INTERNATIONAL STANDARD

ISO/IEC 18013-1

Second edition
2018-08

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

Part 1: Physical characteristics and basic data set

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

Partie 1: Caractéristiques physiques et jeu de données de base

Reference number
ISO/IEC 18013-1:2018(E)

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

Contents

Page

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

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 document 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 and IEC 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 on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by ISO/IEC JTC 1, *Information technology*, SC 17, *Cards and personal identification*.

This second edition cancels and replaces the first edition (ISO/IEC 18013-1:2005), which has been technically revised.

The most significant changes are the following:

— Following the revision of ISO/IEC 18013-3, magnetic stripe and optical memory machine readable technologies are no longer supported by this document.

— The vehicle categories in respect of which driving licence may be issued have been updated to incorporate the contemplated amendments to the UN Conventions.

— The document security features have been restructured and grouped in accordance with the nature of the features in respect of the card body, security design, inks/pigments and protection of personalised data. The minimum number of mandatory and optional security features to be included in the IDL from each of the groups is specified in respect of each type of fraud and security level.

— The content of the IDL Booklet has been revised in accordance with the contemplated amendments to the UN Conventions.

A list of all the parts in the ISO/IEC 18013 series can be found on the ISO website.

0 Introduction

0.1 General

This document prescribes requirements for an ISO-compliant driving licence (IDL). The intent of the document is to allow the issuance of one document to serve the purpose of both a domestic driving permit (DDP) and an international driving permit (IDP).

Issuing authorities issuing domestic driving licences (DDLs) that do not conform to this document can benefit from using parts of the document for their own domestic purpose. These issuing authorities should continue to issue a second document that follows the requirements of the DDP and IDP for international use.

0.2 Definition, function and requirements of International Driving Permit (IDP)

The United Nation Conventions on Road Traffic of 1949 Geneva and 1968 Vienna are the responsibility of the Secretary General at the United Nations Headquarters, New York. The maintenance of the 1968 Convention has been assigned to UN/ECE-Transport Division, Geneva, Switzerland. The 1949 Convention is not being maintained and it continues to exist due to the fact that certain countries who are signatories to the 1949 Convention have not acceded or ratified the 1968 Convention. The ultimate goal of the Conventions is road safety. The Conventions prescribe provisions for both a DDP and an IDP.

The IDP serves as a means of mutual recognition in that it is issued by the holder's home country licensing authority requesting another country who has ratified the Conventions to allow the holder the permission to operate a motor vehicle of authorized categories under specific conditions/restrictions. The IDP is essentially a translation of the DDP except in a common worldwide-recognized standardized format for global recognition and acceptance as specified in the Conventions. The IDP also makes provision for a state to disqualify the holder of an IDP from driving in that country by recording such in the designated area.

However, following the amendment of Clause 2 of Article 41 of the 1968 Convention on 29 March 2011 that the IDP only be recognized if accompanied by the DDP and that the DDP be recognised by all Contracting Parties, the IDP is rendered as a translation of the DDP only by the 1968 Convention. Furthermore, the 1968 Convention places all confidence in the integrity of the DDP, which according to Annex 6 shall take the form of a document and may be made of plastic or paper, without detailing any minimum requirements to protect the integrity of the document. Hence the DDP will become the focus of the attention of forgers and criminal activity. In the case of many countries that issue a DDP which is not in conformance with this document, such DDP will not be able to withstand the test of time.

0.3 Harmonisation and interoperability

The above general definition of a driving licence implies a human-readable document with the following properties:

— The document contains sufficient information for the identification of the licence holder.

— The document conveys the driving privileges of the licence holder in a standardised manner for consistent interpretation.

— The document is difficult to counterfeit.

— The document is secure to resist alteration.

In today's worldwide freedom of movement, modern driving licence systems impose additional requirements with the advent and need for machine-assisted storage, retrieval, reading and verification technologies for facilitation of data protection and secure communication that the Conventions have not addressed.

To achieve maximum global harmonisation and interoperability, standards are required to provide common platforms for visual human-readable evidence as well as for machine-assisted storage,

retrieval, reading and verification by the use of ISO data storage technologies incorporated into the driving licence document.

0.4 Current limitations of International Driving Permit

The problems and concerns with the current IDP that have been reported include:

— Easily copied, altered, or simulated and difficult for law enforcement authorities to detect fraudulent licences from genuine documents.

— Many non-government IDP issuing authorities do not query their respective government motor vehicle agencies to establish if the DDP presented is still valid and still current.

— There is no register/directory of national motor vehicle agency addresses for the inquiry and exchange of information among the agencies to verify the validity of a presented IDP.

— Does not incorporate the ISO machine-assisted data storage technologies.

— Suspension or cancellation of domestic driving licence (DDL) or domestic driving permit (DDP) *should* result in an automatic suspension or cancellation of the IDP; however, the current system does not facilitate that.

— The IDP holder may circumvent disqualifications entered on their original IDP by obtaining a new IDP.

— Validity of the IDP is currently limited to a maximum of 1 to 3 years, depending on the UN Convention followed.

0.5 Replacement of International Driving Permit with ISO-compliant Driving Licence (IDL)

At one time, the Conventions contained specifications in regard to a mandatory "model" data element set (particulars) and a mandatory design layout of defined dimensions for both DDP and IDP. Subsequently, the 1968 Convention's mandatory requirement for the defined design layout of the DDP was rescinded, allowing contracting parties to produce the DDP in either paper or plastic and in the case of plastic in the preferred format of an ISO ID-1 size card. Furthermore, the 1968 Convention requires all contracting parties to recognise any DDP conforming to the provisions of Annex 6, yet it does not prescribe the minimum properties of the document to ensure that the integrity of the DDP can be maintained.

Since the March 2011 amendment of the 1968 Convention effectively integrated the two documents (DDP and IDP) into a single document, this document provides for the following minimum requirements:

— Layout and integrity properties of the DDP in the dimensions of an ISO ID-1 size card, allowing the use of ISO machine-readable technologies at the option of motor vehicle authorities in the contracting parties.

— Layout and dimensions of the paper document for the IDP translation of the DDP inclusive of the language provisions of Annex 7 of the 1968 Convention.

Compliance with this document is at the discretion of the issuing authority.

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

Part 1:
Physical characteristics and basic data set

1 Scope

This document establishes guidelines for the design format and data content of an ISO-compliant driving licence (IDL) in regard to both visual human-readable features and ISO machine-readable technologies. It creates a common basis for international use and mutual recognition of the IDL without impeding individual national/community/regional motor vehicle authorities in taking care of their specific needs.

The design approach of the IDL ISO ID-1 size card is to establish a secure domestic driving permit (DDP) for both human verification and machine readability and accompanying booklet with sleeve insert pocket for international use instead of the international driving permit (IDP) paper document (see Annex G).

The basic document design premises include:

— A minimum common mandatory data element set.

— A common layout for ease of recognition.

— Minimum security requirements for both human and machine verification.

— Interoperability of the machine-readable content.

At the discretion of national/community/regional motor vehicle authorities it allows for:

— Inclusion of supplementary/optional data elements to meet the needs of specific national/community/regional requirements apart from the minimum common mandatory data element set.

— Additional document physical security elements at the option of national/community/regional authorities, and facilitates international procurements.

— Incorporation of ISO/IEC JTC1/SC17 machine-readable technologies including integrated circuit with contacts and contactless integrated circuit technology, and ISO/IEC JTC1/SC31 1-dimensional / 2-dimensional bar codes, at the option of national/community/regional authorities.

— Incorporation of current and future technologies (including biometrics, cryptography, data compression) at the option of national/community/regional authorities.

A major benefit of these design premises is that a single card may serve a dual purpose of both a national/community/regional licence as well as an internationally recognized licence. Therefore, one card, in most cases, can replace the need for two documents. Alternatively, those countries that choose to maintain their individual domestic design or not to use Latin characters on their domestic driving licence for example can issue a second card with or without ISO machine-readable technologies. This second card can serve as DDP to be used with the accompanying booklet with sleeve insert pocket for international use instead of the current IDP paper document.

This new IDL design yields a document that:

— Is more secure from counterfeiting and alteration than the previous DDP and IDP documents.

— Allows authorities to verify the authenticity of the document.

— Integrates the personal data into a secure ID-1 size medium.

— Allows a more reliable identification of the licence holder.

— Allows for machine-readable technologies.

— Facilitates information exchange and mutual recognition among motor vehicle authorities.

— Allows the IDL to serve simultaneously as a DDP and IDP when accompanied by the booklet.

Issuing authorities may introduce other functions to an IDL provided that it does not interfere with the driving licence function and the requirements in this document are not compromised.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 7810, *Identification cards — Physical characteristics*

ISO/IEC 19794-5:2011, *Information Technology — Biometric Interchange Formats — Part 5: Face Image Data, Annex A, B and C*

European Commission Directive 2006/126/EC of 20 December 2006 O.J. EC No L 403/18, as amended or supplemented by Commission Directive 2011/94/EU of 28 November 2011 and Commission Directive EU 383/2012 of 4 May 2012

UN Convention on Road Traffic. Vienna, 8 November 1968, as amended by Amendment of UN Convention on Road Traffic, Vienna of 29 March 2011

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1
alphabetic character A
hexadecimal ranges '41' – '5A' (Latin capital letters), '61' – '7A' (Latin small letters), 'C0' – 'D6', 'D8' – 'F6' and 'F8' – 'FF' of ISO/IEC 8859-1

3.2
card
document with nominal dimensions in conformance with ISO/IEC 7810 ID-1

3.3
contracting party
country that is a signatory to the UN Convention Geneva 1949, or a country that has signed, ratified or acceded to the provisions of the UN Convention Vienna 1968

3.4
country distinguishing sign
abbreviation for issuing country identified to the UN Secretary General in accordance with the UN Conventions (1949 and 1968) for vehicles in international traffic (see Annex F), on the driving licence (human-readable)

3.5
data element
item of data that may appear on the driving licence in either human or machine-readable form

Note 1 to entry: A distinction is made between static data elements and dynamic data elements.

3.5.1
static data element
data element associated with the issuing authority, and which is the same for all DLs issued on behalf of or by that issuing authority

3.5.2
dynamic data element
data element associated with the licence holder and thus varies from one DL to the next for a particular licensing authority, thus specifically excluding the issuing authority data element

3.6
document recognition
educational knowledge and ability to recognize the validity of the driving licence of both national and international jurisdictions including data elements, formatting, visual biometrics (e.g. portrait, signature), electronic readable features and document security features

3.7
driving licence
DL
document issued to a driving licence holder by an issuing authority granting the individual the privilege to operate a motor vehicle within its jurisdiction

Note 1 to entry: The document may facilitate driving licence transactions and provide input data for such transactions. This issued document incorporates several elements and qualifications regarding the licence holder: positive identification of the individual; evidence of knowledge of laws and practices; practical driving proficiency in specific motor vehicle class categories; and, the individual's health restrictions (e.g. corrective eye lenses).

Note 2 to entry: Driving licences are classified into four types of documents, namely domestic driving licence, domestic driving permit, ISO-compliant driving licence and international driving permit.

3.7.1
domestic driving licence
DDL
document conveying driving privilege for operating motor vehicles within country/community of issuance, and which may partially only or may not be issued in conformance with ISO/IEC 18013

3.7.2
domestic driving permit
DDP
driving licence issued in conformance with the UN Convention Vienna 1968, annex 6

Note 1 to entry: The prescribed model for the domestic driving permit issued in conformance with UN Convention Geneva 1949, annex 9 differs in format and dimensions from the DDP. Should the UN Convention Geneva 1949 be amended in this regard to be similar to the UN Convention Vienna 1968, this definition would also apply to the domestic driving permit issued in conformance with the UN Convention Geneva 1949. In practice the current domestic driving permit issued by most of the signatories of the UN Convention Geneva 1949 and who have not acceded to the UN Convention Vienna 1968 does not conform to the prescribed model of the UN Convention Geneva 1949 but rather to the prescribed model of the UN Convention Vienna 1968.

3.7.3
ISO-compliant driving licence
IDL
DDP issued in conformance with ISO/IEC 18013, which may be used for both domestic and international use

3.7.4
international driving permit
IDP
driving licence issued in conformance with the UN Convention Vienna 1968, annex 7

Note 1 to entry: The prescribed model for the international driving permit issued in conformance with UN Convention Geneva 1949, annex 10 differs in format and dimensions from the IDP and does not have to be accompanied by the domestic driving permit for it to be recognised by another contracting member of the UN Convention Geneva 1949. However, a contracting member of the UN Convention Vienna 1968 may require that the international driving permit issued in conformance with UN Convention Geneva 1949 be accompanied by the domestic driving permit. Should the UN Convention Geneva 1949 be amended in this regard to be similar to the UN Convention Vienna 1968, this definition would also apply to the international driving permit issued in conformance with the UN Convention Geneva 1949.

3.8
first line inspection
cursory examination without tools or aids that involves easily identifiable visual or tactile features for rapid inspection at point of usage

3.9
human-readable data / information
data or information that is printed or engraved that is visually present on a driving licence and designed to be interpreted by a human

3.10
image
representation of the visual likeness of a subject

EXAMPLE Portrait, finger print, or signature.

Note 1 to entry: Images may be collected and stored digitally or otherwise, and rendered for visual inspection using a variety of systems.

3.11
issuing authority
licensing authority, or issuing country if separate licensing authorities have not been authorised

3.12
issuing country
country according to Annex F which issued the DL or within which the licensing authority is located

3.13
jurisdiction
territory (country, state, province) within which the licensing authority has the mandate and responsibility to apply motor vehicle laws/directives

3.14
licence holder
individual to whom a DL is issued, i.e. the legitimate holder of the driving privileges reflected on a DL

3.15
licensing authority
authorised agent organisation that issues a DL

EXAMPLE National, federal, state, provincial, regional, territorial or local Ministry of Transport, Department of Motor Vehicles, or Police Agency.

3.16
machine-readable data / information
data or information that is encoded into a machine-readable medium, such as a bar code or integrated circuit

3.17
mandatory element
element that shall be required

3.18
mutual recognition
privilege of citizens from two jurisdictions to drive an eligible vehicle under specified conditions/ restrictions in each other's jurisdictions without the requirement of undergoing additional practical and/or written testing

Note 1 to entry: Mutual recognition is administered by way of agreements between the governments of the jurisdictions.

3.19
non-portrait side of card
opposite face from the portrait side

3.20
numeric character
N
hexadecimal range '30' – '39' (digits 0 to 9) of ISO/IEC 8859-1

Note 1 to entry: In this definition ISO/IEC 8859-1 is used for identification of the character and not for encoding.

3.21
optional element
element that may be used, but that is not mandatory

3.22
pictograph
graphical representation associated with a specific value or instance of a predefined classification or restriction, such as a vehicle category or medical condition

Note 1 to entry: See Annex B.

3.23
portrait
two or three dimensional representation of the face of a person in a minimum of full-face frontal pose

Note 1 to entry: See Annex A.

3.24
portrait side of card
face of the card carrying visual information containing the reproduction of the portrait of the licence holder

3.25
second line inspection
examination by trained inspectors with simple equipment

EXAMPLE Simple equipment includes magnifying glass, UV light, machine-reading equipment such as barcode reader or integrated circuit reader.

3.26
security element
distinct physical element or property of a document that contributes to at least one security feature

Note 1 to entry: Depending on the method of verification, one element may be designed to provide one or more security features that may apply to the same or to different categories.

3.27
security feature
feature of a document that is linked to a specific method of verification and thus helps ensure the document's integrity and/or authenticity as a properly issued document, including that it has not been tampered with

3.28
special character
S
hexadecimal ranges '20' – '2F' (<space> ! " # $ % & ' ( ) * + , - . /), '3A' (:), '3C' – '40' (< = > ? @), '5B' – '60' ([\ ] ^ _ `), '7B' – '7E' ({ | } ~), 'A1' – 'AC' (¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬), 'AE' – 'A5' (® ¯ ° ± ^{2} ^{3} ´ µ), and 'A7' – 'BF' (· ¸ ^{1} º » ¼ ½ ¾ ¿) of ISO/IEC 8859-1

Note 1 to entry: The semicolon ";", multiplication sign "×" and division sign "÷" are defined as delimiters and the pilcrow sign "¶" is defined as the end-of-file character in the machine-readable data / information.

3.29
supranational
extending beyond or transcending established borders or spheres of influence held by separate nations

EXAMPLE This applies to entities such as the Economic Community of West African States, European Union and Southern Africa Development Community.

3.30
text
human-readable A, N or S

3.31
third line inspection
inspection by forensic specialists conducting detailed examination which allows for more in-depth evaluation and may require special equipment to provide true verification

4 Conformance

A driving licence is in conformance with this document if it meets all mandatory requirements specified directly or by reference herein.

5 Human-readable data elements on IDL

5.1 Visual presence

Data elements other than those discussed in this document may be visually present on an IDL provided that such elements do not interfere with the form, content and data elements specified in this document.

EXAMPLE 1 Data elements originating from domestic or regional driving licence requirements (see Figure A.5).

EXAMPLE 2 IDL that conforms to ISO/IEC 18013-2 or ISO/IEC 18013-3 may include data elements used to assist in the processing of the machine-readable data elements on the IDL, such as the scanning area identifier (SAI) comprising one or more graphical elements that demarcate an input string (see Figure A.7 and A.14).

5.2 Data element tables

The tables in 5.3 and 5.4 specify the mandatory and optional elements that appear on the IDL.

Column 1 (**Item #**): serves as a reference indicator for citation elsewhere in this document.

Column 2 (**Data field reference code on IDL**): reference code shall be visibly included as text on the IDL to identify the data element for purposes of interpreting the data and other international interchange

requirements. The reference code may be depicted on the IDL with punctuation or without punctuation (as shown in Table 1 and Table 2).

EXAMPLE "1." or "1" may be used to reference the data element "Family name" and likewise "4c." or "4c" may be used to reference the data element "Issuing authority". Informative examples with punctuation and without punctuation are provided in A.8.

Column 3 (**Card zone placement**): indicates the location on the IDL where the data element shall be placed. Location of the zones are specified in Annex A.

Column 4 (**Data element name**): common name or phrase that is used to refer to the accompanying data element definition.

Column 5 (**Definition**): description of the data element, including any exceptions.

Column 6 (**Field maximum length/type**): valid field length (i.e., the number of characters) for each data element. The nature of the field length is defined by F=fixed length and V=variable length.

5.3 Mandatory data elements for international interchange

All the data elements appearing in Table 1, except for item f, the issuing authority, are dynamic data elements.

Table 1 — Mandatory data elements for international interchange

Item #	Data field reference code on IDL	Card zone placement	Data element name	Description/ Definition	Field maximum length/ type
a	1	Zone II	Family name	Last name, surname, or primary identifier, of the licence holder	V36AS
b	2	Zone II	Given names	First name(s), other name(s), or secondary identifier, of the licence holder	V36AS
c	3	Zone II	Date of Birth	Day, month, year on which the licence holder was born (if unknown, approximate Date of Birth)	F8N
d	4a	Zone II	Date of Issue	Date licence document was issued (same format as Date of Birth)	F8N
e	4b	Zone II	Date of Expiry	Date licence document expires (same format as Date of Birth)	F8N
f	4c	Zone II	Issuing Authority	Abbreviations may be used (see 3.11)	V65ANS
g	5	Zone II	Licence Number	The number assigned or calculated by the issuing authority	V25AN
h	6	Zone III	Portrait	A reproduction of the licence holder's portrait	(Image)
i	7	Zone II	Signature	A reproduction of the licence holder's signature, or usual mark, or thumb or finger print	(Image)
j	9	Zone II (may be repeated in Zone IV)	Categories of Vehicles	Vehicle types the licence holder is authorised to operate	V3AN (or Pictographs)
k	10	Zone II or IV	Date of issue per category	The date of issue for a specific class of vehicle if it is before the date of issue of the licence document (same format as Date of Birth)	F8N

Table 1 *(continued)*

Item #	Data field reference code on IDL	Card zone placement	Data element name	Description/ Definition	Field maximum length/ type
l	11	Zone II or IV	Date of expiry per category	The date of expiry of the specific category if it expires before or after the date of expiry of the licence document (same format as Date of Birth)	F8N
m	12	Zone II or IV	Restrictions	Restrictions or conditions which apply to the licence holder when operating a vehicle (shown as pictographs defined in the restriction codes)	V3AN (or Pic-to-graphs)
n	12	Zone II or IV	Conditions/ Information	Any medical, administrative or legal limitations applying to the licence holder and not covered under the standard restriction codes	V3AN

5.4 Optional data elements for international interchange

All the data elements appearing in Table 2 are dynamic data elements.

Table 2 — Optional data elements for international interchange

Item #	Data field reference code on IDL[a]	Card zone placement	Data element name	Description/ Definition	Field maximum length/ type
o	3	Zone II	Place of Birth	Country and municipality or state/province where the licence holder was born	V33A
p	4d	Zone II	Administrative Number	An audit control number assigned by the licensing authority	V25ANS
q	8	Zone II	Permanent Place of Residence	The place where the licence holder resides and/or may be contacted (street/house number, municipality etc.)	V108ANS
r	15	Zone II	Gender	Licence holder's gender: M for male, F for female	F1A
s	16	Zone II	Height (cm)	Licence holder's height in centimetres, for example 187 cm would be rendered on the card as 187	F3N
t	16a	Zone II	Height (ft/in)	Licence holder's height in feet and inches, for example 5ft 9in would be rendered on the card as 509	F3N
u	17	Zone II	Weight (kg)	Licence holder's weight in kilograms, for example 60 kg would be rendered on the card as 060	F3N

NOTE Data field reference codes 13 and 14 are not used as they are designated for domestic use in the EC Directives and in the amendments to the 1968 Convention.

[a] The use of the reference code on the IDL is optional for the data elements in this table. However, if a reference code is used, it shall be the reference code listed in this table.

Table 2 *(continued)*

Item #	Data field reference code on IDL[a]	Card zone placement	Data element name	Description/ Definition	Field maximum length/ type
v	17a	Zone II	Weight (lbs)	Licence holder's weight in pounds, for example 132 pounds would be rendered on the card as 132	F3N
w	18	Zone II	Eye Colour	Licence holder's eye colour: blue, brown, black, hazel, green, grey, pink, dichromatic	V12A
x	19	Zone II	Hair Colour	Licence holder's hair colour: brown, black, blonde, grey, red/auburn, sandy, white, bald	V12A

NOTE Data field reference codes 13 and 14 are not used as they are designated for domestic use in the EC Directives and in the amendments to the 1968 Convention.

[a] The use of the reference code on the IDL is optional for the data elements in this table. However, if a reference code is used, it shall be the reference code listed in this table.

Annex A
(normative)

Card design

A.1 Introduction

This annex contains the requirements with regard to the human-readable content and layout of the data elements on the IDL.

The main ideology for defining the design of the IDL is the minimum acceptable set of requirements to guarantee global interoperability. Sufficient freedom is afforded to the issuing authorities of driving licences to meet their national (domestic) needs (existing standards, data contents, security elements, etc).

This annex defines the specifications of the card layout, together with informative examples for ease of understanding.

A.2 Dimensions and character set

The nominal dimensions of the IDL shall be in conformance with ISO/IEC 7810 ID-1. Additional specifications may apply depending upon the machine- readable technology incorporated on the card.

All mandatory human-readable data elements shall be printed in A, N or S characters.

A.3 Functions

The basis of the visual card design is to meet the minimum common mandatory set of data elements in the following areas of function:

— Common recognition of the IDL by law enforcement agencies and users outside of the country of issue.

— Layout of the human-readable data elements and the machine-readable components.

— Text, images and/or pictographs of the human-readable data elements.

— Security of the card as a separate topic to avoid confusion between common recognition and integrity issues.

A.4 Common recognition

To assist verification of a driving licence presented by a driver outside the country of issue as an IDL, the following shall appear on the card:

— In addition to other colours that might be preferred by an issuing authority, the predominant colour used in the background printing of Zone 1 shall be pink, matched as closely as possible to a 30 % tint of Pantone 198. This match shall be achieved without the use of the CMYK colours, as defined in Annex C.

— The reproduction of the portrait of the licence holder is depicted on the left side on the portrait side of the card as shown by the position of Zone III in Figure A.1 as a mandatory requirement.

— Mandatory static data elements in Zone I of the card.

— Dynamic data elements and the issuing authority identified by data field reference codes (but for the photograph) as a mandatory requirement.

A.5 Layout

Because there are many licensing authorities, more than the number of issuing countries involved, the layout is not fixed to a single format. The layout is grouped by different zones and the various options for the zones are depicted in Figures A.3 to A.20.

The portrait and non-portrait side of the card shall carry the following:

Portrait side

Data Element Set of text, reproduction of portrait and signature, usual mark or thumb/ finger print of the licence holder (mandatory) and machine-readable technologies (optional).

Zones I, II and III.

Non-portrait side

Data Element Set of text (optional) and machine-readable technologies (optional).

Zones IV and V.

A.6 Contents of the zones

A.6.1 Data element placement

Mandatory and optional data elements are defined for each zone.

A.6.1.1 Zone I

Table A.1 — Zone I data elements

Description	Mandatory/ Optional
Text “DRIVING PERMIT” in the language or languages of the issuing country.	M
Text or alternatively in the background graphic design, the words “DRIVING PERMIT” in one of the languages English (“DRIVING LICENCE”), French (“PERMIS DE CONDUIRE”) or Spanish (“PERMISO DE CONDUCCIÓN”).	O
Distinguishing sign of the issuing country as identified to the UN Secretary General in accordance with the UN Conventions (1949 and 1968). Annex F contains the current list of distinguishing signs identified to the UN Secretary General.	M
The name of the issuing country.	O
The name or acronym of supranational entity.	O
Other national signs, such as the flag or logo of the issuing country or supranational entity.	O

A.6.1.2 Zone II

Table A.2 — Zone II data elements

Data field reference code on IDL	Description	Mandatory/ Optional
1	Family name of the licence holder.	M
2	Given name or other names of the licence holder.	M
3	Date of birth (mandatory) and place of birth	O
4a	Date of issue of the licence.	M
4b	Date of expiry of the licence.	M
4c	Name of the issuing authority.	M
4d	Administrative number, different from the one under reference code 5, for administrative purposes.	O
5	Number of the licence.	M
7	Image of the signature or usual mark of the licence holder, or thumb or finger print.	M
8	Permanent place of residence, or postal address.	O
9	(Sub)category(ies) of vehicle(s) the licence holder is entitled to drive.	M
10	Date of first issue of each (sub)category of vehicles.	M
11	Date of expiry of each (sub)category of vehicles.	M
12	Additional information/ restrictions, in pictograph form, facing the subcategory of vehicles affected (pictographs stated in Annex B mandatory, restriction code optional).	M/O
13	Reserved for domestic information essential for administration of licence by issuing authority.	O
14	Reserved for domestic information related to road safety by issuing authority.	O
15	Gender of the licence holder.	O
16	Height of the licence holder.	O
16a	Height of the licence holder in feet and inches.	O
17	Weight of the licence holder.	O
17a	Weight of the licence holder in pounds.	O
18	Eye colour of the licence holder.	O
19	Hair colour of the licence holder.	O
NOTE Data field reference codes 13 and 14 are designated for domestic use in the EC Directives and in the amendments to the 1968 Convention.		

Although the maximum field length for Data Field 4c is specified as V65ANS in Table 1, the ID-1 dimensions of the card does not allow more than V45ANS in Zone II adjacent to Zone III. Thus, if the numerical order of data fields is maintained and field 4c is located adjacent to Zone II, field 4c shall be maximum V45ANS in a 6pt font (shown in regular font (black) in Figure A.6). Alternatively, for up to V65ANS data field 4c could be accommodated in a 6pt font at the bottom of the card (shown in italic font (red) in Figure A.6).

This zone may also include other data fields for national (domestic) or regional purposes in human-readable format (optional).

This zone may also include machine readable technologies (optional).

Alternatively, the data fields 10, 11, 12, 13 and 14 may be located in Zone IV and data field 9 may be repeated in Zone IV.

A.6.1.3 Zone III

Table A.3 — Zone III data elements

Data field reference code on IDL	Description	Mandatory/ Optional
6	Image of the portrait of the licence holder. The portrait image is not denoted by its reference code on the card.	M

A.6.1.4 Zone IV

Table A.4 — Zone IV data elements

Data field reference code on IDL	Description	Mandatory/ Optional
9	(Sub)category(ies) of vehicle(s) the holder is entitled to drive (may be repeated from Zone II).	O
10	Date of first issue of each (sub)category of vehicles (mandatory if the (sub)categories are repeated from Zone II).	M
11	Date of expiry of each (sub)category of vehicles (mandatory if the (sub) categories are repeated from Zone II).	M
12	Additional information/ restrictions, in pictograph form, facing the sub-category of vehicles affected (pictograph mandatory, restriction code optional).	M/O
13	Reserved for domestic information essential for administration of licence by issuing authority (optional).	O
14	Reserved for domestic information related to road safety by issuing authority (optional).	O
NOTE Data field reference codes 13 and 14 are designated for domestic use in the EC Directives and in the amendments to the 1968 Convention.		

Alternatively, the data fields 10, 11, 12, 13 and 14 may be located in Zone II.

This zone may also include national (domestic) or regional information in human-readable format for purposes of administration of the licence or related to road safety (optional).

A.6.1.5 Zone V

Machine-readable technologies for international, national or regional purposes (optional).

The IDL may contain any or a combination of the following supported machine-readable technologies:

— OCR-B.

— Bar code, one or two dimensional.

— Integrated circuit with contacts.

— Proximity integrated circuit.

The positions of the zones for the optional national or regional human-readable fields and optional machine- readable technologies are presented in the figures of the annex. The position and size of Zones IV and V may be adjusted in accordance with the machine-readable technologies incorporated on the card.

Within this document, the above technologies may co-exist. Incorporation of a contactless integrated circuit is not depicted in the figures of this annex as it does not occupy visible space.

Depending on the printing technology used, care should be taken when incorporating personalised data on the portrait side of the card opposite the location of an integrated circuit.

A.6.2 Production of images

A.6.2.1 Portrait

Measures as specified in Annex C shall be taken by the issuing authority to ensure that the reproduction of the portrait of the licence holder on the card is resistant to forgery and substitution. Such image of the portrait shall meet ISO/IEC 19794-5:2011, Annex B and C.

Pose. The portrait shall depict the face of the rightful licence holder in a full-face frontal pose with both eyes visible, i.e. captured perpendicular to an imaginary plane formed parallel to the front surface of the face. The portrait may only show the licence holder with headgear, if the licence holder is a member of a religion requiring the wearing thereof and provided that the headgear does not render the portrait inadequate for the identification of the licence holder.

Depth of Field. The full-face frontal pose shall be in-focus from the crown (top of the hair) to the chin and from the nose to the ears.

Orientation. The approximate horizontal midpoints of the mouth and of the bridge of the nose shall lie on an imaginary vertical line, and the crown (top of the hair) shall be nearest the top edge of the portrait image.

Face Size. The crown to chin portion of the full-face frontal pose shall be 60 % to 90 % of the longest dimension defined for Zone III, maintaining the aspect ratio between the crown-to-chin and ear-to-ear details of the face of the licence holder.

Lighting. Adequate and uniform illumination shall be used to capture the full-face frontal pose; i.e. appropriate illumination techniques shall be employed and illumination used to achieve natural skin tones (and avoid any colour cast) and a high level of detail, and minimize shadows, hot spots and reflections (such as sometimes caused by spectacles).

Background. A uniform colour background shall be used to provide a contrast to the face and hair. For colour portraits, light blue, beige, light brown, pale grey or white are recommended for the background.

Centring. The full-face frontal pose shall be centred within Zone III.

Border. A border or frame shall not be used to outline the portrait image.

Colour. The portrait image shall be black and white or a true colour representation of the licence holder.

Image resolution. The portrait image shall yield an accurate and recognisable representation of the rightful licence holder. The quality of a digitally reproduced portrait shall be visually comparable to an acceptable photograph. To achieve this comparable quality in a digital reproduction, care should be given to the image capture, processing, digitisation, compression and printing technology and the process used to reproduce the portrait on the card, including the final preparation of the IDL.

Image Location. The crown (top of the hair) shall be nearest the top edge of Zone III as defined in Figure A.3, i.e. the crown to chin orientation covering the longest dimension defined for Zone III.

A.6.2.2 Signature or usual mark

Measures shall be taken by the issuing authority to ensure that the reproduction of the signature or usual mark on the card is resistant to forgery and substitution as specified in Annex C. Such image of the signature or usual mark displayed on the card shall meet the following requirements:

Orientation. The signature or usual mark shown in Figure A.1 shall be displayed with its A-dimension parallel to the Top Reference Edge of the card identified in Figure A.3.

Figure A.1

Size. The signature or usual mark displayed shall be of such dimensions as to be discernible by the human eye and maintain the aspect ratio (A-dimension to B-dimension) of the original signature or usual mark.

Scaling. In the event the signature or usual mark displayed is scaled-up or scaled-down, the aspect ratio (A-dimension to B-dimension) of the original signature or usual mark shall be maintained. In the case of a scaled-down image, the reproduction shall not be smaller than 50 % of the original signature or usual mark.

Cropping. The issuing authority should take steps to eliminate or minimize cropping.

Colour. The reproduction of the signature or usual mark shall be printed in black to afford a definite contrast to the background.

Borders. Borders or frames shall not be used to outline the image of the signature or usual mark.

Image resolution. The image shall yield an accurate and recognisable representation of the original signature or usual mark of the rightful licence holder. To achieve this comparable quality in a digital reproduction, care should be given to the image capture, processing, digitisation, compression and printing technology and the process used to reproduce the signature or usual mark on the card, including the final preparation of the IDL.

A.6.2.3 Finger print

In the absence of the signature or usual mark of the licence holder, a reproduction of an original single-digit (i.e. a flat and not rolled) finger print as shown in Figure A.2 shall be printed on the card. Measures shall be taken by the issuing authority to ensure that the single-digit finger print is resistant to forgery and substitution as specified in Annex C. Such image of the single-digit finger print shall meet the following requirements:

Orientation. The A-dimension (length, following a line drawn along the length of the finger of which the print is displayed) of the displayed single-digit finger print shall be parallel to the Top Reference Edge of the card. The B-dimension (width) of the finger print shall be perpendicular to the Top Reference Edge of the card identified in Figure A.3.

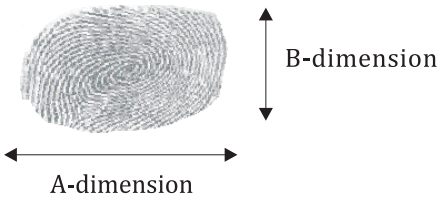

Figure A.2

Size. The single-digit finger print displayed shall be a one-to-one replication (A-dimension versus B-dimension) of the original print.

Scaling. Scaling of the single-digit finger print image shall not be permitted.

Cropping. The issuing authority should take steps to eliminate or minimize cropping.

Colour. The single-digit finger print shall be displayed in black and white to afford a definite contrast to the background.

Borders. Borders or frames shall not be used to outline the displayed single-digit finger print image.

Image resolution. The image shall yield an accurate and recognisable representation of the finger print of the rightful licence holder. To achieve this comparable quality in a digital reproduction, care should be given to the image capture, processing, digitisation, compression and printing technology and the process used to reproduce the finger print on the card, including the final preparation of the IDL. For image capturing, the minimum scanning resolution shall be 600 dots per inch for electronic comparison and 300 dots per inch for visual comparison.

A.7 Security

The IDL shall comprise security elements to provide security features for first line, second line and third line inspection. The elements for first and second line inspections shall be selected in accordance with the specifications in Annex C.

A.8 Figures

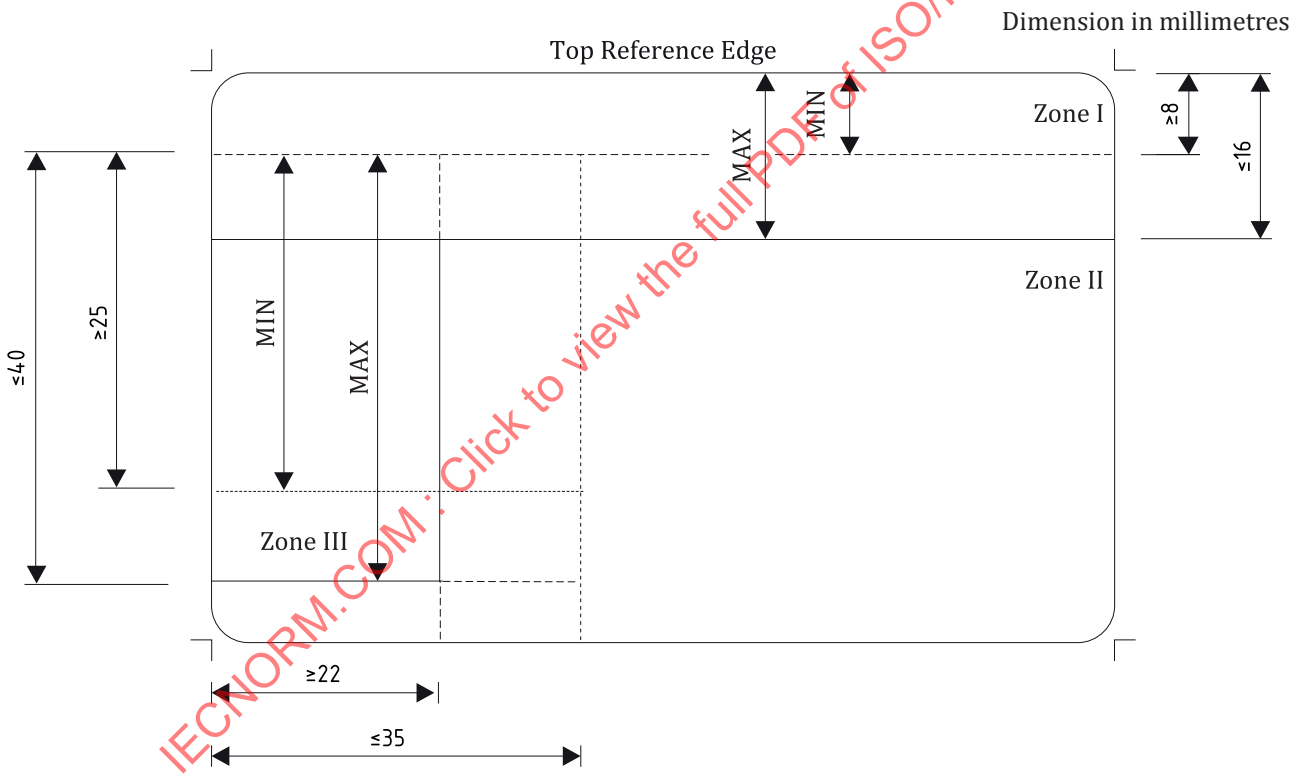

Figure A.3 — Portrait side of IDL (not to scale)

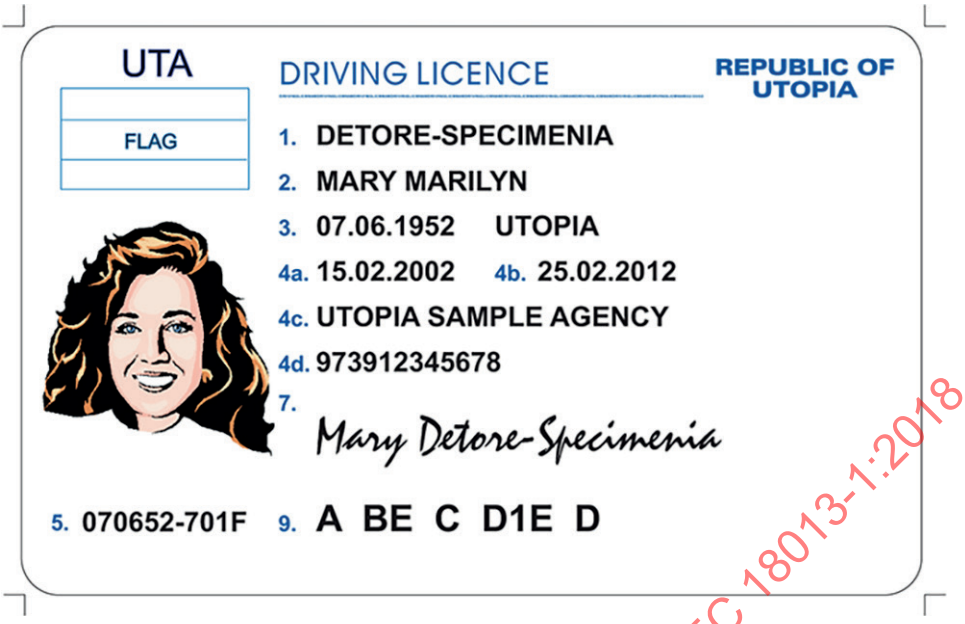

Figure A.4 — Informative example (not to scale)

NOTE 1 Data field reference codes **with punctuation** are used in the above example.

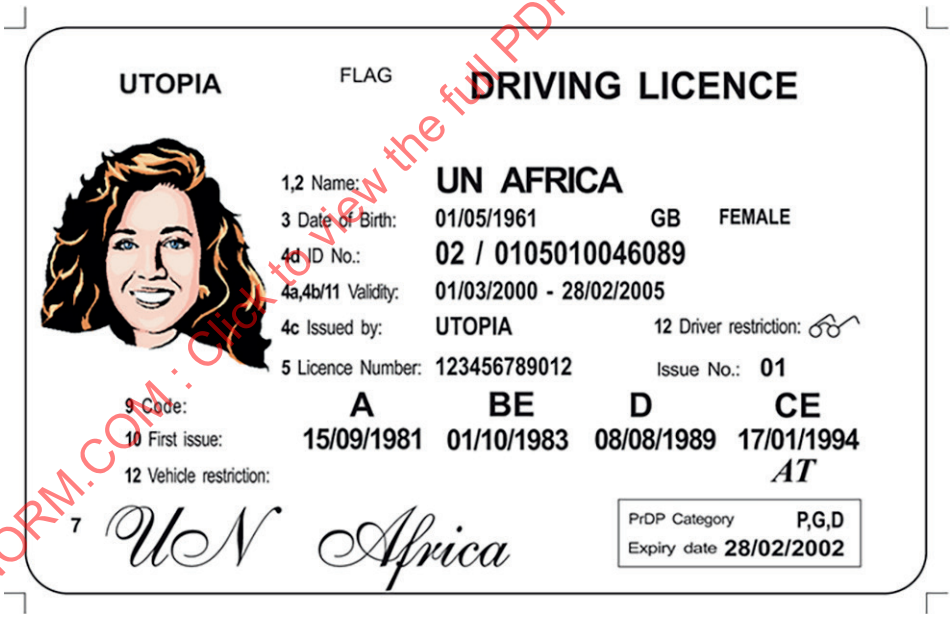

Figure A.5 — Informative example (not to scale)

NOTE 2 Data field reference codes **without punctuation** are used in the above example.

NOTE 3 "PDE Category P,G,D" and the associated "Expiry date 28/02/2002" are examples of national or regional requirements (for purposes of a DDL) included on the card.

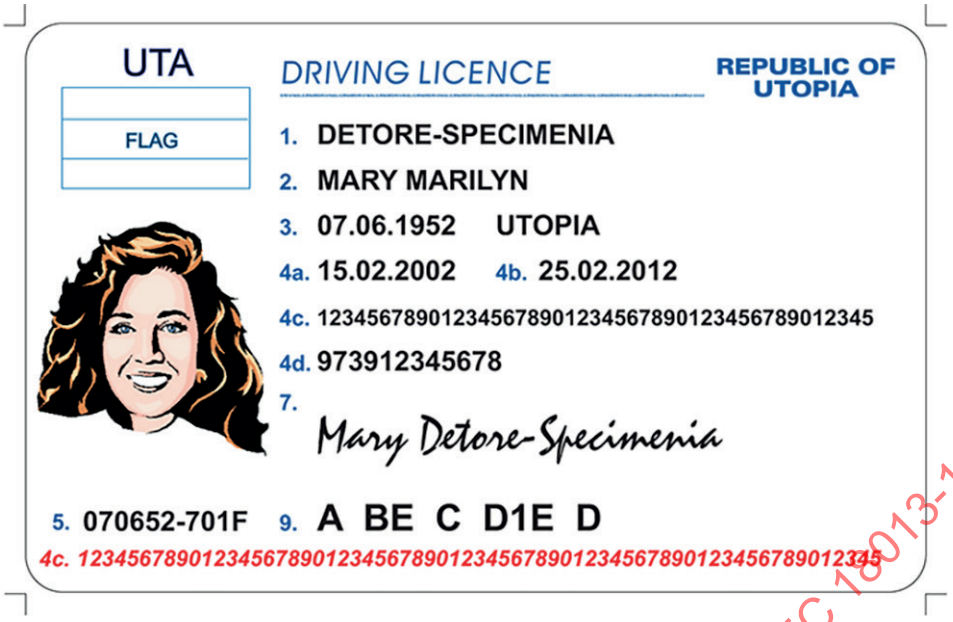

Figure A.6 — Informative example (not to scale)

NOTE 4 The depiction of alternative locations for data field 4c (issuing authority) is for illustration purposes only. In the example, the field is filled with numbers to show the field's maximum space requirement.

Figure A.7 — Informative example (not to scale)

NOTE 5 Location of the Scanning area identifier (SAI) on the portrait side of the IDL. An existing data field (4d.) is designated as input string by a double lined rectangle as illustrated.

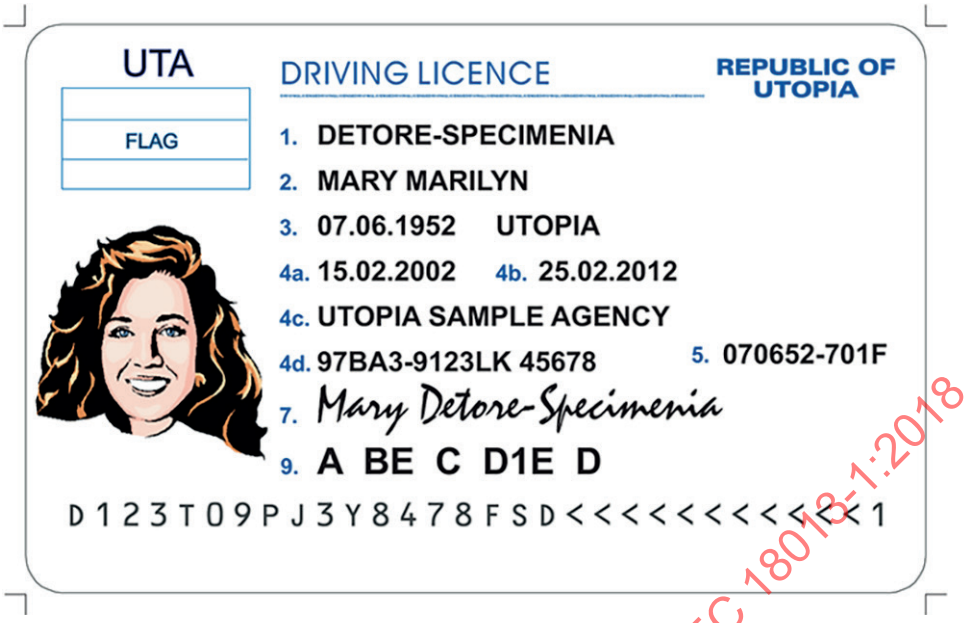

Figure A.8 — Informative example (not to scale)

NOTE 6 Location of the 1 line MRZ at the bottom of the card on the portrait side of the IDL. The 1 line MRZ may be located on the portrait side or the non-portrait side of the IDL.

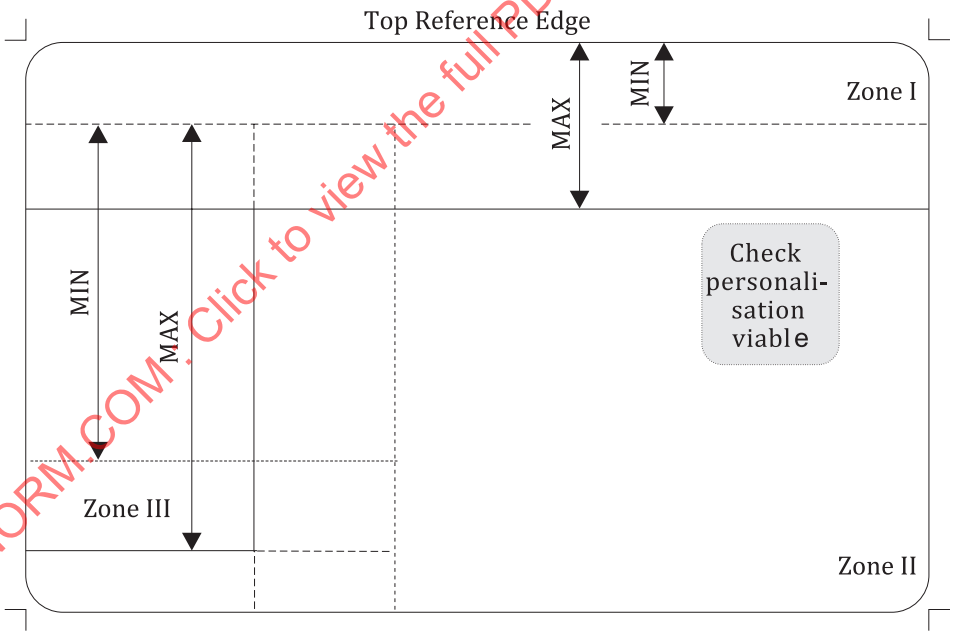

Figure A.9 — Portrait side of IDL — IC with contacts (not to scale)

NOTE 7 Depending on the personalization technology used, it should be checked if personalised dynamic data elements on the portrait side of the card opposite to the location of an integrated circuit with contacts is viable or not.

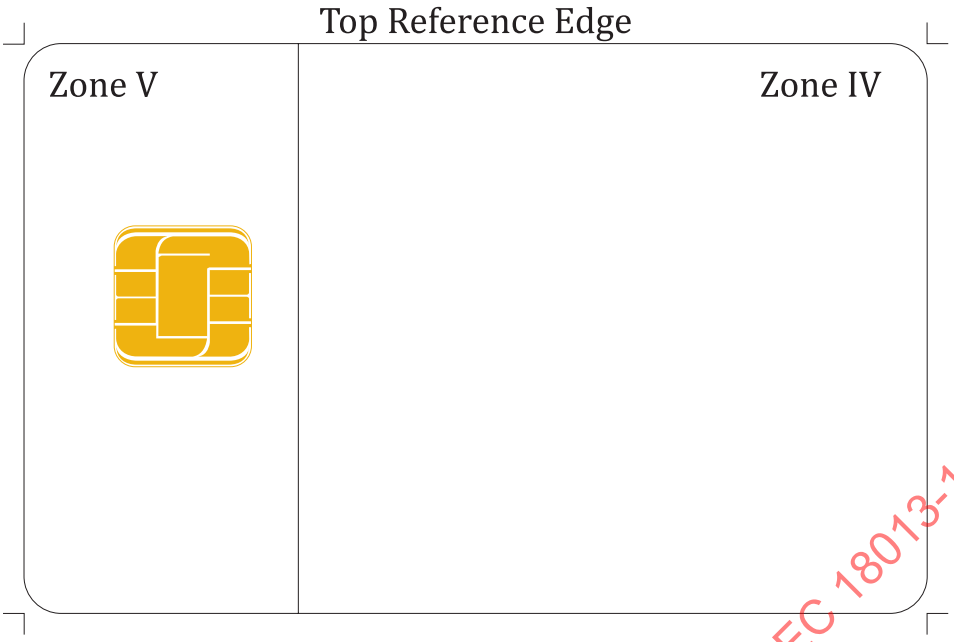

Figure A.10 — Non-portrait side of IDL — Integrated Circuit with contacts (not to scale)

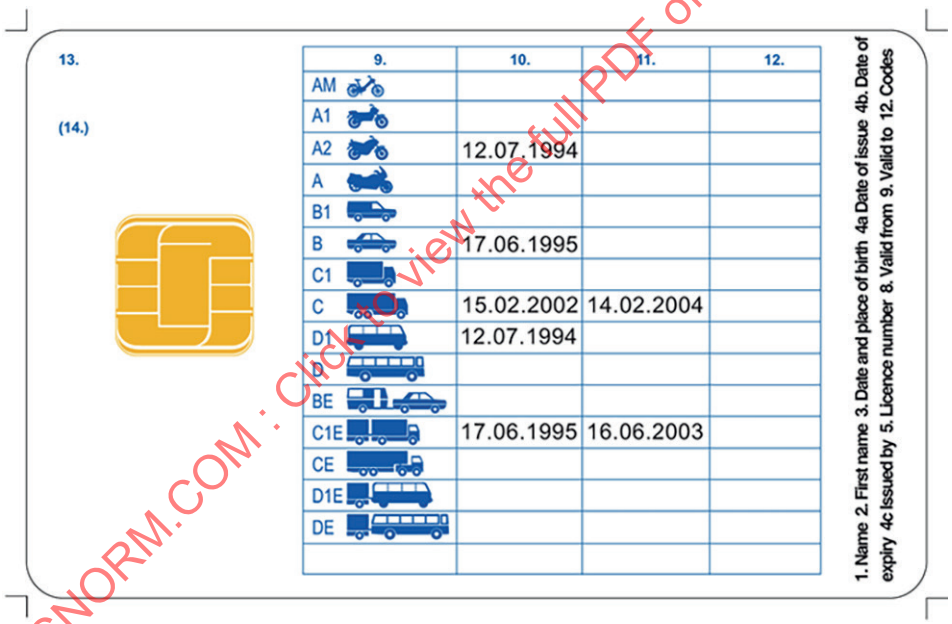

Figure A.11 — Informative example (not to scale)

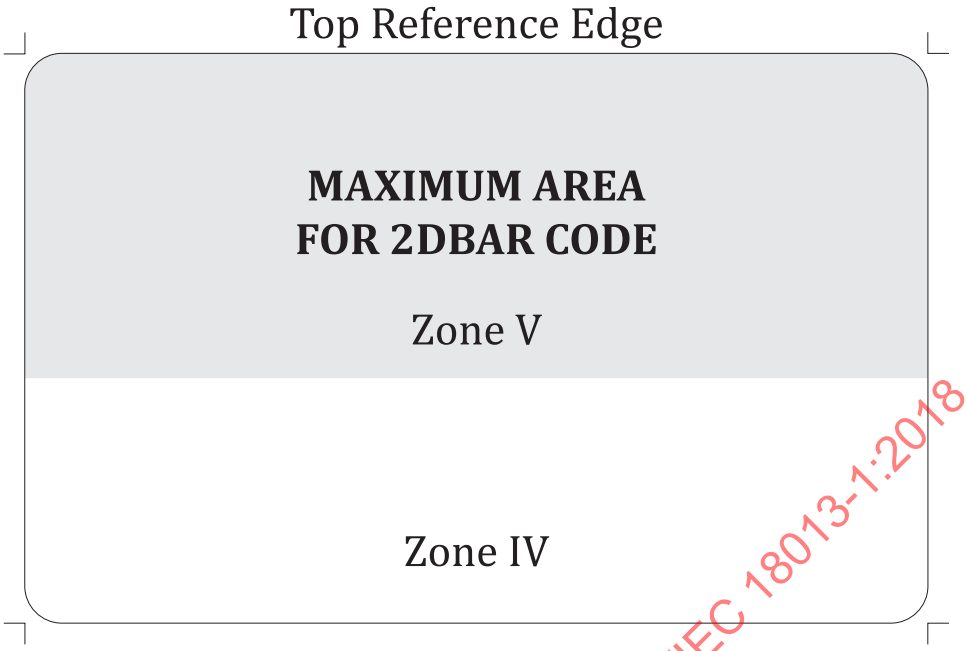

Figure A.12 — Non-portrait side of IDL — 2D bar code (not to scale)

Figure A.13 — Informative example (not to scale)

NOTE 8 Additional pictographs specific to national or regional requirements (for purposes of a DDL) have been included in the figures above and below, such as “Electrically powered”, “Tractor only” and “Industrial/Agricultural only”.

NOTE 9 A non-portrait side layout corresponding to the figures above and below can only be used with a portrait side layout of the card similar to the example given in Figure A.5, where the data fields 10, 11 and 12 are located in Zone II.

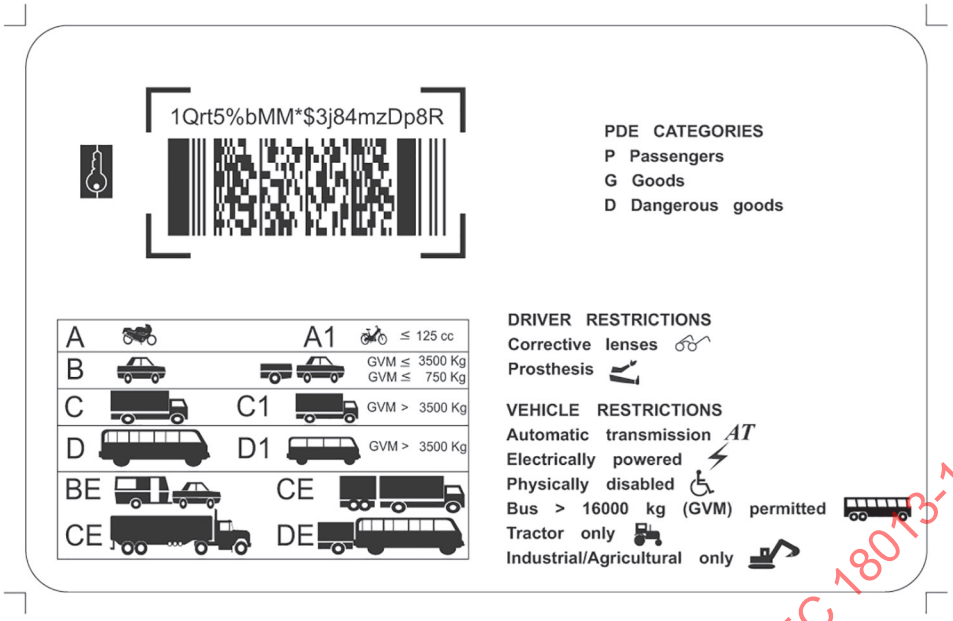

Figure A.14 — Informative example (not to scale)

NOTE 10 Location of the SAI on the non-portrait side of the IDL. A barcode is designated as input string as illustrated. The Basic Access Protection (BAP) logo indicates that the SAI contains a BAP input string which allows access to the data stored on a proximity integrated circuit card (PICC).

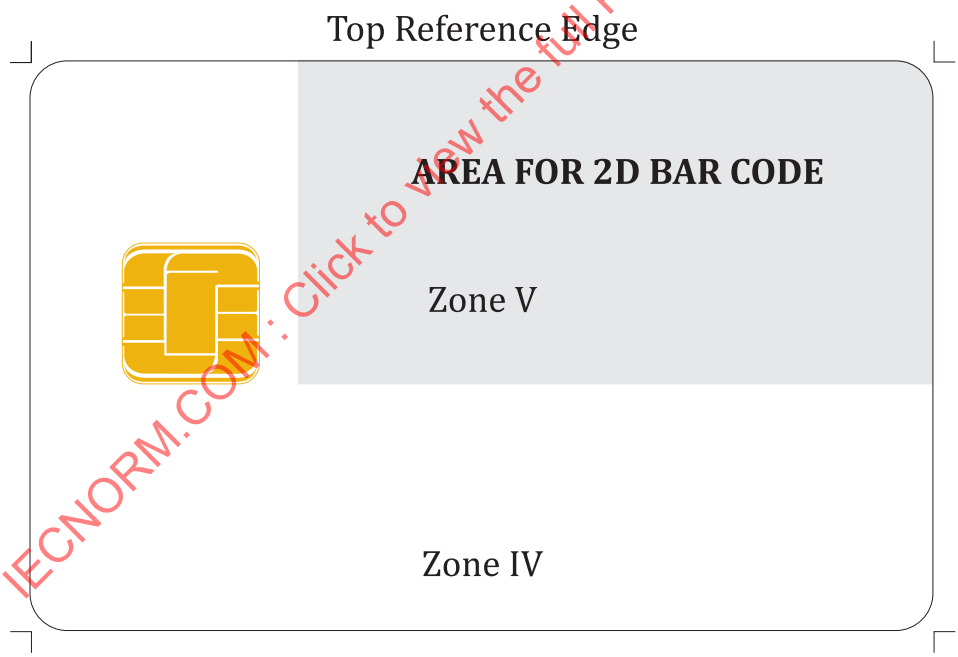

Figure A.15 — Non-portrait side of IDL – IC with contacts and 2D bar code (not to scale)

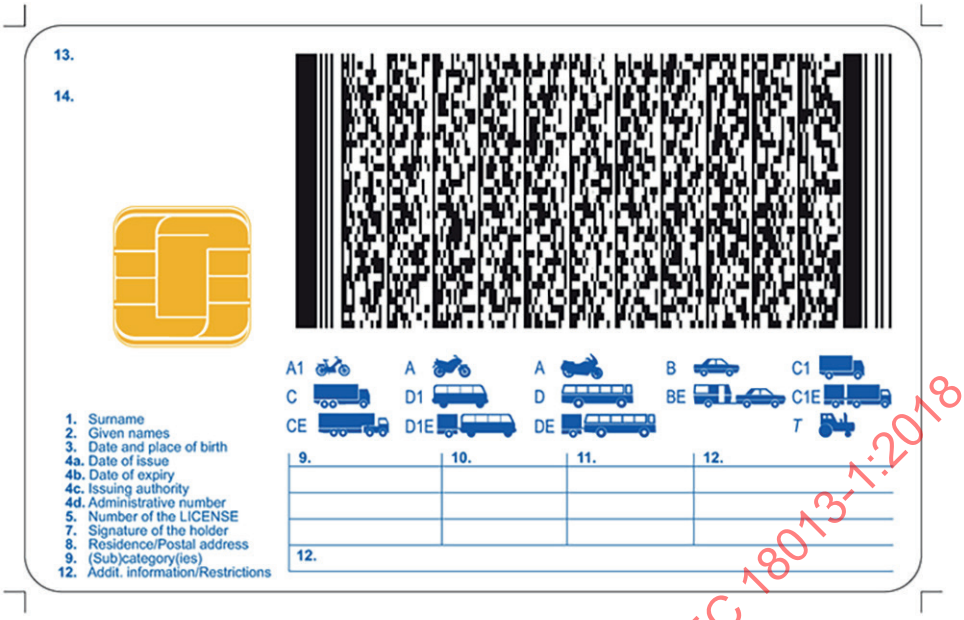

Figure A.16 — Informative example (not to scale)

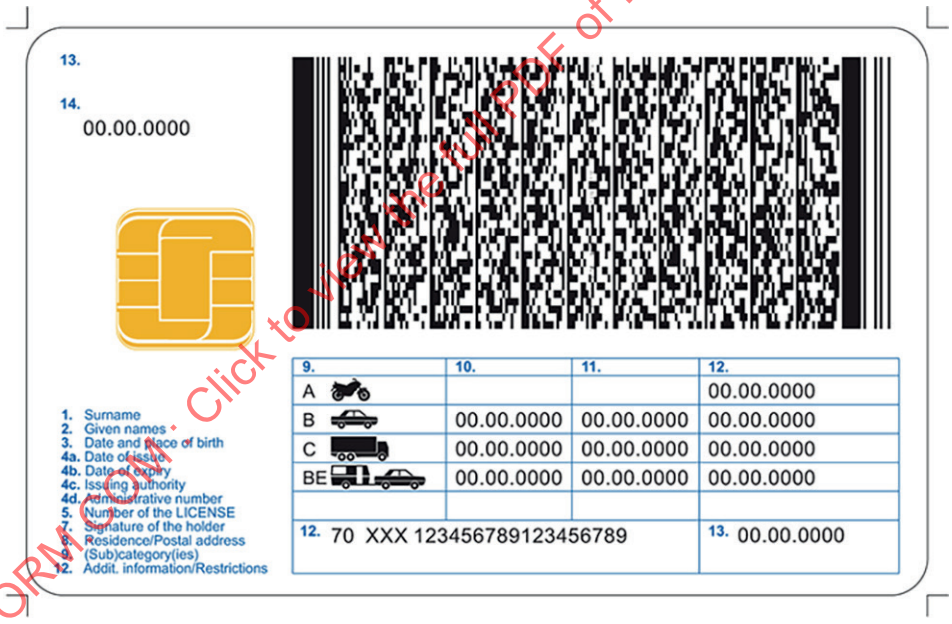

Figure A.17 — Informative example (not to scale)

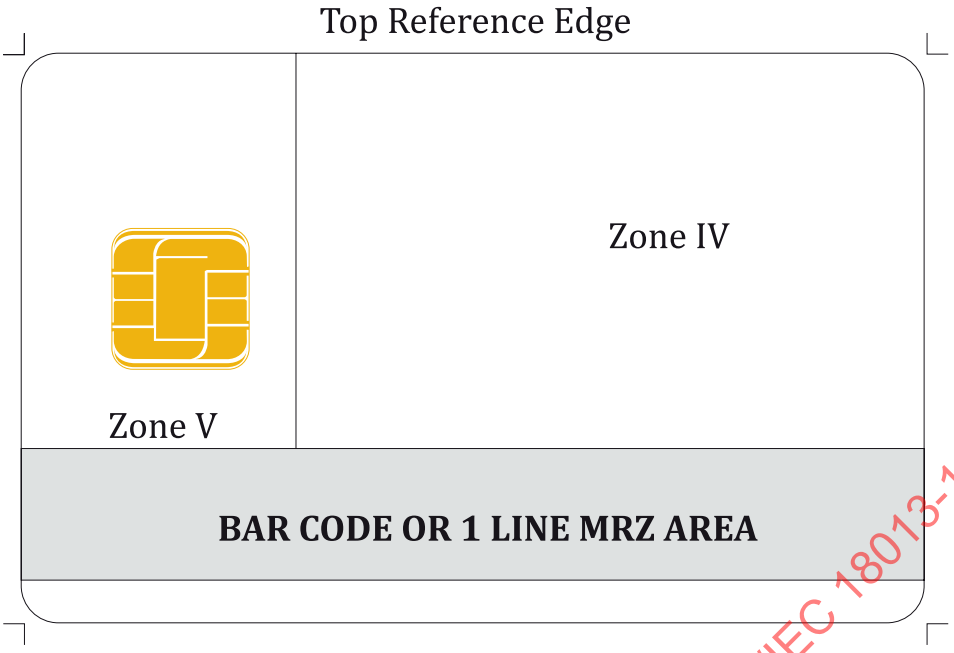

Figure A.18 — Non-portrait side of IDL – IC with contacts and bar code or 1 line MRZ (not to scale)

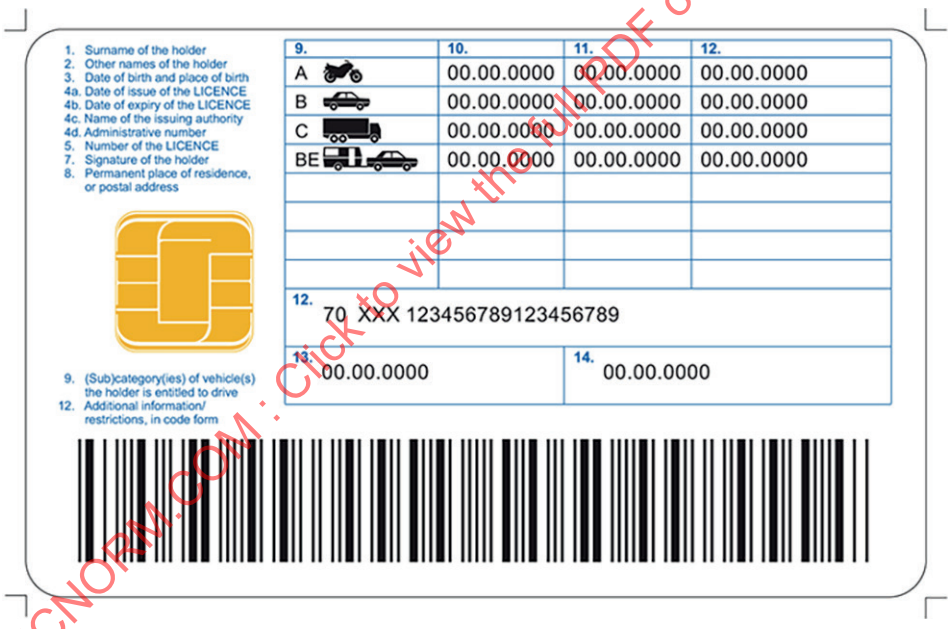

Figure A.19 — Informative example (not to scale)

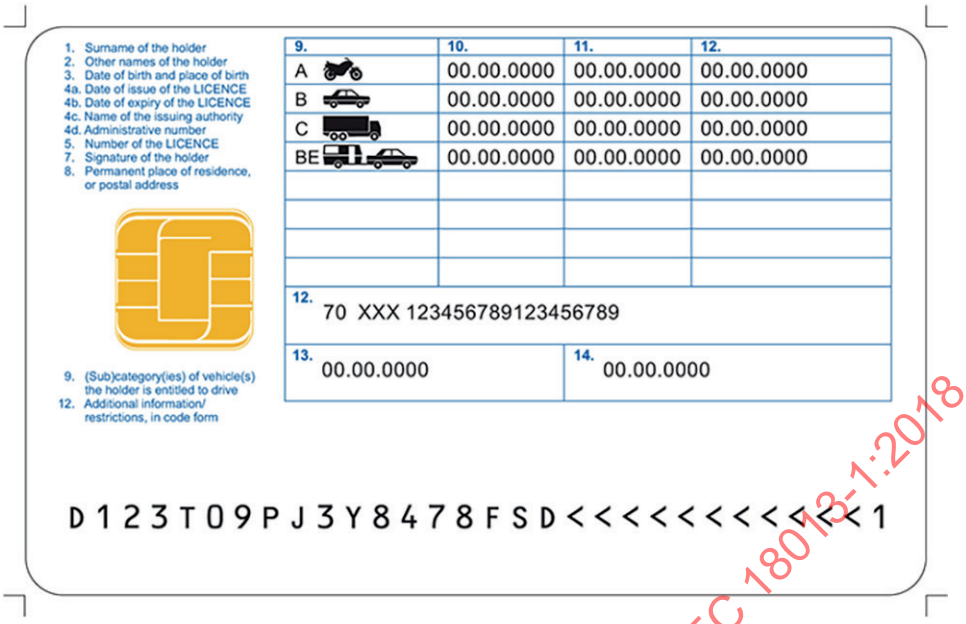

Figure A.20 — Informative example (not to scale)

NOTE 11 Location of the 1 line MRZ at the bottom of the card on the non-portrait side of the IDL. The 1 line MRZ may be located on the portrait side or the non-portrait side of the IDL.

Annex B
(normative)

Vehicle categories and pictograph descriptions

B.1 Introduction

This annex defines the specifications of vehicle categories and restrictions, which contain several samples of pictographs to ease understanding without languages.

B.2 Vehicle categories

B.2.1 Mandatory vehicle categories

Table B.1 defines the mandatory vehicle categories. The vehicle category symbol shall be depicted on the card and it is recommended that the corresponding pictograph be displayed too, should sufficient space be available on the card.

Table B.1 — Mandatory vehicle categories

Symbol	Description	Definition	Pictograph[a]
A	Motorcycles	Motorcycles, with or without a sidecar	
A[EU]	Motorcycles	Motorcycles, with or without a sidecar and motor tricycles	
B	Light vehicles	Motor vehicles other than those in category A with a maximum authorized mass[b] not exceeding 3 500 kilograms and having not more than eight seats in addition to the driver's seat; motor vehicles in this category may be combined with a trailer having a maximum authorized mass[b] which does not exceed 750 kilograms, or combinations of a tractor vehicle in category B and a trailer, the maximum authorized mass[b] of which exceeds 750 kilograms but does not exceed the unladen mass of the tractor vehicle, where the maximum authorized mass[b] of the combination does not exceed 3 500 kilograms	
C	Goods vehicles	Motor vehicles other than those in category D and whose maximum authorized mass is over 3 500 kilograms; motor vehicles in this category may be combined with a trailer having a maximum authorized mass[b] which does not exceed 750 kilograms	

[a] The pictographs in the above table are examples and minor differences in the actual pictographs for each issuing authority are allowed.

[b] "Maximum authorised mass" of a vehicle means the mass of the vehicle and its maximum load when the vehicle is ready for the road (Gross Vehicle Mass (GVM)).

[EU] Definition applicable to EU member states. Although the 1968 Convention allows the introduction of categories of vehicle other than those defined in Annex 6 of the Convention, the designations of such categories should not resemble the symbols used in the Convention to designate categories of vehicles and another type of print should also be used.

Table B.1 *(continued)*

Symbol	Description	Definition	Pictograph[a]
D	Passenger vehicles	Motor vehicles used for the carriage of persons and having more than eight seats in addition to the driver's seat; motor vehicles in this category may be combined with a trailer having a maximum authorized mass[b] which does not exceed 750 kilograms	
BE	Light vehicles with trailers	Combination of motor vehicles consisting of the tractor vehicle in category B above and a trailer the maximum authorized mass[b] of which exceeds 750 kilograms and the unladen mass of the tractor vehicle (but the maximum authorized mass[b] of the combination does not exceed 3 500 kilograms), **or** combinations of a tractor vehicle in category B and a trailer, the maximum authorized mass[b] of which exceeds 750 kilograms but does not exceed the unladen mass of the tractor vehicle (where the combined maximum authorised mass[b] exceeds 3 500 kilograms)	
CE	Goods vehicles with trailers	Combination of motor vehicles consisting of the tractor vehicle in category C above and its trailer(s) a maximum authorized mass[b] exceeding 750 kilograms	
DE	Passenger vehicles with trailers	Combination of motor vehicles consisting of the tractor vehicle in category D above and its trailer has a maximum authorized mass[b] exceeding 750 kilograms	

[a] The pictographs in the above table are examples and minor differences in the actual pictographs for each issuing authority are allowed.

[b] "Maximum authorised mass" of a vehicle means the mass of the vehicle and its maximum load when the vehicle is ready for the road (Gross Vehicle Mass (GVM)).

EU Definition applicable to EU member states. Although the 1968 Convention allows the introduction of categories of vehicle other than those defined in Annex 6 of the Convention, the designations of such categories should not resemble the symbols used in the Convention to designate categories of vehicles and another type of print should also be used.

B.2.2 Optional vehicle subcategories

To accommodate a domestic or regional need for the introduction of subcategories, Table B.2 defines the optional vehicle subcategories. The vehicle subcategory code shall be depicted on the card and it is recommended that the corresponding pictograph be displayed too, should sufficient space be available on the card.

Table B.2 — Optional vehicle subcategories

Symbol	Description	Definition	Pictographa
AM	Mopeds	Light two-wheel and three-wheel vehicles and light quadricycles with a maximum design speed of not more than *xx*[b] km/h	
A1	Light motorcycles	Light motorcycle with a cubic capacity not exceeding *xxx*[b] cm^3 and of a power not exceeding *xx*[b] kW, with or without a sidecar	
A1[EU]	Light motorcycles	Light motorcycle with a cubic capacity not exceeding *xxx*[b] cm^3 and of a power not exceeding *xx*[b] kW, with or without a sidecar, and motor tricycles of a power not exceeding *xx*[b] kW	
A2 [c]	Medium motorcycles	Medium motorcycle with a power not exceeding *xx*[b] kW, with or without a sidecar	
B1	Light vehicles	Motor powered tricycles and quadricycles	
B1[EU]	Light vehicles	Motor powered quadricycles	
C1	Medium sized goods vehicles	Motor vehicles other than those in category D and whose maximum authorized mass is over 3 500 kilograms but not more than *xxxx*[b] kilograms; motor vehicles in this category may be combined with a trailer having a maximum authorized mass which does not exceed 750 kilograms	
D1	Medium sized passenger vehicles (e.g. minibuses)	Motor vehicles used for the carriage of persons and having more than eight seats but not more than *xx*[b] seats in addition to the driver's seat; motor vehicles in this category may be combined with a trailer having a maximum authorized mass which does not exceed 750 kilograms	

[a] The pictographs in the above table are examples and minor differences in the actual pictographs for each issuing authority are allowed.

[b] The maximum number of cubic centimetres, kilowatts, kilograms or seats for each subcategory in the table is to be determined by the issuing authority and supplemented on the card in accordance with B.2.3.

[c] A2 only to be used if A1 exists.

EU Definition applicable to EU member states. Although the 1968 Convention allows the introduction of subcategories of vehicle other than those defined in Annex 6 of the Convention, the designations of such subcategories should not resemble the symbols used in the Convention to designate subcategories of vehicles and another type of print should also be used.

Table B.2 *(continued)*

Symbol	Description	Definition	Pictographa
C1E	Medium sized goods vehicles with trailers	Combination of motor vehicles consisting of the tractor vehicle in category C1 above combined with a trailer having a maximum authorized mass exceeding 750 kilograms, provided that the maximum authorized mass of the combination does not exceed *xxxx*[b] kilograms, and that the maximum authorized mass of the trailer does not exceed the unladen mass of the tractor vehicle	
C1E[EU]	Medium sized goods vehicles with trailers	Combination of motor vehicles consisting of the tractor vehicle in category C1 above combined with a trailer having a maximum authorized mass exceeding 750 kilograms, provided that the maximum authorized mass of the combination does not exceed 12 000 kilograms, Without prejudice to the provisions of type approval rules for the vehicles concerned, combinations of vehicles where the tractor vehicle is in Category B and its trailer has an authorised mass of over 3 500 kilograms provided that the authorised mass of the combination does not exceed 12 000 kilograms	
D1E	Medium sized passenger vehicles (e.g. minibuses) with trailers	Motor vehicles in category D1 above combined with a trailer having a maximum authorized mass exceeding 750 kilograms, provided that the maximum authorized mass of the combination does not exceed *xxxx*[b] kilograms, and that the maximum authorized mass of the trailer does not exceed the unladen mass of the tractor vehicle and the trailer is not used for the transport of persons	

[a] The pictographs in the above table are examples and minor differences in the actual pictographs for each issuing authority are allowed.

[b] The maximum number of cubic centimetres, kilowatts, kilograms or seats for each subcategory in the table is to be determined by the issuing authority and supplemented on the card in accordance with B.2.3.

[c] A2 only to be used if A1 exists.

EU Definition applicable to EU member states. Although the 1968 Convention allows the introduction of subcategories of vehicle other than those defined in Annex 6 of the Convention, the designations of such subcategories should not resemble the symbols used in the Convention to designate subcategories of vehicles and another type of print should also be used.

B.2.3 Vehicle category supplementation

As each issuing authority may define different limits in terms of mass, engine capacity or number of seats for passengers in each subcategory, such detail shall be supplemented to the pictograph.

Table B.3 shows informative examples of supplementation to the pictograph.

Table B.3 — Supplementation examples

Symbol	Example		Description
A1		<=250 cm^3 <=30 kW	Motorcycles with a cylinder capacity not exceeding 250 cm^3. Motorcycles' power output not exceeding 30 kW.
D1		<=4 500 kg <=1 + 12 P	Motor vehicles with a maximum authorized mass not exceeding 4 500 kg, and in addition to the driver's seat, at most 12 seats.
NOTE The S comparison operators are =, <, >, <=, >=.			

B.3 Restrictions

Table B.4 defines the pictographs of the restrictions accounting for majority of licences issued (more than 99 % of all restrictions).

The pictographs shall be used on the card. The code shall be included in the machine-readable data and is optionally printed on the card in addition to the pictograph.

Table B.4 — Restrictions description

Code (optional)	Definition	Pictograph (mandatory)
01	Licence holder requires eyesight correction and/or protection	
03	Licence holder requires prosthetic device for the limbs	
78	Licence holder restricted to vehicles with automatic transmission	AT
S05	Licence holder restricted to vehicles adapted for physically disabled	

Annex C
(normative)

Document security and security features

C.1 Introduction

This annex specifies the minimum security requirements for an IDL. Areas addressed include IDL card body design, graphical design, inks/pigments, and personalization. The goal is to help deter counterfeiting, falsification and other types of fraudulent misuse of IDL's. More specifically, this annex provides:

1. Lists of security features and the minimum features required for compliance with this document.
2. Basic guidelines for document security management.
3. Guidance to issuing authorities and suppliers on some of the security threats to which an IDL may be exposed.

It also provides basic guidelines for document security management in C.4.

NOTE Access control, authentication and integrity validation is outside the scope of this document and are addressed in ISO/IEC 18013-3. The procedures for securing the personalisation and issuance process and use of IDL's are addressed in Annex D.

C.2 Basic principles

C.2.1 Introduction

The rapid growth in identity fraud has led to increasing concerns over the security of driving licences and many other types of documents used to confirm the identity of the holder. Driving licences are often accepted not only as proof of entitlement to drive a motor vehicle, but also as confirmation of the identity of the holder for obtaining access to a wide variety of other services, for example opening bank accounts, withdrawing or transferring funds etc. Of particular concern is the opportunity driving licences have to serve as evidence of identity to assist in building a false identity and providing a pathway to obtain other documents, such as passports, all in an assumed identity. For these reasons the driving licence is a target for the fraudster making it important to ensure that IDL's are adequately protected from the various forms of fraud to which they may be subject.

The entire card including all the security features should afford protection for the lifetime of an IDL. All security features should maintain their function for the planned service life of the card.

C.2.2 Security classification

Security features can be classified into three levels, based on the nature and intensity of the inspection required for verification. The three security levels are:

— Level 1 (first line inspection),

— Level 2 (second line inspection), and

— Level 3 (third line inspection).

In addition, four groups of security features are defined:

1. Card body design;
2. Security design, resistant to reproduction;
3. Security inks/pigments;
4. Protecting personalised data.

To be compliant with this document, a driving licence shall contain a minimum set of security features providing protection across all groups and Levels 1 and 2, as defined in C.3. Security features designed at Level 3 are optional.

The inclusion of at least one Level 3 security feature is recommended although not specified, because Level 3 security features are generally disclosed and discussed between experts only on a need to know basis.

Issuing authorities may add additional security features to bolster security against any specific threats, provided such features do not have an adverse impact on other security features or personalised information.

C.2.3 Document related fraud

Document related fraud can be categorized in the following types:

— Counterfeiting – producing a simulation of the genuine document;

— Falsification – altering the holder's details on a genuine document;

— Misuse of a genuine document – e.g. posing as the rightful holder.

In order to ensure that an IDL is well protected against these threats, it should contain a balanced set of security features selected to combat all three types of fraud. Fraudsters are generally resourceful and pragmatic people who will look to exploit the weakest point in the overall process. So, an IDL that contains a number of strong anti-counterfeiting features is unlikely to be fraudulently reproduced, but if the holder's data printed on the card is not well secured then falsification will be the more likely form of attack. Concentrating on one type of threat to security, whilst paying insufficient attention to another, will leave an IDL vulnerable to attack and this is why it is necessary to select a balanced set of security features offering protection against all perceived threats.

Care should be taken when applying a security feature or the combination of features that these do not interfere with the legibility of the personalised portrait, signature, text or machine-readable data.

Similarly, it is strongly recommended not to place too much reliance upon any single security feature. Even if a security feature appears to be very difficult to reproduce or to falsify, there can be no guarantee it will not become compromised during the validity period of the document. If this happens the security of an IDL may be significantly damaged resulting in serious consequences. The preferred approach is to select a set of security features that work together in combination, such that even if one feature becomes compromised the others will continue to provide protection. For the fraudster, having to overcome multiple security features has an important deterrent effect, significantly increasing the time, cost and the risk of detection in perpetrating the fraud and probably turning the fraudster to other easier targets.

Different kinds of threats are given in the informative Annex A. In summary, the following threats are defined:

— A.1: Document design attacks;

— A.2: Substitute material/personalization attacks;

— B.1: Falsification by physical modification of existing valid documents;

— B.2: Falsification by recycling;

— B.3: Falsification of logical data;

— C.1: Misuse of genuine valid documents;

— C.2: Misuse of genuine invalid documents;

— C.3: Misuse by theft of original blank documents;

— C.4: Misuse through the fraudulent issue of genuine documents.

Only security threats related to the physical document are covered in this annex. The following threats are excluded:

— Falsification of logical data (B.3);

— Misuse of genuine valid documents (C.1);

— Misuse of a genuine, but invalid documents (C.2);

— Misuse through fraudulent issue of a genuine documents (C.4).

C.3 Security feature requirements

C.3.1 General requirements

While remaining open to future solutions and technology independent, this annex:

— classifies each security feature by group,

— specifies the threats against which a security feature protects, and

— specifies the security levels at which a security feature can be applied.

The minimum number of security features per group is specified in C.3.2.1 to C.3.2.4.

The minimum number of security features per type of fraud (see C.5) shall be as follows:

— Counterfeiting:

  — Reproducing by scanning or copying (A.1): 7 security features

  — Re-origination (A.2): 5 security features

— Falsification:

  — Modification of existing valid documents (B.1): 7 security features

  — Reuse of valid or invalid documents (B.2): 2 security features

— Misuse of a genuine document:

  — Theft of original blank documents (C.3): 1 security feature

The minimum number of security features per security level shall be as follows:

— Level 1: 6 security features

— Level 2: 6 security features

The combination of security features shall be chosen to ensure they work together without conflict to support the security of the IDL. Security features can address more than one type of threat. Security

features can also be classified into more than one level, provided they are designed to function at each of the intended levels.

C.3.2 Security features per group

C.3.2.1 to C.3.2.4 classify security features according to which group they belong. All four groups of features contain one or more mandatory security elements. For each of the four groups there is also a set of optional security features from which issuing authorities are free to make their selection, subject to including the required minimum number of features in an IDL. Issuing authorities may also include other security features not listed in each clause. Such other security features do not count towards meeting the minimum requirements in C.3.1.

C.3.2.1 Card-body design

Card-body design refers to the security of the card construction and in particular to the properties of the materials used in the manufacture of card blanks.

It should be noted that the chosen card construction cannot be determined in isolation and must also take account of operational profile of the card. For example, the construction of the card must be suitable for the intended method of personalisation, and if a chip is to be included within the card body the construction must allow either for an inlay (contactless interface) or for milling and embedding (contact interface) of the card body.

The available features are listed in Table C.1 — Card body security features. In addition to the mandatory feature (M), at least two optional security features (O) shall be included.

Table C.1 — Card body security features

#	Security feature	M/O	A.1	A.2	B.1	B.2	C.3	Level 1	Level 2
1.1	UV-A dull substrate material	M	x	x	x				x
1.2	Fixed printed and/or dynamic data on different layers	O			x	x	x		x
1.3	Tamper evident card body	O	x		x	x		x	x
1.4	Taggant substances for genuine authentication	O	x	x	x	x			x
1.5	Look through element (transparent) such as window element	O	x	x	x			x	
1.6	Look through element comprising grey levels	O	x	x	x			x	x
1.7	Card core inclusions	O	x	x				x	
1.8	Pre-printed serial number on card blanks	O					x	x	x
1.9	Embossed surface pattern	O	x	x	x	x		x	x
1.10	Embedded thread or fibre	O						x	x

C.3.2.2 Security design, resistant to reproduction

The following requirements relate to the security background design and not to the personalised data. IDL's shall be printed with a security background design, which

— is accomplished using a combination of tools, skills, equipment and materials that are not easily accessible, and

— cannot be easily reproduced using generally available production equipment.

As no single security feature can provide protection against counterfeiting an IDL, a combination of features is required.

In addition to the three mandatory features (M), at least 1 optional feature (O) shall be included from Table C.2 — Security design features.

Table C.2 — Security design features

#	Security feature	M/O	A.1	A.2	B.1	B.2	C.3	Level 1	Level 2
2.1	No CMYK colours and at least 2 special colours	**M**	x	x					x
2.2	Guilloche design	**M**	x	x	x			x	x
2.3	Micro printed text	O		x	x				x
2.4	Anti-scan pattern	**M**	x	x	x				x
2.5	Duplex security pattern	O	x	x	x			x	
2.6	Rainbow printing	O	x	x	x			x	
2.7	Deliberate error into the design or microprint	O		x	x			x	x
2.8	Use of non-standard type-fonts	O		x	x			x	x

One solution/technology may address more than one of the mandatory requirements.

C.3.2.3 Security inks / pigments

An IDL shall contain inks or pigments with special properties by which the document may be authenticated and differentiated from fake IDL's. The purpose of these inks/pigments is to include properties in an IDL that can serve as authentication features, either directly by visual inspection or through the use of simple verification equipment, for example an ultra violet lamp. These properties shall not be present in inks that are commercially available to the public and pigment printing systems in order to differentiate a genuine IDL from a fake or falsified document.

UV fluorescent ink (visible or invisible) with a spectral response in the 365 nm wavelength shall be used as the mandatory feature. The UV element included in the background printing of the IDL shall be located in a specific area or areas of the IDL to protect vulnerable data or other elements of the IDL that may be particular targets to fraud.

Where inks providing a short-wave UV response are used, care should be taken that these are compatible with the card construction and personalisation (e.g. are not rendered ineffective by laminate UV absorption).

IR-fluorescent ink and IR-drop out ink shall not be used where the personalised data is intended to be read in the B900 part of the spectrum.

In addition to the mandatory feature (M), at least 2 optional features (O) shall be added from Table C.3 — Security Ink/Pigment Features.

Table C.3 — Security ink/Pigment features

#	Security feature	M/O	A.1	A.2	B.1	B.2	C.3	Level 1	Level 2
3.1	Security background printing								
3.1.1	UV fluorescent ink in security background printing	**M**	x	x	x				x
3.1.2	Optical effect pigments (other than UV or IR pigments)	O	x	x	x			x	x
3.1.3	IR-fluorescent ink	O	x	x	x				x
3.1.4	IR-drop out inks	O	x	x	x				x
3.1.5	Non-optical effect pigments	O	x	x	x				x
3.2	Personalised data								
3.2.1	Optical effect pigments (other than UV or IR pigments)	O	x	x	x		x	x	
3.2.2	IR fluorescent ink	O	x	x	x		x		x

Table C.3 *(continued)*

#	Security feature	M/O	A.1	A.2	B.1	B.2	C.3	Level 1	Level 2
3.2.3	IR drop-out inks	O	x	x	x		x		x
3.2.4	Non-optical effect pigments	O	x	x	x			x	x
3.2.5	UV fluorescent ink in personalized data	O			x	x			x

C.3.2.4 Protecting personalised data

One type of attack on an IDL involves the removal of the portrait image from a stolen or illegally obtained document and its replacement with the portrait image of a different person. To counter this attack, a security feature shall overlap the portrait area without limiting the visual recognition of the holder from the portrait.

The application of the dynamic data elements including the portrait shall be by one of the digital imaging technologies or a process offering equivalent security, since an IDL with a physically attached photograph is particularly susceptible to photo-substitution.

To ensure that data are properly secured against attempts at forgery the dynamic data elements shall be integrated into the layers of an IDL. A variety of technologies are available for applying the data in this way, including the following examples, which are listed in no particular order of importance:

— Electro-photographic printing;

— Thermal transfer printing;

— Ink-jet printing;

— Photographic process;

— Laser engraving.

The choice of a particular technology is a matter for individual issuing authorities and depends upon a number of factors, such as the volume of IDL's to be produced, the construction of the IDL including the card blank material selected and whether it is to be personalised during the IDL manufacturing process or after a blank card has been assembled.

The development and availability of digital imaging techniques and their resulting potential for fraud means that high grade security features in the form of optically variable elements or other equivalent elements are the preferred optional security features for protecting against copying and scanning.

Appropriate integration of optically variable element components or other equivalent elements in an appropriate position in the structure of the IDL also protects the IDL from counterfeiting.

It is recommended that the visible security element overlapping the portrait without obstructing the visibility of the portrait be an optically variable feature.

Dynamic data elements shall be protected against abrasion over time and against fraudulent tampering either by a final assembly including a transparent element (layer, varnish) securely bonded or by the use of a technology which is by design adapted to afford the related protection such as laser engraving. Although these precautions relate primarily to the dynamic data elements on the portrait side of the IDL, appropriate protection against tampering of the data in Zone IV on the non-portrait side of the IDL shall also be included.

In addition to the three mandatory features (M), at least 1 optional security feature (O) shall be included from Table C.4 — Personalisation security features.

Table C.4 — Personalisation security features

#	Security feature	M/O	A.1	A.2	B.1	B.2	C.3	Level 1	Level 2
4.1	Printing dynamic data elements using digital imaging technologies	**M**	x		x		x	x	
4.2	Sub-surface personalisation technique, or Laminate, overlay or coating for surface printed data and portrait	**M**	x		x	x		x	x
4.3	Visible security element overlapping the portrait	O	x	x	x	x	x	x	x
4.4	Security background overlapping the portrait image area	**M**	x		x	x		x	
4.5	Embedded data in the portrait image	O	x		x	x	x	x	x
4.6	Redundant personalized data	O	x		x	x	x	x	x
4.7	Optical Variable Element	O	x	x	x	x	x	x	x
4.8	Areas of different surface reflection	O	x	x	x	x		x	
4.9	Personalized tactile elements	O	x		x	x	x	x	
4.10	Lenticular patterns (such as variable laser element CLI/MLI)	O	x	x	x	x	x	x	
4.11	Random pattern resulting in unique codes	O	x		x	x	x		x
4.12	Magnetic/Optical media "finger printing"	O							x

C.4 Document security management

Production of an IDL, including the personalisation processes, shall be undertaken in a secure environment with appropriate security measures in place to protect the premises against unauthorised access. Centralised IDL production and personalisation is recommended wherever possible. If the personalisation process is decentralised, or if personalisation is carried out in a location geographically separated from where card blanks are made, care shall be taken to transport blank cards and security sensitive materials by secure means to safeguard their security in transit.

There shall be full accountability over all the security materials used in the production of good and spoiled IDL's and a full reconciliation at each stage of the production process, with records maintained to account for all material usage (including waste). The audit trail shall be to a sufficient level of detail to account for secure materials used in the production and shall be independently audited by persons who are not directly involved in the production. Certified records shall be kept of the destruction of all security waste material and spoiled IDL's.

The specifications of all secure material used in the production of an IDL should be carefully controlled and should be quality assured to ensure consistency from one batch to another. Security feature components of an IDL should be obtained only from bona fide security suppliers who can demonstrate that they have appropriate security procedures in place to safeguard the security of the supply chain.

Security design experts shall use specialised security design software packages for at least part of the security background and not only general graphics software packages that are commercially available to the public for originating the entire security background.

C.5 Main threats to the security of an IDL (informative)

C.5.1 Introduction

This clause describes the main threats to IDL security in terms of the ways in which an IDL, its issuance and its use may be fraudulently attacked. The purpose of this clause is to provide a context for the recommendation of security features in the preceding sections.

The threats are split into three primary categories according to characteristics of the underlying attacks: Counterfeiting, Falsification and Misuse.

C.5.2 Counterfeiting threats

C.5.2.1 Document design attacks

C.5.2.1.1 Re-creating the basic document look and feel including such as the background pattern, flags and other fixed motives

— Copying and printing a valid document for physical manipulation

— Scanning a valid document for modification using computer software

— Re-origination of the document using computer software

C.5.2.1.2 Adding personalization information

— Image and text editing with computer software (re-origination)

C.5.2.2 Substitute material/Personalization attacks

C.5.2.2.1 Substitute materials

— Using substitute materials to imitate original documents

  — Paper vs Teslin vs PVC vs PET vs PC

— Using original material that may be commercially available

C.5.2.2.2 Substitute printing methods

— Reproduction of background and logos using alternative technologies

  — Screen printing vs offset printing vs dye sublimation vs electrostatic laser printing

— Reproduction of text and images using alternative technologies

  — Inkjet vs dye sublimation vs electrostatic laser printing vs laser engraving

C.5.2.2.3 Alternative finishing

— Final lamination of the document using commercial laminates

C.5.3 Falsification threats

C.5.3.1 Falsification by physical modification of existing valid documents

C.5.3.1.1 Text attacks

— Printing directly on document, e.g. manipulation (erasing, modifying, adding) of data such as card holder

C.5.3.1.2 Image attacks

— Complete substitution of the licence holder's portrait image

— Masking the original portrait by overlaying another photo

— Changing the original portrait to alter the appearance of the person

C.5.3.1.3 Delaminating attacks

— Partly delaminating to remove genuine features and inserting forged ones (e.g. exchanging data by replacing the data carrying layers)

— Insert forged data or security features after adding, removing or damaging genuine ones during partial delaminating

C.5.3.2 Falsification by recycling

C.5.3.2.1 Extraction of genuine security features

— Removal of security features from genuine cards (e.g. a hologram) for reuse in a falsified document

C.5.3.2.2 Use of recycled genuine security features in a new falsification

— Applying original document parts including data storage elements into forged document

C.5.3.3 Falsification of logical data

C.5.3.3.1 Logical data denial of service attack

— Destruction of data storage elements to circumvent logical security features

C.5.3.3.2 Logical data substitution attack

— Substitution of data storage elements such as IC's

C.5.4 Misuse attacks

C.5.4.1 Misuse of genuine valid documents

C.5.4.1.1 Identity theft

— An unauthorised person using a valid genuine physical document of another similar looking person

C.5.4.2 Misuse of genuine invalid documents

C.5.4.2.1 Invalid documents

— Use of registered lost or stolen documents by look-alikes of the real document holder

C.5.4.2.2 Cloned documents

— Cloning of logical data from a similar looking person

C.5.4.3 Misuse by theft of original blank documents

This category of threats deals with the theft of original blank documents at some stage during the document life cycle up, until the point of personalisation. This can be during the production of the document, during document transport, or during subsequent storage of the document at the personalisation location.

C.5.4.3.1 Theft of blank cards at the card production site

— Misappropriated during the production process

— Cards removed for quality assurance purposes

— Reject blank cards

— Taken from the intermediate production storage

C.5.4.3.2 Theft of blank cards during the transportation process

— During card packaging

— During card transportation

— During intermediate storage

C.5.4.3.3 Blank cards are removed from the personalisation site

— From where they are stored

— During the stock issuance process

— During the personalisation process

— Reject/Lost cards

— Intermediate storage

C.5.4.3.4 Stolen blank documents are personalised

— Using alternative personalisation methods that are available to the attacker

— Using the official equipment or using test personalisation equipment

C.5.4.4 Misuse through the fraudulent issue of genuine documents

C.5.4.4.1 An attacker makes a fraudulent application for an IDL document

— Identity theft using genuine breeder documents

— Fraudulent breeder documents

C.5.4.4.2 Employee at the issuing authority makes unauthorised requests for IDL documents

— Employee bribed by an attacker

C.6 Glossary

The glossary of terms in this annex is included to assist in understanding the general meanings of such terms within the context of this annex. This glossary is not limited to features included in C.3, and not intended to be authoritative or definitive.

Anti-scan pattern: A pattern usually constructed of fine lines at varying angular displacement and embedded in the security background design. When viewed normally, the pattern cannot be distinguished from the remainder of the background security print but when the original is scanned or photocopied the embedded pattern becomes visible.

Areas of different surface reflection: Surface embossed structure with different reflectivity/roughness, e.g. matt or glossy.

Background printing: Printed graphical security design consisting of e.g. guilloche, rainbow printing, micro text, etc. lying below or above the dynamic data.

*Card blank*s: A card that does not contain any of the dynamic data elements.

Card core inclusions: The opaque or translucent inner layers of a laminated card, e.g. coloured or with a modulation of opacity simulating a watermark.

CLI/MLI (Changeable/Multiple Laser Image): Combination of a lens structure integrated to the surface of the document with elements engraved or printed into a bottom layer. Resulting effect consist in multiplexing of at least 2 images each of them being visible separately depending of the viewing angle.

Core inclusions: A material which is included within the inner layers of the card body, such as coloured layer. One example of this is displaying a watermark effect, another being a laser absorption layer for displaying dynamic data

Counterfeit: An unauthorised copy or reproduction of a genuine security card made by whatever means.

CMYK colours: The 'process' colours, cyan, magenta, yellow and black used in combination for commercial colour printing, normally in the form of half-tone patterns, and by digital printing devices to approximately represent the visible colour spectrum and enable the printing of 'colour pictures'.

Deliberate error: Intentional error in the design.

Diffraction: An optical effect produced by periodic microstructures embedded into material layer and producing decomposition of white light into rainbow continuous spectrum that may be seen at specific viewing angles"

Duplex security pattern: A design made up of an interlocking pattern of small irregular shapes, printed in two or more colours and requiring very close register printing in order to preserve the integrity of the pattern.

Dynamic data: Information specific to the document and the holder.

Effect pigments: see optical or non-optical effect pigments.

Electrostatic laser printing: A digital process that produces black and white and/or colour text, images and pictographs by a passing laser beam by over a charged drum to define differentially areas. The drum then selectively collects charged toner and transfers the text, images and pictographs to the card, which is then heated to fix the text, images and pictographs.

Embedded data: Data that is visible, encoded or concealed within a primary visual image or pattern.

Embossed surface pattern: A design or image formed on the surface of an IDL, for example during the card lamination process.

Fibres: Small, thread-like particles embedded in a substrate during manufacture and may include an UV feature too.

Fluorescent ink: Ink containing material that glows when exposed to light at a specific wavelength (usually UV) and that, unlike phosphorescent material, ceases to glow immediately after the illuminating light source has been removed.

Forgery: Fraudulent alteration of any part of the genuine IDL e.g. changes to the dynamic data elements.

Guilloche design: A pattern of continuous fine lines, usually computer generated, and forming a unique pattern that can only be accurately re-originated by access to the software and parameters used in creating the original design.

Half-tone image: A method of representing images by printing, usually in the form of dots of black and/or coloured ink. Varying tones are achieved by varying the size of the printed dots relative to the unprinted, white background area surrounding the dots.

Heat-sealed laminate: A laminate designed to be bonded to the card-body by the application of heat and pressure.

Impostor: A person who applies for and obtains an IDL by assuming a false name and identity, or a person who alters his or her physical appearance to represent himself or herself as another person for the purpose of using that other person's IDL.

Infra-red drop-out ink: An ink which is visible when illuminated with light in the visible part of the spectrum and which cannot be detected in the infra-red region.

Infra-red fluorescent ink: In daylight invisible ink, which can only be seen when applying light in the infrared spectrum (630 nm).

Laminate: A transparent material, which may have security features such as optically variable elements contained within it and which is designed to be securely bonded to the IDL to protect the dynamic data elements and the security features within the card structure.

Laser embossing: A process whereby a laser is used to create tactile elements on the card surface (also referred to as raised laser engraving).

Laser engraving: A process whereby a laser is used to alter the card-body material to display information. The information may consist of text, images, pictographs and security features.

Laser perforation: A process whereby information is created by perforating the card-body material with a laser. The information may consist of text, images and pictographs and appear positive when viewed in reflected light and negative when viewed against a light source.

Latent image/data: A hidden image formed within a relief image which is composed of line structures which vary in direction and profile resulting in the hidden image appearing at predetermined viewing angles. A latent image/ data is – subject to the condition of the correct viewing angle – visible to the human eye without further equipment.

Lenticular feature: Security feature in which a lens structure is integrated in the surface of the document such as a *changeable/*multiple laser image (CLI/MLI).

Look through element: An area of the card designed to permit the transmission of visible light through the card body. The light transmitting area may be transparent or comprise grey levels.

Machine-verifiable biometrics element: A unique physical personal identification element (e.g. an iris pattern, fingerprint or facial characteristics) stored on an IDL in a form that can be read and verified by machine.

Metallic ink: Ink exhibiting a metallic-like appearance.

Metameric inks: A pair of inks formulated to appear to be the same colour when viewed under specified conditions, normally daylight illumination, but which are mismatched at other wavelengths.

Micro- printed text: Very small text printed in positive and/or negative form, that may be used in conjunction with rainbow printing and which can only be read with the aid of a magnifying glass and not exceeding 0,3 mm in height.

Multi-layer card: A card-body comprising two or more layers of material securely bonded together to form a single structure.

Non-optical effects pigments: Any ink containing visible or invisible pigments which is not designed to be controlled by eye such as metallic ink, magnetic ink, conductive ink, bleeding ink or which is not showing any predictable behaviour upon wavelength activation.

Non-standard type fonts: Type fonts that are of restricted availability.

Optical effect pigment: Visible or invisible pigments incorporated in an ink which is designed to be controlled by eye, such as: optically variable ink also called colour shifting inks, or iridescent inks.

Optically variable element: An element whose appearance in colour and/or design changes dependent upon the angle of viewing or illumination, such as holograms or optical diffractive structures.

Optically variable ink: Printing ink containing optically variable pigments which show variations in colour depending on the angle of observation or lighting. Optically variable inks can be either opaque or transparent and include iridescent inks and metameric inks.

Overlay: An ultra-thin film or protective coating that may be applied to the surface of an IDL in place of a laminate and which may contain optically variable elements.

Personalisation: The process by which the dynamic data elements (portrait, signature, biographical and all personal data) are applied to the IDL.

Personalised tactile element: A surface element giving a distinctive 'feel' to the IDL, such as laser embossing.

Phosphorescent ink: Ink containing a pigment, which glows when exposed to light of a specific wavelength, the reactive glow remaining visible and then fading after the light source is removed.

Photo-substitution: A type of forgery in which the portrait on an IDL is substituted for a different one after the IDL has been issued.

Physical security: The range of security measures applied within the production environment to prevent theft and unauthorised access to the process.

Pre-printed serial number on card blanks: identifier printed on card and/or on main components of the card before transfer to the personalization centre(s).

Random pattern resulting in unique codes: Any random feature intrinsic or individually applied to each document by any technology giving uniqueness feature that can be controlled either by eye or with any kind of tool.

Rainbow (split-duct) printing: A technique whereby two or more colours of ink are printed simultaneously by the same unit on a press to create a subtle merging of the colours resulting in a gradual colour change.

Redundant personalized data: Dynamic text and/or image to be printed more than once for redundancy checking by whatever means.

Security background printing: Printed elements that are devoted to secure blank cards and do not include any dynamic data.

Security feature: see definition 3.26 in this document.

Special colours: Colours that are not easily reproduced using CMYK colours.

Strong adhesion: Bonding between top and personalisation layer high enough to prevent access to variable elements for falsification purposes.

Taggants: Special materials/chemicals hidden inside the card core (plastic, composite paper or synthetic material) which can only be detected and authenticated with special equipment.

Tagged inks: Inks containing taggants.

Tamper evident card body: Card showing evidence of destruction or modification caused by an attack.

Thermochromic ink: An ink which undergoes a reversible colour change when exposed to heat (e.g. body heat).

UV: Ultra violet.

UV-A: No response using a light source with a wavelength between 315 nm and 400 nm.

UV dull: Substrate material exhibiting no visibly detectable fluorescence when illuminated with UV light or with a controlled response to UV at 365 nm.

UV fluorescent ink: UV fluorescent ink can be either transparent or integrated to an ink visible to the naked eye; in addition, some UV fluorescent inks can respond to standard wavelength UV light with one colour and with another colour to a shorter wavelength UV light, called Bi-UV.

NOTE The UV response of fluorescent dyes and pigments is prone to fading after prolonged exposure to daylight.

Variable laser element: Element that generated by laser engraving (such as CLI/MLI) or laser perforation displaying changing information dependent upon the viewing angle.

Variable opacity: comprising two or more grey levels visible against a light source.

Visible security element: Human-readable security feature protecting dynamic data that may in addition be designed to provide protection at Level 2.

Watermark: A recognizable image or pattern that appears as various shades of lightness/darkness when viewed against a light source.

NOTE Watermarks can be created by thickness or density variations. There are two main ways of producing watermarks in core material of a card; rolling process, and the more complex cylinder mould process. Watermarks vary greatly in their visibility.

Window element: A type of look through element with a high level of transparency.

Annex D
(informative)

Procedures for securing the issuance and use of IDLs

D.1 Identity confirmation and licence holder verification

This annex relates to the processes whereby an issuing authority determines the entitlement of an individual to be issued an IDL and, after issuance, the procedures applied to check the IDL and validate the identity of the person presenting it. Although these are not strictly IDL security issues they are fundamental to the overall security of the IDL system and so have been included for the sake of completeness. In C.4 these threats are characterised as the threats posed by impostors. In this context, an impostor is a person who assumes a false identity to obtain an IDL using someone else's name and biographical data, or who uses another person's IDL and alters their own appearance in order to impersonate that other person. These are uniquely troublesome problems, because both cases involve the fraudulent use of genuine IDLs rather than counterfeit or forged IDLs. Prevention and detection of this type of fraud is difficult, requiring different security measures and checks than are used to protect and determine the authenticity of an IDL. In these cases, it is necessary to determine whether the person is genuine rather than the IDL itself. The following measures should be considered:

— Original photographs and all digitally captured portrait images to be true likenesses of the legitimate licence holder and the image to be of the appropriate dimensions as specified in this document.

— Training of document examiners in detection techniques.

— Thorough checking and cross-referencing of supporting identity documents prior to issuing an IDL.

— A maintained database of all IDLs issued nationally along with search and match capability, where permitted by national legislation.

— A maintained database of all lost, stolen, defective or other security-sensitive IDLs or materials along with search and match capability.

— Inclusion of a machine-verifiable biometric feature linking the IDL to its legitimate licence holder.

— Bilateral and multi-lateral international agreements to share specific information on suspect documents.

D.2 Protection against theft and abuse of genuine card blanks or IDL components

The most effective method of protecting against the illegal issue of stolen blank cards is to centralise the issuing procedure. Where IDLs continue to be issued on a regional or decentralised basis, appropriate security measures should be taken in terms of logistics, administration and personalisation techniques. This applies particularly to the storage of any card blanks and the means of personalisation (e.g. access to personalisation systems). All card blanks and IDL components should be stored in locked and appropriately supervised premises. The following measures should be considered:

— Good physical security of the premises with controlled access to delivery/shipment and production areas, IDL storage facilities and personalisation equipment.

— Full audit trail, including blind audits, with reconciliation of all materials (used, unused, defective or spoiled) and certified records of same.

NOTE "Blind audit" – An auditing procedure for multi-step production on operations whereby the following process is used. The person responsible for security of the completed operation performs an article count and submits the count to an auditor. The person responsible for the operation to be commenced performs an article count and submits it to the same auditor. The auditor compares the counts and assuming they match authorises commencement of the pending operation.

— All card blanks, and other security-sensitive components to be serially numbered with full audit trail from raw materials to dispatch. Where applicable, tracking and control numbers of other principal IDL components (e.g. rolls or sheets of laminates, optically variable elements, etc,) to be recorded.

— Secure transport vehicles for movement of blank cards and other principal IDL components (if applicable).

— Details of all lost and stolen IDLs, card blanks, other secure items and issuing equipment to be rapidly circulated between issuers. Appropriate controls to be in place to protect the production, personalisation and issuance systems from internal fraud.

— TV video coverage/recording of all production areas.

— Centralised production, personalisation and issuing of IDLs.

D.3 Internal security of the issuance process

Appropriate controls shall be in place to protect the internal security of the issuance process to prevent fraudulent use of the system by employees and other persons who may have access to all or any part of the official issuance system.

— The handling and storage of application data and forms should be done using relevant security arrangements so that the integrity of the data can be guaranteed through the issuance process and to ensure any archived/stored information cannot be changed.

— If possible, when making the issuance decisions the relevant registers and databases should be deployed for proper identification.

— The issuance process should be organised so that no one individual can authorise the issuance of, personalise and issue an IDL ("two person principle").

— There should be a complete audit trail of the entire issuance and personalization processes and when handling forms and user data, or making data base transactions the person(s) carrying out these operations should sign or identify themselves to link them with the action.

— The integrity of audit trail data should be protected through proper means (user rights/ encryption etc.).

— Strict control of the issuance of the IDL to the applicant with proper identification of the applicant both when he applies for and when he receives the IDL

— Control of the staffing arrangements to reduce the possibility of fraud through collusion of employees in the application and IDL handling processes.

D.4 Quality control

Quality checks and controls at all stages of the production process and from one batch to the next are essential to maintain consistency in the finished IDL. This should include quality assurance inspection on all materials used in the manufacture of the IDLs. The consistency in the finished IDL is very important because those inspecting the IDLs rely upon being able to recognise fake IDLs from variations in their appearance or characteristics. If there are variations in the quality, appearance or characteristics of an issuing authority's genuine IDLs, detection of counterfeit or forged IDLs is made more difficult.

Annex E
(informative)

Card durability

E.1 Introduction

Issuing authorities need an indication of a card's durability and conformity. This annex provides references to globally recognized ISO test methods specifically on test application profiles and requirements as well as the assessment process.

There are many factors that shall be considered when attempting to establish durability requirements for an IDL. It is recommended that each issuing authority assesses and defines its own durability requirements, based on the expected use of its cards.

Special care shall be taken that mandatory data elements of the IDL are protected over the life of the IDL.

Consideration should be given to the longevity / long-term integrity of document security features that are incorporated into the IDL (see Annex C).

E.2 Tests

To assess compliance with an issuing authority's durability requirements, it is recommended that the issuing authority considers tests from the following standards:

— ISO/IEC 10373-1: Identification cards — Test methods — Part 1: General characteristics tests

— ISO/IEC 10373-3: Identification cards — Test methods — Part 3: Integrated circuit cards with contacts and related interface devices

— ISO/IEC 10373-6: Identification cards — Test methods — Part 6: Proximity cards.

— ISO/IEC 24789-2: Identification cards — Card service life — Part 2: Methods of evaluation

Issuing authorities may consider other tests to help estimate the assurance that all the issuing authority's card durability requirements will be met.

Annex F
(informative)

Distinguishing signs of countries

The distinguishing sign of the issuing country, as identified to the UN Secretary General in accordance with the UN Conventions (1949 and 1968) on 1 February 2017, is provided in Table F.1.

Table F.1 — Distinguishing signs of Contracting Parties

Country	Distinguishing sign	Country	Distinguishing sign
Albania	AL	Brunei	BRU
Algeria	DZ	Bulgaria	BG
Andorra	AND	Cambodia	K
Argentina	RA	Canada	CDN
Armenia	AM	Central African Republic	RCA
Australia	AUS	Chile	RCH
Austria	A	China (Republic of)	RC
Azerbaijan	AZ	Congo	RCB
Bahamas	BS	Costa Rica	CR
Bahrain	BRN	Côte d'Ivoire	CI
Bangladesh	BD	Croatia	HR
Barbados	BDS	Cuba	CU[a]
Belarus	BY	Cyprus	CY
Belgium	B	Czech Republic	CZ
Belize (former British Honduras)	BH[b]	Democratic Republic of the Congo	ZRE
Benin	DY	Denmark	DK
Bosnia and Herzegovina	BIH	Faroe Islands	FO
Botswana	BW	Dominican Republic	DOM
Brazil	BR	Ecuador	EC
Egypt	ET	Jordan	HKJ
Estonia	EST	Kazakhstan	KZ
Fiji	FJI	Kenya	EAK
Finland	FIN	Kuwait	KWT
France	F	Kyrgyzstan	KG
Gambia	WAG	Lao People's Democratic Republic	LAO
Georgia	GE	Latvia	LV
Germany	D	Lebanon	RL
Ghana	GH	Lesotho	LS
Greece	GR	Liberia	LB

[a] The distinguishing sign was not notified to the UN Secretary-General.

[b] After independence the change of the name of the State not notified in the Convention(s).

[c] The distinguishing sign was not notified to the UN Secretary-General.

[d] The distinguishing sign was not notified to the UN Secretary-General.

Table F.1 *(continued)*

Country	Distinguishing sign	Country	Distinguishing sign
Grenada (Windward Islands)	WG	Lithuania	LT
Guatemala	GCA	Luxembourg	L
Guyana	GUY	Madagascar	RM
Haiti	RH	Malawi	MW
Holy See	V	Malaysia	MAL
Hungary	H	Mali	RMM
Iceland	IS	Malta	M
India	IND	Mauritius	MS
Indonesia	RI	Mexico	MEX
Iran (Islamic Republic of)	IR	Moldova	MD
Iraq	IRQ[c]	Monaco	MC
Ireland	IRL	Mongolia	MGL
Israel	IL	Montenegro	MNE
Italy	I	Morocco	MA
Jamaica	JA	Myanmar	BUR
Japan	J	Namibia	NAM
Netherlands	NL	Slovakia	SK
Netherlands Antilles	NA	Slovenia	SLO
New Zealand	NZ	South Africa	ZA
Nicaragua	NIC	Spain (incl African localities and provinces)	E
Niger	RN	Sri Lanka	CL
Nigeria	WAN	St Lucia (Windward Islands)	WL
Norway	N	St Vincent and the Grenadines (Windward Islands)	WV
Pakistan	PK	Suriname	SME
Papua New Guinea	PNG	Swaziland	SD
Paraguay	PY	Sweden	S
Peru	PE	Switzerland	CH
Philippines	RP	Syrian Arab Republic	SYR
Poland	PL	Tajikistan	TJ
Portugal	P	Thailand	T
Republic of Korea	ROK	The F.Y.R. of Macedonia	MK
Romania	RO	Togo	TG
Russian Federation	RUS	Trinidad and Tobago	TT
Rwanda	RWA	Tunisia	TN
Samoa	WS	Turkey	TR
San Marino	RSM	Turkmenistan	TM
Senegal	SN	Uganda	EAU
Serbia	SRB	Ukraine	UA

[a] The distinguishing sign was not notified to the UN Secretary-General.

[b] After independence the change of the name of the State not notified in the Convention(s).

[c] The distinguishing sign was not notified to the UN Secretary-General.

[d] The distinguishing sign was not notified to the UN Secretary-General.

Table F.1 *(continued)*

Country	Distinguishing sign	Country	Distinguishing sign
Seychelles	SY	United Arab Emirates	UAE[d]
Sierra Leone	WAL	United Kingdom:	GB
Singapore	SGP	Alderney	GBA
Guernsey	GBG	United States of America	USA
Gibraltar	GBZ	Uruguay	ROU
Isle of Man	GBM	Uzbekistan	UZ
Jersey	GBJ	Venezuela	YV
United Republic of Tanzania:	TZA	Viet Nam	VN
Tanganyika	EAT	Zambia	RNR
Zanzibar	EAZ	Zimbabwe	ZW

[a] The distinguishing sign was not notified to the UN Secretary-General.

[b] After independence the change of the name of the State not notified in the Convention(s).

[c] The distinguishing sign was not notified to the UN Secretary-General.

[d] The distinguishing sign was not notified to the UN Secretary-General.

Other distinguishing signs used by United Nations Member States, not Contracting Parties to the 1968 Convention on Road Traffic and/or the 1949 Convention on Road Traffic on 1 February 2017, are provided in Table F.2.

Table F.2 — Distinguishing signs of countries

Country	Distinguishing sign	Country	Distinguishing sign
Afghanistan	AFG	Libyan Arab Jamahiriya	LAR
Bolivia	BOL	Liechtenstein	FL
Burkina Faso	BF	Mauritania	RIM
Burundi	RU	Mozambique	MOC
Cameroon	CAM	Nauru	NAU
Chad	TCH/TD	Nepal	NEP
Colombia	CO	Panama	PA
Dominica (Windward Islands)	WD	Qatar	Q
El Salvador	ES	Saudi Arabia	SA
Eritrea	ER	Somalia	SO
Ethiopia	ETH	Sudan	SUD
Gabon	G	Virgin Islands	BVI
Guinea	RG	Yemen	YAR

Annex G
(normative)

IDL booklet

G.1 Introduction

Although the human-readable content of the DDP is displayed in the extended Latin character set, the explanatory information printed on the DDP is in the domestic language of the issuing country (e.g. in German on the German licence). To enable the international interpretation of the DDP, also in countries that do not use the Latin character set (e.g. Japan or China), an explanatory booklet containing the languages and character sets specified in this annex may accompany the DDP.

This annex defines the specifications of the layout of the booklet, together with figures for ease of understanding.

G.2 The need for an IDL booklet

Since Clause 2 of Article 41 of the 1968 Convention stipulates that the IDP shall only be recognized if accompanied by the DDP and that a DDP issued in accordance with the provisions of the Convention shall be recognised by all Contracting Parties, the need for a booklet to be used in conjunction with the DDP is established in the 1968 Convention. The Convention also determines that the IDL booklet serves to translate the DDP which was issued in the language of the issuing country for international use.

The scope of the booklet is determined by the considerations arising from the following options:

— a booklet with some degree of personalisation; or

— a booklet with no personalisation, serving as translation only.

G.2.1 Booklet with some personalisation

A DDP issued in accordance with the provisions of the 1968 Convention takes care of the **identification of the licence holder** and **licence authorisation** functions for the international use of the IDL. The possible inclusion of two lines of OCR-B characters in the booklet was also considered. However, this document already makes provision for the inclusion of several optional machine-readable technologies on the non-portrait side of the IDL. Thus there is no need to duplicate the machine-readable content of the IDL in the booklet.

When considering a means for a foreign state to disqualify the holder of a DDP from driving in that country, it should be remembered that the licence holder easily circumvents this **disqualification** when using an IDP by merely obtaining another IDP upon presentation of his/her DDP. This is due to the absence of an integrated system to link the issuing of an IDP to the validity of a DDP and the absence of a means for a foreign state to record the disqualification of the licence holder on the driving licence register of the authority, which issued the domestic licence.

Instead of perpetuating the illusion of a means to control the driving privileges of a licence holder in the territory of a foreign country by means of the exclusions written on the booklet, the inefficiencies of the process should be recognised and the means for validation and exchange of information between countries be adopted to facilitate a secure solution to record disqualifications.

G.2.2 Booklet with no personalisation

The primary purpose of an explanatory booklet in the number of languages prescribed in the UN Conventions (or more), but without any personalisation included, would be to facilitate the international interpretation of the DDP as provided for in Clause 2 of Article 41 of the 1968 Convention. The booklet does not contain any authorisation or validity period (which is the function of the IDL), but merely facilitates the interpretation thereof.

Instead of **explanatory text,** pictographs are used to the largest extent possible on the IDL to overcome the problems associated with translations into several languages. However, pictographs are not effective for the description of the data fields. Given the ID-1 size card dimensions and the need to reserve space for the inclusion of machine-readable technologies, the text carrying capacity of the IDL is limited.

Furthermore, in the transitional period upon introduction of the IDL, the majority of law enforcement authorities in the world may not yet be familiar with the interpretation of the various data elements (as identified by the assigned data field reference codes) or the driving privileges afforded by the various UN vehicle categories and optional domestic or regional categories described in Annex B.

To occupy space on the non-portrait side of the card with explanatory text for the data field reference codes (as some EU countries do) would reduce the capacity for machine-readable components on the non-portrait side of the card. Any explanatory text on the non-portrait side of the card would also be restricted to a single language (e.g. German only on the German EU licence), compared to a booklet that has all the languages included in the booklet.

G.3 Common recognition of booklet

For purposes of common recognition of the booklet, the following shall be depicted on the booklet:

— The logo (e.g. national symbol or crest of arms) of the issuing country or the UN.

— The background colour of the booklet may be a printed pattern and shall be predominantly grey.

— The words “Translation of Driving Licence” in English and French.

Text descriptions in the number of languages specified in this annex and the additional languages included at the discretion of the issuing authority of the following:

— vehicle categories that the IDL may possibly authorise the licence holder to drive, together with the associated pictographs;

— data fields depicted by way of the reference codes from 1 to 12 on the IDL, and

— restrictions/limitations (e.g. licence holder requires eye sight correction (corrective lenses) or licence holder limited to vehicles fitted with automatic transmission), together with the standard pictographs that may be depicted on the IDL.

G.4 Dimensions and format

The dimensions of the booklet shall be marginally larger than the dimensions of the ID-1 size IDL card as depicted in Figure G.2, to accommodate the card in the insert pocket and for convenient carrying of the booklet.

To further enhance the convenience of carrying, the booklet has an insert pocket for the card to slide in, with a cut-away section allowing the portrait image of the licence holder to be visible when the card is inserted in the pocket, the dimensions of which are shown in Figure G.2. The insert pocket protects the machine-readable components that may be included on the card.

The inner pages of the booklet shall be attached to the cover pages using a stitched or stapled binding method along a vertical line in the centre of the booklet.

The cover pages shall be of at least 150 g/m^2 paper and the inner pages should not exceed 80 g/m^2 paper.

G.5 Layout

G.5.1 Cover

The front and back covers of the booklet shall have the following information:

G.5.1.1 Front

The logo of the issuing country or the UN. The logo shall be reproduced exactly to the design and proportions (width and height) specified in Figure G.2.

The words “Translation of Driving Licence” (English) and "Traduction du Permis de Conduire " (French).

G.5.1.2 Back

Explanatory text in English for the data field reference codes and pictographs of restrictions (as specified in Annex B), which may be depicted on the IDL as shown in Figure G.14.

G.5.2 Introduction

The introduction pages contain important notices to the licence holder in English and French.

It points out that the booklet is not a driving licence, but merely translates the driving privileges appearing on the IDL into multiple languages for international interpretation, and hence the booklet is of no use to a driver if not accompanied by the IDL at all times.

It also confirms that the licence holder is subject to the laws and regulations regarding road traffic in the country through which he or she travels.

The first page is printed on the inside (back) of the front cover page.

G.5.2.1 English

The English text of the notice is as follows:

"Important Notice to Holder!

(1) This booklet is not a driving licence, but merely translates the categories of vehicles for which your Domestic Driving Permit is valid in the languages agreed upon for international recognition in the United Nations (UN) Conventions on Road Traffic.

(2) Your valid Domestic Driving Licence is valid for the territories of all the other Contracting Parties to the UN Conventions on condition that it conforms with the requirements that allows it to be "Ready for International Use" in the Conventions and this booklet should be presented with your valid Licence.

(3) A Domestic Driving Licence shall cease to be valid in the territory of another country which is a Contracting Party to the UN Conventions if its holder establishes normal residence in that country.

(4) A Domestic Driving Licence shall in no way affect the obligation of the holder to conform strictly to the laws and regulations which are in force in each country through which you travel."

G.5.2.2 French

The French text of the notice is as follows:

"Note importante pour le titulaire!

(1) Ce livret n'est pas un permis de conduire mais traduit simplement vos droits en matière de conduite dans les langues reconnues internationalement par les Conventions des Nations Unies (NU) concernant le trafic routier.

(2) Votre permis de conduire valide est valable pour les territoires de toutes les autres Parties contractantes aux Conventions des Nations Unies, à condition qu'il se conforme aux exigences qui lui permet d'être "prêt à l'emploi international" dans les conventions et ce livret devrait être présenté avec votre licence valide.

(3) Le Permis de Conduire cesse d'être valide si le titulaire établit sa résidence normale dans un autre pays signataire des Conventions sur le droit routier des Nations Unis.

(4) Il est entendu que la possession d'un permis de conduire n'affecte en aucune sorte l'obligation où se trouve son porteur de se conformer strictement, aux lois et règlements en vigueur des pays où il circule."

G.5.3 Recognition of the IDL

These pages describe in English and French the distinguishing features included in the specification of the IDL to enable common recognition thereof.

G.5.3.1 English

The English text of the notice is as follows:

"Recognition of Domestic Driving Permit — Ready for International Use

A Domestic Driving Licence, which is **ready for international use** can be recognised from the following common features on the front of the plastic card:

— The words "DRIVING PERMIT" in one of the languages English ("DRIVING LICENCE"), French ("PERMIS DE CONDUIRE") or Spanish ("PERMISO DE CONDUCCIÓN") are printed in black lettering along the top edge of the card or alternatively in the background graphic design.

— The entries on the card are in Latin characters or transcribed in Latin characters.

— The entries on the card are numbered in accordance with the reference codes described in this booklet to allow identification of the information recorded.

— The colour of the background of the first 10 mm along the top edge of the card shall be predominantly pink.

— The photograph of the holder of the licence is only depicted on the left side of the card."

G.5.3.2 French

The French text of the notice is as follows:

"Signes distinctifs du Permis de Conduire — Prêt à l'utilisation Internationale

Le Permis de Conduire **prêt à l'utilisation internationale** est reconnaissable aux caractéristiques communes suivantes au recto de la carte en plastique:

— La mention "PERMIS DE CONDUIRE" traduite dans une des trois langues, anglais ("DRIVING LICENCE"), ou français ("PERMIS DE CONDUIRE"), ou espagnol ("PERMISO DE CONDUCCIÓN") est imprimée en noire le long du bord supérieur de la carte, ou faire partie intégrante du fond de la carte.

— Les entrées de la carte sont en caractères latins ou transcrites en caractères latins.

— Les entrées sur la carte sont numérotées en conformité avec les codes de référence décrits dans ce livret pour permettre l'identification de l'information enregistrée.

— La partie haute de la carte est de couleur rose sur une hauteur d'au moins 10mm.

— La photographie du titulaire est obligatoirement positionnée sur la partie gauche de la carte."

G.5.4 Multi-language descriptions

These pages include text descriptions in English, French, Spanish, Russian, Chinese and Arabic (the 6 official languages prescribed by the UN Conventions), followed by a number of additional languages which may be included at the discretion of the issuing authority of the following:

— Vehicle categories and associated pictographs that may be depicted on the IDL.

— Data fields depicted by way of the reference codes from 1 to 12 on the IDL.

— Restrictions/limitations (e.g. licence holder requires eye sight correction (corrective lenses) or licence holder limited to vehicles fitted with automatic transmission), and standard pictographs that may be depicted on the IDL.

Figure G.1 below depicts the template on which the various text elements involved are identified. Note that the page has been rotated through 90° and enlarged to facilitate easy reading.

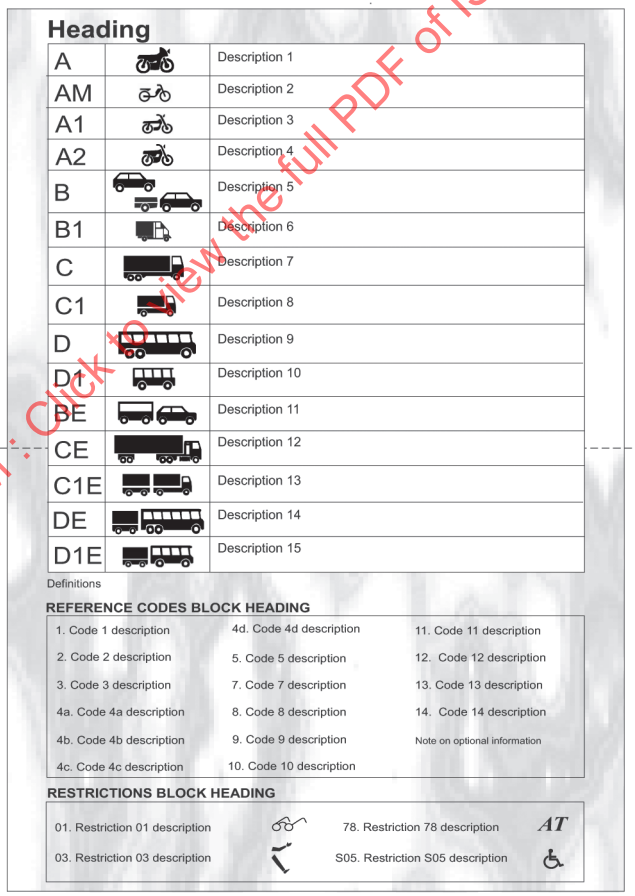

Figure G.1 — Template of text elements on driving licence descriptions page

The English version and translation for each of the text elements for the other five mandatory languages are provided in Tables G.1 to G.6. Tables G.7 to G.10 provide the translation for a selection of other languages as an example of further translations that may be added by an issuing authority.

Table G.1 — English version of text elements

Text element	English version
Heading	CATEGORIES OF VEHICLES, WITH THE CORRESPONDING CODES, FOR WHICH THE DRIVING LICENCE IS VALID
Description 1	Motorcycles, with or without a sidecar.
Description 2	Motorcycles and motor powered tricycles with a maximum design speed of not more than 45 km/h and light motor powered quadricycles.
Description 3	Motorcycles with a cubic capacity not exceeding 125 cm^3 and a power not exceeding 11 kW (light motorcycles).
Description 4	Motorcycles with or without a sidecar of a power not exceeding 35 kW and with a power/weight ratio not exceeding 0,2 kW/kg and not derived from a vehicle of more than double its power.
Description 5	Motor vehicles other than those in category A having a permissible maximum mass not exceeding 3 500 kg (7 700 lbs) and not more than eight seats in addition to the driver's seat; or motor vehicles of category B coupled to a trailer the permissible maximum mass of which does not exceed 750 kg (1 650 lbs); **or** motor vehicles of category B coupled to a trailer the permissible maximum mass of which exceeds 750 kg (1 650 lbs) but does not exceed the unladen mass of the motor vehicle, where the combined permissible maximum mass of the vehicles so coupled does not exceed 3 500 kg (7 700 lbs).
Description 6	Motor powered tricycles and quadricycles.
Description 7	Motor vehicles other than those in category D having a permissible maximum mass exceeding 3 500 kg (7 700 lbs); or motor vehicles of category C coupled to a trailer the permissible maximum mass of which does not exceed 750 kg (1 650 lbs).
Description 8	Motor vehicles, with the exception of those in category D, the permissible maximum mass of which exceeds 3 500 kg (7 700 lbs) but does not exceed 7 500 kg (16 500 lbs); or motor vehicles of subcategory C1 coupled to a trailer, the permissible maximum mass of which does not exceed 750 kg (1 650 lbs).
Description 9	Motor vehicles used for the carriage of passengers and having more than eight seats in addition to the driver's seat; or motor vehicles of category D coupled to a trailer the permissible maximum mass of which does not exceed 750 kg (1 650 lbs).
Description 10	Motor vehicles used for the carriage of passengers and having more than 8 seats in addition to the driver's seat but not more than 16 seats in addition to the driver's seat; or motor vehicles of subcategory D1 coupled to a trailer, the permissible maximum mass of which does not exceed 750 kg (1 650 lbs).
Description 11	Motor vehicles of category B coupled to a trailer the permissible maximum mass of which exceeds 750 kg (1 650 lbs) and exceeds the unladen mass of the motor vehicle; **or** motor vehicles of category B coupled to a trailer the permissible maximum mass of which exceeds 750 kg (1 650 lbs) where the combined permissible maximum mass of the vehicles so coupled exceeds 3 500 kg (7 700 lbs).
Description 12	Motor vehicles of category C coupled to a trailer whose permissible maximum mass exceeds 750 kg (1 650 lbs).
Description 13	Motor vehicles of subcategory C1 coupled to a trailer the permissible maximum mass of which exceeds 750 kg (1 650 lbs) but does not exceed the unladen mass of the motor vehicle, where the combined permissible maximum mass of the vehicles so coupled does not exceed 12 000 kg (26 400 lbs).
Description 14	Motor vehicles of category D coupled to a trailer whose permissible maximum mass exceeds 750 kg (1 650 lbs).

Table G.1 *(continued)*

Text element	English version
Description 15	Motor vehicles of subcategory D1 coupled to a trailer, not used for the carriage of persons, the permissible maximum mass of which exceeds 750 kg (1 650 lbs) but does not exceed the unladen mass of the motor vehicle, where the combined permissible maximum mass of the vehicles so coupled does not exceed 12 000 kg (26 400 lbs).
Definitions	"Permissible maximum mass" of a vehicle means the mass of the vehicle and its maximum load when the vehicle is ready for the road (Gross Vehicle Mass (GVM)).
Reference codes block heading	Domestic Driving Permit data reference codes:
Code 1 description	Family name
Code 2 description	Given or other names
Code 3 description	Date (and Place)* of birth
Code 4a description	Date of issue
Code 4b description	Expiry date
Code 4c description	Issuing Authority
Code 4d description	(Identification or Administrative Number)*
Code 5 description	Permit Number
Code 7 description	Signature
Code 8 description	(Place of Residence)*
Code 9 description	Categories of vehicles
Code 10 description	Category valid from
Code 11 description	Category valid to
Code 12 description	Information/restriction codes
Code 13 description	Information for change in country of residence
Code 14 description	Road traffic safety information
Note on optional information	* Optional, if available/known only
Restrictions block heading	Restrictions:
Restriction 01 description	Driver requires eyesight correction
Restriction 03 description	Driver requires prosthetic device for the limbs
Restriction 78 description	Vehicles with automatic transmission only
Restriction S05 description	Vehicles adapted for physically disabled only

Table G.2 — French translation of text elements

Text element	Translation
Heading	CATEGORIES POUR LESQUELLES LE PERMIS DE CONDUIRE EST VALIDE:
Description 1	Motocyclettes avec ou sans side-car.
Description 2	Cyclomoteurs à 2 ou 3 roues avec une vitesse par construction n'excédant pas 45 km/h et quadricycles légers à moteur.
Description 3	Motocyclettes de cylindrée n'excédant pas 125 cm^3 et de puissance électrique n'excédant pas 11 kw.
Description 4	Motocyclettes avec ou sans side-car d'une puissance n'excédant pas 35 kW et dont le rapport puissance/poids n'excède pas 0,2 kW/kg et qui ne dérive pas d'un véhicule faisant plus de deux fois cette puissance.

Table G.2 *(continued)*

Text element	Translation
Description 5	Véhicules automobiles ayant un poids total autorisé en charge (PTAC) qui n'excède pas 3 500 kg, affectés au transport de personnes et comportant, outre le siège du conducteur, huit places assises au maximum, ou ensemble de véhicules couplés composé d'un véhicule tracteur et d'une remorque affecté au transport de marchandises dont le poids total autorisé en charge (PTAC) n'excède pas 750 kg, **ou** ensemble de véhicules couplés composé d'un véhicule tracteur et d'une remorque dont le poids total autorisé en charge (PTAC) excède 750 kg sous réserve que la masse à vide de l'ensemble n'excède pas 3 500 kg et que la masse autorisée de la remorque n'excède pas la masse autorisée à vide du tracteur lui-même.
Description 6	Tricycles et quadricycles à moteur.
Description 7	Véhicules automobiles autres que ceux de la catégorie D dont le poids total autorisé en charge (PTAC) excède 3 500 kg. Ou ensemble de véhicules couplés de catégorie C composé d'un véhicule tracteur et d'une remorque dont le poids total autorisé en charge (PTAC) n'excède pas 750 kg.
Description 8	Véhicules automobiles autres que ceux de la catégorie D dont la masse maximum se situe entre 3 500 kg et 7 500 kg, ou ensemble de véhicules couplés composé d'un véhicule tracteur entrant dans la sous-catégorie C1 et d'une remorque dont le poids total autorisé en charge (PTAC) n'excède pas 750 kg.
Description 9	Véhicules automobiles affectés au transport de personnes comportant plus de huit places assises outre le siège du conducteur, ou ensemble de véhicules couplés composé d'un véhicule tracteur entrant dans la catégorie D et d'une remorque dont le poids total autorisé en charge (PTAC) n'excède pas 750 kg.
Description 10	Véhicules automobiles affectés au transport de personnes comportant plus de huit places assises et au maximum seize sièges outre le siège du conducteur, ou ensemble de véhicules couplés composé d'un véhicule tracteur entrant dans la catégorie D1 et d'une remorque dont le poids total autorisé en charge (PTAC) n'excède pas 750 kg.
Description 11	Véhicules relevant de la catégorie B, ayant une remorque attelée dont le poids total autorisé en charge (PTAC) excède 750 kg, et est supérieur à la masse à vide du véhicule tracteur, **ou** ensemble de véhicules couplés composé d'un véhicule tracteur entrant dans la catégorie B et d'une remorque dont le poids total autorisé en charge (PTAC) excède 750 kg sous réserve que la masse autorisée de l'ensemble avec la remorque excède 3 500 kg.
Description 12	Véhicules à moteur relevant de la catégorie C, ayant une remorque attelée dont le poids total autorisé en charge (PTAC) excède 750 kg.
Description 13	Ensemble de véhicules couplés composé d'un véhicule tracteur entrant dans la catégorie C1 et d'une remorque dont le poids total autorisé en charge (PTAC) excède 750 kg mais est inférieur à la masse à vide du véhicule motorisé, sous réserve que la masse autorisée de l'ensemble n'excède pas 12 000 kg.
Description 14	Véhicules à moteur relevant de la catégorie D, attelés d'une remorque dont le poids total autorisé en charge (PTAC) excède 750 kg.
Description 15	Ensemble de véhicules couplés non affecté au transport de personnes, composé d'un véhicule tracteur entrant dans la catégorie D1 et d'une remorque dont le poids total autorisé en charge (PTAC) excède 750 kg sous réserve que la masse à vide de l'ensemble n'excède pas 12 000 kg et que la masse autorisée de la remorque n'excède pas la masse autorisée à vide du tracteur lui-même.
Definitions	Le terme "poids total autorisé en charge (PTAC)" d'un véhicule désigne la masse du véhicule en ordre de marche ainsi que de sa charge maximum.
Reference codes block heading	Données du permis de conduire correspondant aux codes de référence:
Code 1 description	Nom
Code 2 description	Prénom

Table G.2 *(continued)*

Text element	Translation
Code 3 description	Date (et lieu)* de naissance
Code 4a description	Permis valable du
Code 4b description	Permis valide jusqu'à.
Code 4c description	Délivré par
Code 4d description	(Numéro administratif)*
Code 5 description	Permis N°
Code 7 description	Signature
Code 8 description	(Domicile)*
Code 9 description	Catégories de permis
Code 10 description	Catégorie valable du
Code 11 description	Catégorie valable jusqu'à
Code 12 description	Information / restrictions
Code 13 description	Information en cas de changement de pays de résidence normale
Code 14 description	Information de sécurité routière
Note on optional information	*Optionnel seulement si disponible ou connue
Restrictions block heading	Restrictions (Conditions particulières d'usage):
Restriction 01 description	Ne peut conduire qu'avec une correction de la vue
Restriction 03 description	Ne peut conduire que muni d'une prothèse
Restriction 78 description	Ne peut conduire que des véhicules avec transmission automatique
Restriction S05 description	Ne peut conduire que des véhicules adaptés aux infirmes physiques

Table G.3 — Spanish translation of text elements

Text element	Translation
Heading	CATEGORÍAS DE VEHÍCULOS, CON LOS CÓDIGOS CORRESPONDIENTES, PARA LOS QUE EL PERMISO ES VÁLIDO:
Description 1	Motocicletas con o sin sidecar.
Description 2	Motocicletas y triciclos motorizados con una velocidad máxima de diseño de no más de 45 km / h cuadriciclos de motor ligero.
Description 3	Motocicletas con cilindrada que no excede 125 cm^3 y potencia que no excede 11 kW (motocicletas ligeras).
Description 4	Motocicletas con o sin sidecar de potencia inferior o igual a 35 kW y con una relación potencia / peso inferior o igual a 0,2 kW / kg y que no deriven de un vehículo de más del doble de su potencia.
Description 5	Vehículos automotores no incluidos en la categoría A con una masa máxima permitida que no excede 3 500 kilogramos (7 700 libras) y un máximo de ocho asientos adicionales al asiento del conductor; ó vehículos automotores de categoría B enganchados a un remolque cuya masa máxima permitida no excede 750 kilogramos (1 650 libras); **ó** vehículos automotores de categoría B enganchados a un remolque cuya masa máxima permitida excede 750 kilogramos (1 650 libras) pero no excede la masa en vacío del vehículo, donde la masa máxima permitida del conjunto de vehículos acoplados no excede 3 500 kilogramos (7 700 libras).
Description 6	Triciclos y cuadriciclos motorizados.
Description 7	Vehículos automotores no incluidos en la categoría D cuya masa máxima permitida excede 3 500 kilogramos (7 700 libras); ó vehículos automotores de categoría C enganchados a un remolque cuya masa máxima permitida no excede 750 kilogramos (1 650 libras).

Table G.3 *(continued)*

Text element	Translation
Description 8	Vehículos automotores no incluidos en la categoría D cuya masa máxima permitida excede 3 500 kilogramos (7 700 libras) pero no excede 7 500 kilogramos (16 500 libras); ó vehículos automotores de subcategoría C1 enganchados a un remolque cuya masa máxima permitida no excede 750 kilogramos (1 650 libras).
Description 9	Vehículos automotores que se usan para el transporte de pasajeros con más de ocho asientos adicionales al asiento del conductor; ó vehículos automotores de categoría D enganchados a un remolque cuya masa máxima permitida no excede 750 kilogramos (1 650 libras).
Description 10	Vehículos automotores que se usan para el transporte de pasajeros con más de 8 asientos adicionales al asiento del conductor pero no más de 16 asientos adicionales al asiento del conductor; ó vehículos automotores de subcategoría D1 enganchados a un remolque cuya masa máxima permitida no excede 750 kilogramos (1 650 libras).
Description 11	Vehículos automotores de categoría B acoplados a un remolque cuya masa máxima permitida excede 750 kilogramos (1 650 libras) y excede la masa en vacío del vehículo; ó vehículos automotores de categoría B acoplados a un remolque cuya masa máxima permitida excede 750 kilogramos (1 650 libras) donde la masa máxima permitida del conjunto de vehículos acoplados excede 3 500 kilogramos (7 700 libras).
Description 12	Vehículos automotores de categoría C acoplados a un remolque cuya masa máxima permitida excede 750 kilogramos (1 650 libras).
Description 13	Vehículos automotores de subcategoría C1 acoplados a un remolque cuya masa máxima permitida excede 750 kilogramos (1 650 libras) pero no excede la masa en vacío del vehículo, donde la masa máxima permitida del conjunto de vehículos acoplados no excede 12 000 kilogramos (26 400 libras).
Description 14	Vehículos automotores de categoría D acoplados a un remolque cuya masa máxima permitida excede 750 kilogramos (1 650 libras).
Description 15	Vehículos automotores de subcategoría D1 acoplados a un remolque, no utilizado para el transporte de personas, cuya masa máxima permitida excede 750 kilogramos (1 650 libras) pero no excede la masa en vacío del vehículo, donde la masa máxima permitida del conjunto de vehículos acoplados no excede 12 000 kilogramos (26 400 libras).
Definitions	La expresión “masa máxima permitida” de un vehículo corresponde a la masa del vehículo y su carga máxima cuándo el vehículo está listo para circular (Masa Bruta del Vehículo).
Reference codes block heading	Códigos de referencia de los datos del permiso de conducción:
Code 1 description	Apellidos
Code 2 description	Nombres
Code 3 description	Fecha (y lugar)* de nacimiento
Code 4a description	Fecha de expedición
Code 4b description	Fecha de vencimiento
Code 4c description	Autoridad expedidora
Code 4d description	(Identificación o Número Administrativo)*
Code 5 description	Número del permiso
Code 7 description	Firma
Code 8 description	(Lugar de Residencia)*
Code 9 description	Categorías de vehículos
Code 10 description	Categoría válida desde
Code 11 description	Categoría válida hasta
Code 12 description	Códigos de información y restricciones

Table G.3 *(continued)*

Text element	Translation
Code 13 description	Información para cambio en el país de residencia
Code 14 description	Información de seguridad vial
Note on optional information	* Opcional, sólo si se encuentra disponible o si se conoce
Restrictions block heading	Restricciones:
Restriction 01 description	Conductor requiere corrección de la vista
Restriction 03 description	Conductor requiere un dispositivo de prótesis en las extremidades
Restriction 78 description	Únicamente vehículos con transmisión automática
Restriction S05 description	Únicamente vehículos adaptados para personas discapacitadas

Table G.4 — Russian translation of text elements

Text element	Translation
Heading	Категории транспортных средств, с соответствующими кодами, для которых действительно водительское удостоверение
Description 1	Мотоциклы с коляской или без коляски.
Description 2	Мотоциклы и моторизованные трициклы с максимальной конструктивной скоростью не более 45 км/ч и легкие моторизованные квадрициклы.
Description 2	Моторизованные трициклы и квадрициклы.
Description 4	Мотоциклы с коляской или без коляски с максимальной мощностью, не превышающей 35 кВт, и соотношением мощность/вес, не превышающим 0,2 кВт/кг, и не созданные на базе транспортного средства, мощность которого выше более чем в два раза.
Description 5	Автомобили, за исключением транспортных средств, относящихся к категории A, разрешенная максимальная масса которых не превышает 3 500 кг (7 700 фунтов) и число сидячих мест которых, помимо сиденья водителя, не превышает восьми; или автомобиль категории B, сцепленный с прицепом, разрешенная максимальная масса которого не превышает 750 кг (1 650 фунтов); или автомобиль категории B, сцепленный с прицепом, разрешенная максимальная масса которого превышает 750 кг (1 650 фунтов), но не превышает массы автомобиля без нагрузки, а общая разрешенная максимальная масса такого состава не превышает 3 500 кг (7 700 фунтов).
Description 6	Моторизованные трициклы и квадрициклы.
Description 7	Автомобили, за исключением относящихся к категории D, разрешенная максимальная масса которых превышает 3 500 кг (7 700 фунтов); или автомобили категории C, сцепленные с прицепом, разрешенная максимальная масса которого не превышает 750 кг (1 650 фунтов).
Description 8	Автомобили, за исключением относящихся к категории D, разрешенная максимальная масса которых превышает 3 500 кг (7 700 фунтов), но не превышает 7 500 кг (16 500 фунтов); или автомобили подкатегории C1, сцепленные с прицепом, разрешенная максимальная масса которого не превышает 750 кг (1 650 фунтов).
Description 9	Автомобили, предназначенные для перевозки пассажиров и имеющие более восьми сидячих мест, помимо сиденья водителя; или автомобили категории D, сцепленные с прицепом, разрешенная максимальная масса которого не превышает 750 кг (1 650 фунтов).
Description 10	Автомобили, предназначенные для перевозки пассажиров и имеющие более 8 сидячих мест, помимо сиденья водителя, но не более 16 сидячих мест, помимо сиденья водителя; или автомобили подкатегории D1, сцепленные с прицепом, разрешенная максимальная масса которого не превышает 750 кг (1 650 фунтов).

Table G.4 *(continued)*

Text element	Translation
Description 11	Автомобили категории B, сцепленные с прицепом, разрешенная максимальная масса которого превышает 750 кг (1 650 фунтов) и превышает массу автомобиля без нагрузки; или автомобили категории B, сцепленные с прицепом, разрешенная максимальная масса которого превышает 750 кг (1 650 фунтов), а общая разрешенная максимальная масса такого состава превышает 3 500 кг (7 700 фунтов).
Description 12	Автомобили категории C, сцепленные с прицепом, разрешенная максимальная масса которого превышает 750 кг (1 650 фунтов).
Description 13	Автомобили подкатегории C1, сцепленные с прицепом, разрешенная максимальная масса которого превышает 750 кг (1 650 фунтов), но не превышает массу автомобиля без нагрузки, а общая разрешенная максимальная масса такого состава не превышает 12 000 кг (26 400 фунтов).
Description 14	Автомобили категории D, сцепленные с прицепом, разрешенная максимальная масса которого превышает 750 кг (1 650 фунтов).
Description 15	Автомобили подкатегории D1, сцепленные с прицепом, не предназначенным для перевозки пассажиров, разрешенная максимальная масса которого превышает 750 кг (1 650 фунтов), но не превышает массу автомобиля без нагрузки, а общая разрешенная максимальная масса такого состава не превышает 12 000 кг (26 400 фунтов).
Definitions	«Разрешенная максимальная масса» транспортного средства означает массу самого транспортного средства и его максимального груза до начала движения.
Reference codes block heading	Внутренний блок кодовых ссылок:
Code 1 description	Фамилия
Code 2 description	Имя или другие имена
Code 3 description	Дата (и место)* рождения
Code 4a description	Дата выдачи
Code 4b description	Дата истечения срока действия
Code 4c description	Орган, выдавший водительское удостоверение
Code 4d description	(Идентификационный или Административный номер)*
Code 5 description	Номер водительского удостоверения
Code 7 description	Подпись
Code 8 description	(Место проживания)*
Code 9 description	Категории транспортных средств
Code 10 description	Категория действительна с
Code 11 description	Категория действительна до
Code 12 description	Информация/ограничения в кодированном виде
Code 13 description	Информация о смене страны проживания
Code 14 description	Информация, относящаяся к безопасности дорожного движения
Note on optional information	* Дополнительная информация, если известна
Restrictions block heading	Блок кодовых ограничений:
Restriction 01 description	Водителю требуется коррекция зрения
Restriction 03 description	Водителю требуется протез
Restriction 78 description	Транспортные средства только с автоматической трансмиссией
Restriction S05 description	Транспортные средства, адаптированные только для лиц с физическими ограничениями

Table G.5 — Chinese translation of text elements

Text element	Translation
Heading	驾驶证上代码所表示的准许驾驶的车辆
Description 1	（边三轮）摩托车
Description 2	最大设计时速不超过 45km/h 的摩托车和机动三轮车，以及轻型机动四轮车
Description 3	立方容量不超过 125 cm3、功率不大于 11kW 的摩托车（轻便摩托车）
Description 4	功率不超过 35kW、功率/重量比不超过 0.2kW/kg 以及不派生自功率超出两倍的（边三轮）摩托车
Description 5	最多 8 座位（不包括驾驶员座位）、最大允许总质量不超过 3,500 公斤的非 A 类机动车；或者所牵引挂车最大允许质量不超过 750 公斤的 B 类机动车；或者牵引挂车最大允许质量超过 750 公斤但未超过机动车本身空载质量的 B 类机动车，且机动车及挂车最大允许总质量不超过 3500 公斤
Description 6	三轮以及四轮摩托车
Description 7	最大允许质量超过 3500 公斤的非 D 类机动车；或者所牵引挂车最大允许质量不超过 750 公斤的 C 类机动车
Description 8	最大允许质量超过 3500 公斤但未超过 7500 公斤的非 D 类机动车；或者所牵引挂车最大允许质量不超过 750 公斤的 C1 类机动车
Description 9	用于承载旅客、8 座位以上（不包括驾驶员座位）的机动车；或者所牵引挂车最大允许质量不超过 750 公斤的 D 类机动车
Description 10	用于承载旅客、8 座位以上不多于 16 座位（不包括驾驶员座位）的机动车；或者所牵引挂车最大允许质量不超过 750 公斤的 D1 类机动车
Description 11	所牵引挂车最大允许质量超过 750 公斤并超过机动车本身空载质量的 B 类机动车；或者所牵引挂车最大允许质量超过 750 公斤的 B 类机动车，且机动车及挂车最大允许总质量超过 3500 公斤
Description 12	所牵引挂车最大允许质量超过 750 公斤的 C 类机动车
Description 13	所牵引挂车最大允许质量超过 750 公斤但未超过机动车本身空载质量的 C1 类机动车，且机动车及挂车最大允许总质量未超过 12000 公斤
Description 14	所牵引挂车最大允许质量超过 750 公斤的 D 类机动车
Description 15	不用于承载旅客、所牵引挂车最大允许质量超过 750 公斤但未超过机动车本身空载质量的 D1 类机动车，且机动车及挂车最大允许总质量未超过 12000 公斤
Definitions	机动车“最大允许质量”指准备上路前机动车的质量加其最大装载质量。（最大总质量（GVM））
Reference codes block heading	国内驾驶证数据参考代码
Code 1 description	姓
Code 2 description	名字或其他名字
Code 3 description	出生日期（出生地）
Code 4a description	发放日期
Code 4b description	到期日期
Code 4c description	发证单位

Table G.5 *(continued)*

Text element	Translation
Code 4d description	识别码或行政号码
Code 5 description	证件号码
Code 7 description	签名
Code 8 description	居住地
Code 9 description	驾驶车辆类别
Code 10 description	类别有效期自
Code 11 description	类别有效期至
Code 12 description	信息/限制码
Code 13 description	居住国变更信息
Code 14 description	道路交通安全信息
Note on optional information	* 可选，限已有/已知
Restrictions block heading	限制项目
Restriction 01 description	驾驶员需要视力矫正
Restriction 03 description	驾驶员需用义肢
Restriction 78 description	只限自动档车辆
Restriction S05 description	只限为残疾人士改装的车辆

Table G.6 — Arabic translation of text elements

Text element	Translation
Heading	الفئات الرئيسية والفئات الفرعية للمركبات، إلى جانب الرموز المقابلة لها، والتي تكون الرخصة سارية المفعول بموجبها
Description 1	الدراجات النارية، مع مركبة جانبية أو بدونها
Description 2	الدراجات النارية، والدراجات بثلاث عجلات مع محرّك ولا تزيد سرعتها القصوى عن 45 كم/ ساعة، ودراجة بأربع عجلات مزوّدة بمحرك خفيف
Description 3	الدراجات النارية بسعة مكعّبة لا تزيد عن 125 سنتميتر مكعب، وبقوة لا تتجاوز 11 كيلو واط (دراجات نارية خفيفة)
Description 4	الدراجات النارية المزوّدة بمركبة جانبية أو بدونها، والتي تتمتع بقوة لا تزيد عن 35 كيلو واط مع نسبة قوة/وزن لا يتجاوز 0.2 كيلو واط/ كيلوغرام، وليست مُصنّعة من مركبة بقوة تزيد عن ضعف قوّتها.
Description 5	المركبات المزودة بمحرك وغير المُدرجة في الفئة (أ) والتي يسمح بأن تكون ذات كتلة أكبر على ألّا تزيد عن 3,500 كيلوغرام (7,700 رطل) وعلى ألّا تحتوي على مقاعد تزيد عن ثمانية مقاعد بالإضافة إلى المقعد المخصص للسائق؛ أو المركبات المزودة بمحرك والمُدرجة في الفئة (ب) والمزوّدة بمقطورة لا يزيد وزنها الأقصى على 750 كيلوغرام (1,650 رطل)؛ أو المركبات المزودة بمحرك والمُدرجة في الفئة (ب) والمزوّدة بمقطورة لا يزيد وزنها الأقصى على 750 كيلوغرام (1,650 رطل) بشرط ألّا تتجاوز كتلة المركبة غير المحمّلة ، حيث لا تتجاوز الكتلة الكلية القصوى المسموح بها للمركبات 3,500 كيلوغرام (7,700 رطل)
Description 6	الدراجات المزوّدة بمحرك ثلاثية العجلات ورباعية العجلات
Description 7	المركبات المزوّدة بمحرك غير المدرجة في الفئة (د) والتي يُسمح بأن تتجاوز كتلتها القصوى 3,500 كيلوغرام (7,700 رطل)؛ او المركبات المزوّة بمحرك والمدرجة في الفئة (ج) بمقطورة لا يزيد وزنها الأقصى على 750 كيلوغرام (1,650 رطل)
Description 8	المركبات المزوّدة/ ما عدا تلك المدرجة في الفئة (د) والتي يُسمح بأن تتجاوز كتلتها القصوى 3,500 كيلوغرام (7,700 رطل) دون أن تزيد عن 7,500 كيلوغرام (16,500 رطل)؛ او المركبات المزوّة