



Information technology — Personal identification — ISO-compliant driving licence —

Part 2: Machine-readable technologies

TECHNICAL CORRIGENDUM 1

Technologies de l'information — Identification des personnes — Permis de conduire conforme à l'ISO

Partie 2: Technologies lisibles par une machine

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO/IEC 18013-2:2008 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and personal identification*.

Page 9, Table 1

In the row for Issuing authority, in the Example column, replace “HOKKAIDO PREFECTURAL POLICE ASAHIKAWA AREA PUBLIC SAFETY COMMISSION” with “HOKKAIDO PREFECTURAL PUBLIC SAFETY COMMISSION”.

Page 10, Table 2

In the row for Hair colour, in the Example column, replace “BLD” with “BAL”.

Page 12, Table 6

In the row for BIR creator, in the Example column, replace “Hokkaido Prefectural Police Asahikawa Area Public Safety Commission” with “Hokkaido Prefectural Public Safety Commission”.

Page 16, Table A.1

Replace the existing Table A.1:

Field	Fixed or Variable	Field format/length/type (before encoding)
Vehicle category code	V	2AN
Date of issue	F	8N
Date of expiry	F	8N
Code	V	5ANS
Sign	V	2S
Value	V	N

with the following table:

Field	Fixed or Variable	Field format/length/type (before encoding)
Vehicle category code	V	AN
Date of issue	F	8N
Date of expiry	F	8N
Code	V	ANS
Sign	V	S
Value	V	ANS

Page 17, A.4

In the example, in the table, in the row for Value, in the Encoding method column, replace “BCD” with “As per ISO/IEC 8859-1”.

Page 17, A.5.1

Delete the second sentence: “Each code is of the format nn where “n” is a numeric.”

Page 30, B.6.1

In EXAMPLE 1, in the “Assume the following” section, replace

“Issuing authority = HOKKAIDO PREFECTURAL POLICE ASAHIKAWA AREA PUBLIC SAFETY COMMISSION”

with

“Issuing authority = HOKKAIDO PREFECTURAL PUBLIC SAFETY COMMISSION”

Page 30, B.6.1

In EXAMPLE 1, replace the following encoded representation of the data group:

```
"[header]×Smithe-Williams÷Alexander George Thomas÷'19 70 03 01'÷'20 02 09 15'÷'20 07 09 30'÷JPN÷HOKKAIDO PREFECTURAL POLICE ASAHIKAWA AREA PUBLIC SAFETY COMMISSION÷A290654395164273X÷B;19910901;20350301;;;×[next data group]"
```

with the following:

```
"[header]×Smithe-Williams÷Alexander George Thomas÷'19 70 03 01'÷'20 02 09 15'÷'20 07 09 30'÷JPN÷HOKKAIDO PREFECTURAL PUBLIC SAFETY COMMISSION÷A290654395164273X÷B;19910901;20350301;;;×[next data group]"
```

Page 31, B.6.1

In EXAMPLE 2, replace the following encoded representation of the data group:

```
"[header] × Smithe-Williams ÷ Alexander George Thomas ÷ '19 70 03 01' ÷ '20 02 09 15' ÷ '20 07 09 30' ÷ JPN ÷ HOKKAIDO PREFECTURAL POLICE ASAHIKAWA AREA PUBLIC SAFETY COMMISSION ÷ A290654395164273X ÷ A1;'20 02 09 15';'20 17 09 30';S03;<='32 35 30';C1;;;S01;<='38 30 30 30';C1;;;78;;;ALL;;;01;; × [next data group]"
```

with the following:

```
"[header] × Smithe-Williams ÷ Alexander George Thomas ÷ '19 70 03 01' ÷ '20 02 09 15' ÷ '20 07 09 30' ÷ JPN ÷ HOKKAIDO PREFECTURAL PUBLIC SAFETY COMMISSION ÷ A290654395164273X ÷ A1;'20 02 09 15';'20 17 09 30';S03;<='32 35 30';C1;;;S01;<='38 30 30 30';C1;;;78;;;ALL;;;01;; × [next data group]"
```

Page 32, B.6.3

In the 2nd paragraph, replace "...encoded as a 4 byte binary number." with "...encoded as a 3 byte BCD number."

Page 32, B.6.3

In the example, replace

```
"[previous data group] × 123456789B ÷ '01' ÷ '00 09 B4 60' × [next data group]"
```

with

```
"[previous data group] × 123456789B ÷ '01' ÷ '63 60 00' × [next data group]"
```

Page 43, Table C.2

In the row for EF.DG11, in the Tag column, replace footnote reference "a" with value "6D". In addition, replace the last two rows of the table:

NOTE	Selected tag assignments are aligned with ISO/IEC 7501-1 (ICAO Doc 9303-1).
^a	The Tag for EF.DG11 is to be assigned by the issuing authority in line with (and not in conflict with) ISO/IEC 7501-1 (ICAO Doc 9303-1). In case ISO/IEC 7501-1 does not provide any guidance, the tag for EF.DG11 is to be assigned by the issuing authority according to ISO/IEC 7816 Parts 4 and 6. Tags already defined and assigned to other data groups in either this International Standard or in ISO/IEC 18013-3 shall not be re-used.

with the following row:

NOTE Selected tag assignments are aligned with ISO/IEC 7501-1 (ICAO Doc 9303-1). For example, Tag '75' identifies facial biometric irrespective of the DG in which it appears.

Page 44, Figure C.1

Replace this block for DG11:

EF.DG11
Optional domestic data
Short EF identifier = '0B'

with this block:

EF.DG11
Optional domestic data
Tag = '6D'
Short EF identifier = '0B'

Page 45, C.6.1

In the Example, replace:

'60' '0C'
'5F01' '02' 0100
'5C' '05' '61' '6B' '6C' '65' '67'

with

'60' '0C'
'5F 01' '02' '01 00'
'5C' '05' '61' '6B' '6C' '65' '67'

Page 46, Table C.5

In the row for Issuing authority, in the Example column, replace "HOKKAIDO PREFECTURAL POLICE ASAHIKAWA AREA PUBLIC SAFETY COMMISSION" with "HOKKAIDO PREFECTURAL PUBLIC SAFETY COMMISSION".

Page 47, C.6.2.2

Replace the coded information and subsequent explanation of EXAMPLE 1 with the following:

This will be coded as follows (spaces, underlining, italics and colours are included for legibility only, and are not encoded):

'7F63' '4C'
'02' '01' '04'
'87' '17' A1;'19 90 11 23';'20 13 06 15';S03;<=';32 35 30'

'87' 17 C1;'20 03 05 31';'20 13 06 15';S01;<;'38 30 30 30'
 '87' 09 C1;;;78;;
 '87' 0A ALL;;;01;;

where

'7F63' = vehicle category/restrictions/conditions tag
 '4C' = length of the data following the tag (76_{10})
 '02' 01 '04' = four data objects are contained in the tag, with the number of objects encoded using BCD
 '87'...35 30 = first category of vehicle/restriction/condition data object; licensed for category A1 vehicles not exceeding 250 cm³ from 23 November 1990 to 15 June 2013
 '87'...30 30 = second category of vehicle/restriction/condition data object; category C1 vehicles of less than 8 000 kg valid from 31 May 2003 to 15 June 2013
 '87'...78;; = third category of vehicle/restriction/condition data object; category C1 vehicles restricted to automatic transmission
 '87'...01;; = fourth category of vehicle/restriction/condition data object; driver (i.e. all categories) requires sight correction and/or protection

Page 47, C.6.2.2

Replace the coded information and subsequent explanation of EXAMPLE 2 with the following:

'61' 81 9B
 '5F1F' 8177 '0F' Smithe-Williams 17 Alexander George Thomas '19 70 03 01 20 02 09 15 20 07 09 30'
 JPN 2D HOKKAIDO PREFECTURAL PUBLIC SAFETY COMMISSION 11 A290654395164273X
 '7F63' 1D
 '02' 01 '01'
 '87' 18 C1;'20 00 03 15';'20 10 03 14';S01;<='38 30 30 30'

where

'61' = Tag for Data Group 1
 '81 9B' = Overall length of DG1 data (155_{10} = '81 9B')
 '5F 1F' = Tag for mandatory demographic data
 '81 77' = Overall length of demographic data (119_{10} = '81 77')
 '0F' = Length of variable length family name(s) (15_{10} = '0F')
 Sm...ams = Value of family name(s) field
 '17' = Length of variable length given name(s) (23_{10} = '17')
 Alex...mas = Value of given name(s) field
 '19 70 03 01' = Date of Birth field (BCD encoded)
 '20 02 09 15' = Date of Issue field (BCD encoded)
 '20 07 09 30' = Date of Expiry field (BCD encoded)
 JPN = Issuing Country field
 '2D' = Length of variable length Issuing Authority field (45_{10} = '2D')
 HOK...ION = Issuing Authority field
 '11' = Length of variable length licence number (17_{10} = '11')
 A290...X = Value of licence number field
 '7F 63' = Tag for categories/ restrictions data object
 '1D' = Overall length of categories/ restrictions (29_{10} = '1D')
 '02' = Tag for integer
 '01' = Length of number of entries (1_{10} = '01')
 '01' = Number of entries (BCD encoded)
 '87' = Tag for first entry

'18' = Length of first entry ($24_{10} = '18'$)
 C1; = Vehicle category C1 field and delimiter
 '20 00 03 15'; = Date of issue field (BCD encoded) and delimiter
 '20 10 03 14'; = Date of expiry field (BCD encoded) and delimiter
 S01...'30 30' = Limited to vehicles with an authorised mass not exceeding 8 000 kg

The fully encoded version of tag '**5F 1F**' is as follows (spaces, underlining, italics and colours are included for legibility only, and are not encoded):

'**5F 1F**' '81 77' '0F' '53 6D 69 74 68 65 2D 57 69 6C 6C 69 61 6D 73' '17' '41 6C 65 78 61 6E 64 65 72 20 47 65 6F 72 67 65 20 54 68 6F 6D 61 73' '19 70 03 01 20 02 09 15 20 07 09 30' '4A 50 4E' '2D' '48 4F 4B 4B 41 49 44 4F 20 50 52 45 46 45 43 54 55 52 41 4C 20 53 41 46 45 54 59 20 50 55 42 4C 49 43 20 43 4F 4D 4D 49 53 53 49 4F 4E' '11' '41 32 39 30 36 35 34 33 39 35 31 36 34 32 37 33 58'

The fully encoded version of tag '**7F 63**' is as follows (spaces, underlining, italics and colours are included for legibility only, and are not encoded):

'**7F 63**' '1D' '02' '01' '01' '**87**' '18' '43 31 3B 20 00 03 15 3B 20 10 03 14 3B 53 30 31 3B 3C 3D 3B 38 30 30 30'

Page 49, C.6.3

Replace the example with the following:

EXAMPLE

The example data noted in Table C.7 can be coded as follows (spaces, underlining, italics and colours are included for legibility only, and are not encoded):

'**6B**' '8180'
 '**5C**' '0E' '5F 35 5F 64 5F 65 5F 66 5F 67 5F 11 5F 42'
 '**5F35**' '01' 1
 '**5F64**' '02' 172
 '**5F65**' '02' 082
 '**5F66**' '03' BLU
 '**5F67**' '03' BAL
 '**5F11**' '19' Frozen Foot;Minnesota;USA
 '**5F42**' '45' 471 Monica Road;201 Delta Building;Lynnwood;Gauteng;0186;South Africa

where

'**6B**' = Tag for Data Group 2
 '8180' = Overall length of data group (128_{10})
 '**5C**' = Tag for tag list
 '0E' = Overall length of tag list
 '5F 35...5F 42' = List of tags of data fields included in this data group
 '**5F35**' '01' 1 = Tag, length (of BCD encoding), gender (male). The gender will be encoded as '01'.
 '**5F64**' '02' 172 = Tag, length (of BCD encoding), height of 172 cm. The height will be encoded as '01 72'.
 '**5F65**' '02' 082 = Tag, length (of BCD encoding), weight of 82 kg. The weight will be encoded as '00 82'.
 '**5F66**' '03' BLU = Tag, length, eye colour blue. The eye colour will be encoded (using ISO/IEC 8859-1) as '42 4C 55'.
 '**5F67**' '03' BAL = Tag, length, hair colour bald. The hair colour will be encoded (using ISO/IEC 8859-1) as '42 4C 44'.

'5F11' '19' 'Fro...USA' = Tag, length (25₁₀), place of birth. The place of birth will be encoded (using ISO/IEC 8859-1) as '46 72 6F 7A 65 6E 20 46 6F 6F 74 3B 4D 69 6E 6E 65 73 6F 74 61 3B 55 53 41'.

'5F42' '45' '471....rica' = Tag, length (69₁₀), normal place of residence. The normal place of residence will be encoded (using ISO/IEC 8859-1) as '34 37 31 20 4D 6F 6E 69 63 61 20 52 6F 61 64 3B 32 30 31 20 44 65 6C 74 61 20 42 75 69 6C 64 69 6E 67 3B 4C 79 6E 6E 77 6F 6F 64 3B 47 61 75 74 65 6E 67 3B 30 31 38 36 3B 53 6F 75 74 68 20 41 66 72 69 63 61'.

The information will be fully encoded as follows (spaces, underlining, italics and colours are included for legibility only, and are not encoded):

'6B' '818E'
 '5C' '0E' '5F 35 5F 64 5F 65 5F 66 5F 67 5F 11 5F 42'
 '5F35' '01' '01'
 '5F64' '02' '01 72'
 '5F65' '02' '00 82'
 '5F66' '03' '42 4C 55'
 '5F67' '03' '42 4C 44'
 '5F11' '19' '46 72 6F 7A 65 6E 20 46 6F 6F 74 3B 4D 69 6E 6E 65 73 6F 74 61 3B 55 53 41'
 '5F42' '45' '34 37 31 20 4D 6F 6E 69 63 61 20 52 6F 61 64 3B 32 30 31 20 44 65 6C 74 61 20 42 75 69 6C 64 69 6E 67 3B 4C 79 6E 6E 77 6F 6F 64 3B 47 61 75 74 65 6E 67 3B 30 31 38 36 3B 53 6F 75 74 68 20 41 66 72 69 63 61'

Page 50, Table C.8

In the row for 5F68, in the Length column, replace "19" with "X".

Page 51, C.6.4

Replace the content of the example with the following:

'6C' '26'
 '5C' '09' '5F 68 5F 69 5F 6D 5F 6A'
 '5F68' '0A' 123456789B
 '5F69' '01' 01
 '5F6D' '01' 01
 '5F6A' '03' 636000

where

'6C'	=	Tag for Data Group 3
'26'	=	Overall length of data group (38 ₁₀)
'5C'	=	Tag list
'09'	=	Overall length of tag list
'5F 68...5F 6A'	=	List of tags of data fields included in this data group
'5F68' '0A' 123456789B	=	Tag, length, administrative number. The administrative number will be encoded (using ISO/IEC 8859-1) as '31 32 33 34 35 36 37 38 39 41'.
'5F69' '01' 01	=	Tag, length (of BCD encoding), document discriminator of 01. The document discriminator will be encoded as '01'.
'5F6D' '01' 01	=	Tag, length (of BCD encoding), data discriminator of 01. The data discriminator will be encoded as '01'.
'5F6A' '03' 636000	=	Tag, length (of BCD encoding), issuer ID number. The issuer ID number will be encoded (using ISO/IEC 8859-1) as '36 33 36 30 30 30'.

Page 51, C.6.5

In the heading, replace “Tag = ‘6C’” with “Tag = ‘65’”

Page 55, C.6.7

Replace the content of the example with the following:

Two biometric templates as follows:

Template 1: Facial biometric, created 15 December 2003 at 5:35:30pm, valid from 15 December 2003 through 14 December 2008, product owner number = 1, product type number = 130, format owner number = 257, format type number = 8, biometric data block length = 12634 bytes.

Template 2: Facial biometric, created 7 January 1999 at 10:27:44am, valid from 7 January 1999 through 6 January 2004, product owner number = 1, product type number = 130, format owner number = 271, format type number = 3, biometric data block length = 12711 bytes

Then,

```
'75' '82 63 71'
    '7F 61' '82 63 6C'
        '02' '01' '02'
        '7F 60' '82 31 89'
            'A1' '28'
                '80' '02' '01 01'
                '81' '01' '02'
                '83' '07' '20 03 12 15 17 35 30'
                '85' '08' '20 03 12 15 20 08 12 14'
                '86' '04' '00 01 00 82'
                '87' '02' '01 01'
                '88' '02' '00 08'
                '5F 2E' '82 31 5A' '.....12634 byte Biometric Data Block....'
'7F 60' '82 31 D6'
    'A1' '28'
        '80' '02' '01 01'
        '81' '01' '02'
        '83' '07' '19 99 01 07 10 27 44'
        '85' '08' '19 99 01 07 20 04 01 06'
        '86' '04' '00 01 00 82'
        '87' '02' '01 0F'
        '88' '02' '00 03'
        '5F 2E' '82 31 A7' '.....12711 byte Biometric Data Block....'
```

where

'75'	= Tag for DG6, Optional facial biometric
'82 63 71'	= Overall length of data group ($25457_{10} = '82\ 63\ 71'$)
'7F 61'	= Tag for biometric group template
'82 63 6C'	= Overall length of the biometric group template ($25452_{10} = '82\ 63\ 6C'$)
'02' '01' '02'	= Number of entries (BCD encoded)
'7F 60'	= Tag for biometric template
'82 31 89'	= Overall length of biometric template ($12681_{10} = '82\ 31\ 89'$)
'A1' '28'	= Biometric header template tag and length ($40_{10} = '28'$)

'80' '02' '01 01'	= Patron version
'81' '01' '02'	= Facial biometric type
'83' '07' 20031215173530	= Date and time of creation, 15 December 2003 at 5:35:30pm. This will be encoded as '20 03 12 15 17 35 30' (BCD encoded).
'85' '08' 2003121520081214	= Validity period, from 15 December 2003 through 14 December 2008. This will be encoded as '20 03 12 15 20 08 12 14' (BDC encoded).
'86' '04' '00 01 00 82'	= Product owner and type (130 ₁₀ = '82')
'87' '02' '01 01'	= Format owner (257 ₁₀ = '01 01', registered value for ISO/IEC JTC 1 SC 37-Biometrics)
'88' '02' '00 08'	= Format type (8 ₁₀ = '00 08', registered value for face-image conforming to ISO/IEC 19794-5)
'5F 2E' '82 31 5A'	= Length of biometric data block (12634 ₁₀ = '82 31 5A')
..Biometric..	= Biometric data block encoded per above defined owner and format
'7F 60'	= Tag for biometric template
'82 31 D6'	= Overall length of biometric template (12758 ₁₀ = '82 31 D6')
'A1' '28'	= Biometric header template tag and length (40 ₁₀ = '28')
'80' '02' '01 01'	= Patron version
'81' '01' '02'	= Facial biometric type
'83' '07' 19990107102744	= Date and time of creation 7 January 1999 at 10:27:44am. This will be encoded as '19 99 01 07 10 27 44' (BCD encoded).
'85' '08' 1999010720040106	= Validity period, from 7 January 1999 through 6 January 2004. This will be encoded as '19 99 01 07 20 04 01 06' (BDC encoded).
'86' '04' '00 01 00 82'	= Product owner and type (130 ₁₀ = '82')
'87' '02' '01 0F'	= Format owner (271 ₁₀ = '01 0F')
'88' '02' '00 03'	= Format type (3 ₁₀ = '00'03')
'5F 2E' '82 31 A7'	= Length of biometric data block (12711 ₁₀ = '82 31 A7')
..Biometric..	= Biometric data block encoded per above defined owner and format

The information will be fully encoded as follows (spaces, underlining, italics and colours are included for legibility only, and are not encoded):

'75 82 63 71 7F 61 82 63 6C 02 01 02 7F 60 82 31 89 A1 28 80 02 01 01 81 01 02 83 07 20 03 12 15 17 35 30 85 08 20 03 12 15 20 08 12 14 86 04 00 01 00 82 87 02 01 01 88 02 00 08 5F 2E 82 31 5A <12634 byte Biometric Data Block> 7F 60 82 31 D6 A1 28 80 02 01 01 81 01 02 83 07 19 99 01 07 10 27 44 85 08 19 99 01 07 20 04 01 06 86 04 00 01 00 82 87 02 01 0F 88 02 00 03 5F 2E 82 31 A7 <12711 byte Biometric Data Block>'

Page 57, C.6.8

Replace the content of the example with the following:

Finger biometric (right hand thumb), created 15 December 2003 at 5:36:12pm, valid from 15 December 2003 through 14 December 2008, product owner number = 13, product type number = 99, format owner number = 257, format type number = 7, biometric data block length = 834 bytes

Then,

'63' '82 03 81'
 '7F 61' '82 03 7C'
 '02' '01' '01'
 '7F 60' '82 03 74'
 'A1' '2B'
 '80' '02' '01 01'
 '81' '01' '08'
 '82' '01' '05'
 '83' '07' '20 03 12 15 17 36 12'

'85' '08' '20 03 12 15 20 08 12 14'
 '86' '04' '00 0D 00 63'
 '87' '02' '01 01'
 '88' '02' '00 07'
 '5F 2E' '82 03 42' '.....834 byte Biometric Data Block....'

where

'63'	= Tag for DG7, Optional finger biometric
'82 03 81'	= Overall length of data group (897 ₁₀ = '82 03 81')
'7F 61'	= Tag for biometric group template
'82 03 7C'	= Overall length of the biometric group (892 ₁₀ = '82 03 7C')
'02' '01' '01'	= Number of entries
'7F 60'	= Tag for biometric template
'82 03 74'	= Overall length of biometric template (884 ₁₀ = '82 03 74')
'A1' '2B'	= Biometric header template tag and length (43 ₁₀ = '2F')
'80' '02' '01 01'	= Patron version
'81' '01' '08'	= Finger biometric type
'82' '01' '05'	= Biometric subtype: right hand thumb
'83' '07' 20031215173612	= Date and time of creation, 15 December 2003 5:36:12pm. This will be encoded as '20 03 12 15 17 36 12' (BCD encoded)
'85' '08' 2003121520081214	= Validity period, from 15 December 2003 through 14 December 2008. This will be encoded as '20 03 12 15 20 08 12 14' (BDC encoded).
'86' '04' '00 0D 00 63'	= Product owner and type (13 ₁₀ = '0D', 99 ₁₀ = '63')
'87' '02' '01 01'	= Format owner (257 ₁₀ = '01 01', registered value for ISO/IEC JTC 1 SC 37-Biometrics)
'88' '02' '00 07'	= Format type (7 ₁₀ = '00 07', registered value for finger-image conforming to ISO/IEC 19794-4)
'5F 2E' '82 03 42'	= Length of biometric data block (834 ₁₀ = '82 03 42')
..Biometric..	= Biometric data block encoded per above defined owner and format

The information will be fully encoded as follows (spaces, underlining, italics and colours are included for legibility only, and are not encoded):

'63' '82 03 81' '7F 61' '82 03 7C' '02 01' 01 '7F 60' '82 03 74' 'A1' '2B' '80' '02' 01 01 '81' '01' 08 '82' '01' 05 '83' '07' 20 03 12 15 17 36 12 '85' '08' 20 03 12 15 20 08 12 14 '86' '04' 00 0D 00 63 '87' '02' 01 01 '88' '02' 00 07 '5F 2E' '82 03 42' <834 byte Biometric Data Block>'

Page 73, Table D.4

In the row for Issuing authority, in the Abstract value column, replace

"HOKKAIDO PREFECTURAL POLICE ASAHIKAWA AREA PUBLIC SAFETY COMMISSION"

with

"HOKKAIDO PREFECTURAL PUBLIC SAFETY COMMISSION".

Page 74, Table D.5

Replace

1426	92 05
67	43 00 00 00
HOKKAIDO PREFECTURAL POLICE ASAHIKAWA AREA PUBLIC SAFETY COMMISSION	48 4F 4B 4B 41 49 44 4F 20 50 52 45 46 45 43 54 55 52 41 4C 20 50 4F 4C 49 43 45 20 41 53 41 48 49 4B 41 57 41 20 41 52 45 41 20 50 55 42 4C 49 43 20 53 41 46 45 54 59 20 43 4F 4D 4D 49 53 53 49 4F 4E

with

1426	92 05
45	2D 00 00 00
HOKKAIDO PREFECTURAL PUBLIC SAFETY COMMISSION	48 4F 4B 4B 41 49 44 4F 20 50 52 45 46 45 43 54 55 52 41 4C 20 50 55 42 4C 49 43 20 53 41 46 45 54 59 20 43 4F 4D 4D 49 53 53 49 4F 4E