or mg/kWh.	UnitType			If the emissions are measured directly on the engine test bed the value is declared in mg/kWh
	EmissionCO	Exhaust emission of CO, according to vehicle registration documents, expressed in the unit conveyed by UnitType.	INTEGER (0...32767)			
	EmissionHC	Exhaust emission of HC, according to vehicle registration documents, expressed in the unit conveyed by UnitType.	INT 2	2	0...65535	
	EmissionNOX	Exhaust emission of NOX, according to vehicle registration documents, expressed in the unit conveyed by UnitType.	INT 2	2	0...65535	
	EmissionHCNOX	Exhaust emission of HCNOX, according to vehicle registration documents expressed in the unit conveyed by UnitType.	INT 2	2	0...65535	
<b>DieselEmission Values</b>	Particulate	The unit type of the exhaust diesel emissions particulates, in mg/km or mg/kWh. The emission of particulates for diesel, according to vehicle registration documents, expressed in the unit conveyed by UnitType.	Particulate			If the emissions are measured directly on the engine test bed the value is declared in mg/kWh.
	AbsorptionCoeff	Corrected absorption coefficient for diesel, according to vehicle registration documents, in 10 <sup>-3</sup> m <sup>-1</sup> .	INT 2	2	0...65535	

Page 51, Annex A

Replace

```
'::= BEGIN
    IMPORTS CountryCode, CS5, IssuerIdentifier'
```

with

```
'::= BEGIN
    EXPORTS ALL;
    IMPORTS CountryCode, CS5, IssuerIdentifier'.
```

Page 54, Annex A

Replace

```
'-- (51..255) are reserved for future CEN use
} (0..255) -- vehicle shape x as defined in prENV/278/8/1/5 for silhouette'
```

with

```
'-- (1..50) are reserved for future CEN ISO use
-- (51..255) are reserved for private use
} (0..255)'.
```

Page 54, Annex A

Replace

```
'DieselEmissionValues ::= SEQUENCE {
    particulate SEQUENCE {
        unitType ENUMERATED {
                                g-km (0),
                                g-kWh (1)
                            },
        value INTEGER (0..32766)
    },
    absorptionCoeff Int2
}'
```

with

```
'DieselEmissionValues ::= SEQUENCE {
    particulate SEQUENCE {
        unitType UnitType,
        value INTEGER (0..32767)
    },
    absorptionCoeff Int2
}'
```

Pages 54-55, Annex A

Replace

```
'EnvironmentalCharacteristics ::= SEQUENCE {
  euroValue ENUMERATED {
    noEntry          (0),
    euro-1           (1),
    euro-2           (2),
    euro-3           (3),
    euro-4           (4),
    euro-5           (5),
    euro-6           (6),
    reservedForUse1  (7)
  }, -- 4 bits, EURO-Classes as defined in EC directive 88/77/EEC, annex 1
  -- and in 91/542/EEC, 96/1/EC, 1999/96/EC, 2001/27/EC
  copValue ENUMERATED {
    noEntry          (0),
    co2class1        (1), -- below 101 g/km
    co2class2        (2), -- 101 to 120 g/km
    co2class3        (3), -- 121 to 140 g/km
    co2class4        (4), -- 141 to 160 g/km
    co2class5        (5), -- 161 to 200 g/km
    co2class6        (6), -- 201 to 250 g/km
    co2class7        (7) -- above 250 g/km
  } -- 4 bits, reserved for carbon dioxide pollution values as defined in
  -- EC directive 2003/127/EC
}
```

with

```
'EnvironmentalCharacteristics ::= SEQUENCE {
  euroValue          EuroValue,
  copValue           CopValue
}
```

```
EuroValue ::= ENUMERATED {
  noEntry          (0),
  euro-1           (1),
  euro-2           (2),
  euro-3           (3),
  euro-4           (4),
  euro-5           (5),
  euro-6           (6),
  reservedForUse1  (7),
  reservedForUse2  (8),
  reservedForUse3  (9),
  reservedForUse4  (10),
  reservedForUse5  (11),
  reservedForUse6  (12),
  reservedForUse7  (13),
  reservedForUse8  (14),
  reservedForUse9  (15)
}, -- 4 bits, EURO-Classes as defined in EC directive 88/77/EEC, annex 1
-- and in 91/542/EEC, 96/1/EC, 1999/96/EC, 2001/27/EC
```

```
CopValue ::= ENUMERATED {
  noEntry          (0),
  co2class1        (1), -- below 101 g/km
  co2class2        (2), -- 101 to 120 g/km
  co2class3        (3), -- 121 to 140 g/km
  co2class4        (4), -- 141 to 160 g/km
  co2class5        (5), -- 161 to 200 g/km
  co2class6        (6), -- 201 to 250 g/km
  co2class7        (7), -- above 250 g/km
  reservedforUse   (8) -- reserved for future CEN and ISO use
} -- 4 bits, reserved for carbon dioxide pollution values as defined in
-- EC directive 2003/127/EC'
```

Page 55, Annex A

Replace

```
'ExhaustEmissionValues ::= SEQUENCE {
    unitType ENUMERATED {
        g-km (0),
        g-kWh (1)
    },
    emissionCO          INTEGER (0..32766),
    emissionHC          Int2,
    emissionNOX         Int2,
    emissionHCNOX      Int2
}
```

with

```
'ExhaustEmissionValues ::= SEQUENCE {
    unitType          UnitType,
    emissionCO        INTEGER (0.. 32767),
    emissionHC        Int2,
    emissionNOX       Int2,
    emissionHCNOX     Int2
}'.
```

Page 59, Annex A

Replace

```
'paymentAuthenticatorNotAccepted (21)'
```

with

```
'paymentAuthenticatorNotAccepted (21),'
```

i.e. add ',' at the end of the line.

Page 59, Annex A

Replace

```
'PaymentMeansNotCorrect (23),'
```

with

```
'paymentMeansNotCorrect (23),'
```

i.e. start with a small character.

Page 59, Annex A

Replace

```
'PaymentMeansRestrictionsNotFulfilled (25),
-- (25-255) are reserved for future CEN use'
```

with

## ISO 14906:2011/Cor.1:2013(E)

```
'paymentMeansRestrictionsNotFulfilled (25)'  
-- (26-255) are reserved for future CEN/ISO use'
```

i.e. start with a small character, delete ',' at the end of the first line and correct the value range reserved for future CEN/ISO use.

*Page 60, between, TrailerLicencePlateNumber and ValidityOfContract*

Add

```
'UnitType ENUMERATED {  
    mg-km (0),  
    mg-kWh (1)  
}'.
```

*Page 63, Annex A*

Replace

```
'octetstring [2] OCTET STRING (SIZE (0..127), ...).'
```

with

```
'octetstring [2] OCTET STRING (SIZE (0..127,...)).'
```

*Page 111*

Replace

```
'Mapping table between EFC Vehicledata attribute and European registration certificate'
```

with

```
'Mapping table between EFC Vehicle data attribute and European registration certificate'
```

*Page 112, Annex F*

Replace, for V.1-V.5

```
'(in g/km or g/kWh)'
```

with

```
'(in mg/km or mg/kWh)'
```