INTERNATIONAL STANDARD

ISO/IEC 18013-1

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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

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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.

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

ISO/IEC 18013 consists of the following parts, under the general title *Information technology — Personal identification — ISO-compliant driving licence*:

— *Part 1: Physical characteristics and basic data set*

The following part is under preparation:

— *Part 2: Machine readable technologies*

0 Introduction

ISO/IEC 18013 prescribes requirements for an ISO compliant driving licence (IDL). The intent of ISO/IEC 18013 is to allow the issuance of one document to serve the purpose of both an international driving permit (IDP) and a domestic driving permit (DDP). Issuing authorities issuing domestic driving licences (DDLs) that do not conform to ISO/IEC 18013 can benefit from using parts of ISO/IEC 18013 for their own domestic purpose. These issuing authorities should continue to issue a second document that follows the requirements of the IDP for international use.

0.1 Definition, Function & Requirements of International Driving Permit

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 Conventions has been assigned to UN/ECE-Transport Division, Geneva, Switzerland. The ultimate goal of the Conventions is road safety. The Conventions make provisions for both an International Driving Permit (IDP) and a Domestic Driving Permit (DDP).

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.

0.2 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 is difficult to counterfeit.
- The document is secure to prevent alteration.

In today's worldwide freedom of movement, modern driving licence systems impose additional requirements for facilitation with the advent and need for machine-assisted storage, retrieval, reading and verification technologies that UN 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.

0.3 Current Limitations of International Driving Permit

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

- 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.

0.4 Replacement of International Driving Permit (IDP) 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, in 1990, the Convention’s mandatory requirement for the defined design layout of the DDP was rescinded as some countries made preparations for issuing the DDP in the form of an ISO ID-1 size card.

ISO/IEC 18013 similarly provides for the migration of the current mandatory design layout of defined dimensions for the IDP paper document to an ISO ID-1 size card. This allows the use of ISO machine-readable technologies at the option of motor vehicle authorities. Additionally, it provides the potential integration of the two documents (DDP&IDP) into a single document.

Compliance with International Standards is voluntary. No International Standards are mandated and use is at the sole discretion of the motor vehicle authority.

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

Part 1:
Physical characteristics and basic data set

1 Scope

This part of ISO/IEC 18013 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 and accompanying booklet with sleeve insert pocket is intended to replace the international driving permit (IDP) paper document (see annex G).

The basis of document design premises includes

- a minimum common mandatory data element set;
- a common layout for ease of recognition;
- minimum security requirements.

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;
- allows for the incorporation of ISO/IEC JTC1/SC17 machine-readable technologies including magnetic stripe, integrated circuit with contacts, contactless integrated circuit and optical memory technology, and ISO/IEC JTC1/SC31 1-dimensional / 2-dimensional bar codes, at the option of national/community/regional authorities;
- allows for the incorporation of current and future technologies (including biometrics, cryptography, data compression) at the option of national/community/regional authorities;
- allows for additional document physical security elements at the option of national/community/regional authorities, and facilitates international procurements.

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 some cases, can replace the need for two documents. Alternatively, those countries that choose to maintain their individual domestic design can issue a second card with or without ISO machine-readable technologies to replace the current IDP paper document.

This new IDL design yields a document that

- is more secure from counterfeiting and alteration than the previous IDP document;
- 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 domestic driving licence (DDL) that meets this Standard to serve simultaneously as an ISO compliant driving licence (IDL).

2 Conformance

A driving licence is in conformance with this part of ISO/IEC 18013 if it meets all mandatory requirements specified directly or by reference herein.

3 Normative references

The following referenced documents are indispensable for the application 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 7810:2003, *Identification cards — Physical characteristics*

4 Terms and definitions

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

4.1
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

4.2
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)

4.3
card
document with nominal dimensions in conformance with ISO/IEC 7810 ID-1

4.4
data element
item of data that may appear on the driving licence in either human or machine-readable form

NOTE A distinction is made between static data elements and dynamic data elements.

4.4.1
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

4.4.2
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

4.5
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

4.6
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 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 Driving licences are classified into four types of documents, namely domestic driving licence, domestic driving permit, ISO compliant driving licence and international driving permit.

4.6.1
domestic driving licence
DDL
document conveying driving privilege for operating motor vehicles within country/community of issuance, and which may or may not be issued in conformance with ISO/IEC 18013

4.6.2
domestic driving permit
DDP
driving licence issued in conformance with the UN Convention Geneva 1949, annex 9 or the UN Convention Vienna 1968, annex 6

NOTE This is the UN terminology for a domestic driving licence.

4.6.3
ISO compliant driving licence
IDL
driving licence card issued in conformance with ISO/IEC 18013, which may be used for both domestic and international use

4.6.4
international driving permit
IDP
driving licence issued in conformance with the UN Convention Geneva 1949, annex 10 or the UN Convention Vienna 1968, annex 7

4.7
first line inspection
cursory examination without tools or aids that involves easily identifiable visual or tactile features for rapid inspection at point of usage

4.8
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

4.9
image
representation of the visual likeness of a subject

EXAMPLE Portrait, finger print, or signature.

NOTE Images may be collected and stored digitally or otherwise, and rendered for visual inspection using a variety of systems.

4.10
issuing authority
licensing authority, or issuing country if separate licensing authorities have not been authorised

4.11
issuing country
country according to annex F which issued the DL or within which the licensing authority is located

4.12
jurisdiction
territory (country, state, province) within which the licensing authority has the mandate and responsibility to apply motor vehicle laws/directives

4.13
licence holder
individual to whom a DL is issued i.e. the legitimate holder of the driving privileges reflected on a DL

4.14
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.

4.15
machine-readable data / information
data or information that is encoded into a machine-readable medium, such as a magnetic stripe, bar code, optical memory, or integrated circuit

4.16
mandatory element
element that is required

4.17
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 Mutual recognition is administered by way of agreements between the governments of the jurisdictions.

4.18
non-portrait side of card
opposite face from the portrait side

4.19
numeric character
N
hexadecimal range 30 – 39 (digits 0 to 9) of ISO/IEC 8859-1

4.20
optional element
element that may be used, but that is not mandatory

4.21
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 See annex B.

4.22
portrait
two dimensional representation of the face of a person in a full-face frontal pose

NOTE See annex A.

4.23
portrait side of card
face of the card carrying visual information containing the reproduction of the portrait of the licence holder

4.24
second line inspection
examination by trained inspectors with simple equipment (magnifying glass, UV light, machine-reading equipment, etc.)

4.25
security element
distinct physical element or property of a document that contributes to at least one security feature

NOTE Depending on the method of verification, one element may provide one or more security features that may apply to the same or to different categories.

4.26
security feature
feature of a document that is linked to a specific method of verification and thus helps insure the document's integrity and/or authenticity as a properly issued document that has not been tampered with

NOTE Security features may be distinguished in different kinds of categories such as:

- overt or covert,
- for human or machine-verification,
- for first line, second line, or third line inspection.

Physical security elements applied during production of a document may contribute more than one feature and therefore also cover more than one category of each kind.

4.27
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 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.

4.28
supranational
extending beyond or transcending established borders or spheres of influence held by separate nations

NOTE The concept can apply equally to government entities (such as the European Union) and non-government entities (such as the International Civil Aviation Organization).

4.29
text
human-readable A, N or S

4.30
third line inspection
inspection by forensic specialists conducting detailed examination allows for more in-depth evaluation and may require special equipment to provide true certification

5 Human-readable data elements on IDL

5.1 Data element tables

The tables in 5.2 and 5.3 specify the mandatory and optional elements that appear on the IDL.

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

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.10.

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 of this Standard.

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.

5.2 Mandatory data elements for international interchange

All the data elements appearing in Table 1, but 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 nam es	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 4.10)	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
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)	(Pictographs)
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	(Pictographs)

5.3 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	F3N
t	16	Zone II	Height (ft./in.)	Licence holder's height in feet 1), inches 2) for example. 509= 5ft 9in	F3N
u	17	Zone II	Weight (kg.)	Licence holder's weight in kilograms	F3N
v	17	Zone II	Weight (lb.)	Licence holder's weight in pounds	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 & 14 are not used as they are designated for domestic use in the EC Directives and in the amendments to the Vienna Convention (proposed Rev.3 of WP.1, dated 5 Jan 2004).					
[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).

A.2 Scope

Annex A defines the specifications of the card layout, together with informative examples for ease of understanding.

A.3 Informative references

The following international agreements and standards contain provisions, which were considered in defining the requirements of this annex:

Convention on Road Traffic, Geneva of 19 September 1949

Convention on Road Traffic, Vienna of 8 November 1968

European Union Council Directive 91/439/EEC of 29 July 1991 O.J. EC No. L 237/1, as amended by:

- European Union Council Directive 94/72EC of 19 December 1994 O.J. EC No L 337/86
- European Union Council Directive 96/47/EC of 23 July 1996 O.J. EC No. L 235/1
- European Union Council Directive 97/26/EC of 2 June 1997 O.J. EC No. L 150/41
- Commission Directive 2000/56/EC of 14 September 2000 O.J. EC No L 237/45

AAMVA National Standard for Driver License/ Identification Card, 30 June 2000

SADC Driving Licence specifications, 1995

A.4 Dimensions and character set

The nominal dimensions of the IDL shall be in conformance with ISO/IEC 7810 ID-1. Where the IDL is to incorporate machine-readable technology that requires the use of a slot reader, the dimensions and tolerances specified in ISO/IEC 7810 shall be observed. 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.5 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.6 Common recognition

To assist law enforcement agencies in recognizing a driving licence presented by a driver outside the country of issue as an IDL, the following shall appear on the card:

- Zone 1 of the card shall have a background, preferably formed of a rainbow printed duplex security pattern as specified in annex C.6.2.1. Though several colours should be used in the background to assist in protection against counterfeit by copying, the predominant colour shall be pink matched as closely as possible to a 30% tint of Pantone 198, as a mandatory requirement. This match should be achieved without the use of the primary colours (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.
- No machine-readable technology is permitted on the portrait side of the card.
- 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.7 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.1 to A.7.

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).

Zones I, II and III.

Non-portrait side

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

Zones IV and V.

A.8 Contents of the zones

A.8.1 Data element placement

Mandatory and optional data elements are defined for each zone.

A.8.1.1 Zone I

Text “DRIVING LICENCE” in the language or languages of the issuing country (mandatory).

Text or alternatively in the background graphic design, the words “DRIVING LICENCE” in one of the languages English (“DRIVING LICENCE”), French (“PERMIS DE CONDUIRE”) or Spanish (“PERMISO DE CONDUCCIÓN”) (mandatory).

Distinguishing sign of the issuing country as identified to the UN Secretary General in accordance with the UN Conventions (1949 and 1968) (mandatory). Annex F contains the current list of distinguishing signs identified to the UN Secretary General.

The name of the issuing country (optional).

The name or acronym of supranational entity (optional).

Other national signs, such as the flag or logo of the issuing country (optional).

A.8.1.2 Zone II

Table A.1 — Zone II data elements

Data field reference code on IDL	Description
1	Family name of the licence holder (mandatory).
2	Given name or other names of the licence holder (mandatory).
3	Date of birth (mandatory) and place of birth (optional)
4a	Date of issue of the licence (mandatory).
4b	Date of expiry of the licence (mandatory).
4c	Name of the issuing authority (mandatory).
4d	Administrative number, different from the one under reference code 5, for administrative purposes (optional).
5	Number of the licence (mandatory).
7	Image of the signature or usual mark of the licence holder, or thumb or finger print (mandatory).
8	Permanent place of residence, or postal address (optional).
9	(Sub)category(ies) of vehicle(s) the licence holder is entitled to drive (mandatory).
10	Date of first issue of each (sub)category of vehicles (mandatory).
11	Date of expiry of each (sub)category of vehicles (mandatory).
12	Additional information/ restrictions, in pictograph form, facing the subcategory of vehicles affected (pictographs stated in annex B mandatory, restriction code optional).
13	Reserved for domestic information essential for administration of licence by issuing authority (optional).

Data field reference code on IDL	Description
14	Reserved for domestic information related to road safety by issuing authority (optional).
15	Gender of the licence holder (optional).
16	Height of the licence holder (optional)
17	Weight of the licence holder (optional).
18	Eye colour of the licence holder (optional).
19	Hair colour of the licence holder (optional).
NOTE Data field reference codes 13 & 14 are designated for domestic use in the EC Directives and in the amendments to the Vienna Convention (proposed Rev.3 of WP.1, dated 5 Jan 2004).	

This zone may also include other data fields for national (domestic) or regional purposes in human-readable format (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.8.1.3 Zone III

Table A.2 — Zone III data elements

Data field reference code on IDL	Description
6	Image of the portrait of the licence holder (mandatory). The portrait image is not denoted by its reference code on the licence.

A.8.1.4 Zone IV

Table A.3 — Zone IV data elements

Data field reference code on IDL	Description
9	(Sub)category(ies) of vehicle(s) the licence holder is entitled to drive (may be repeated from Zone II).
10	Date of first issue of each (sub)category of vehicles (mandatory).
11	Date of expiry of each (sub)category of vehicles (mandatory).
12	Additional information/ restrictions, in pictograph form, facing the sub-category of vehicles affected (pictograph mandatory, restriction code optional).
13	Reserved for domestic information essential for administration of licence by issuing authority (optional).
14	Reserved for domestic information related to road safety by issuing authority (optional).
NOTE Data field reference codes 13 & 14 are designated for domestic use in the EC Directives and in the amendments to the Vienna Convention (proposed Rev.3 of WP.1, dated 5 Jan 2004).	

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.8.1.5 Zone V

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

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

- Bar code, one or two dimensional.
- Magnetic stripe.
- Integrated circuit with contacts.
- Contactless integrated circuit.
- Optical memory.

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 Standard, the above technologies may co-exist except for a magnetic stripe and an integrated circuit with contacts. Incorporation of a contactless integrated circuit is not depicted in the figures of this annex as it does not occupy visible space.

NOTE 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.8.2 Production of images

A.8.2.1 Portrait

Measures 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 as specified in annex C.6.4. Such image of the portrait shall meet the following requirements:

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 or where the additional detail of one ear is required ('half-on profile'), at such an angle to the imaginary plane as to reveal the detail of the ear while maintaining full-face frontal details on that side of the face opposite to the exposed ear. 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 crown (top of the hair) shall be nearest the top edge of Zone III as defined in Figure A.1; i.e. the crown to chin orientation covering the longest dimension defined for Zone III.

Face Size. The crown to chin portion of the full-face frontal pose shall be 70 to 80 percent 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.

A.8.2.2 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.6.4. Such image of the signature or usual mark displayed on the card shall meet the following requirements:

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

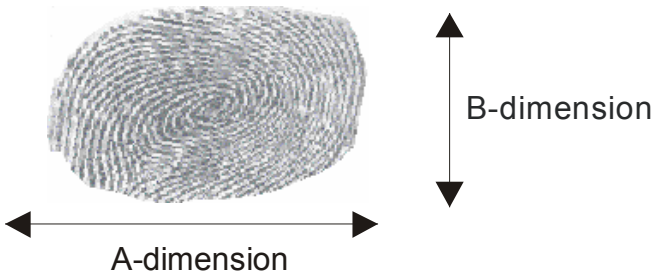
Borders. Borders or frames shall not be used to outline the image of the signature or usual mark.

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.8.2.3 Finger print

In the absence of the signature or usual mark of the licence holder, a reproduction of an original single-digit (ie a flat and not rolled) finger print 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.6.4. 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.1.



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.9 Security

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

A.10 Figures

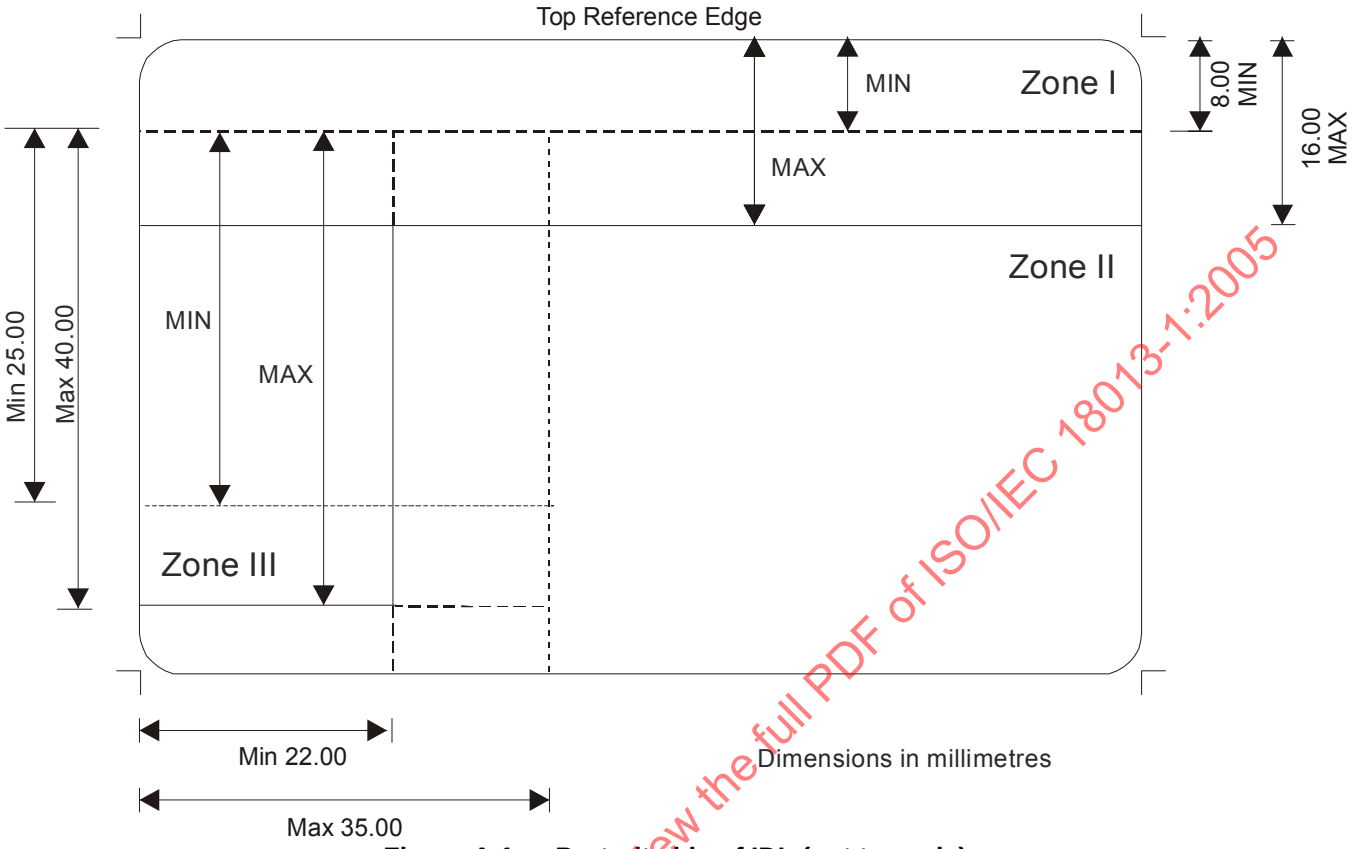


Figure A.1 — Portrait side of IDL (not to scale)

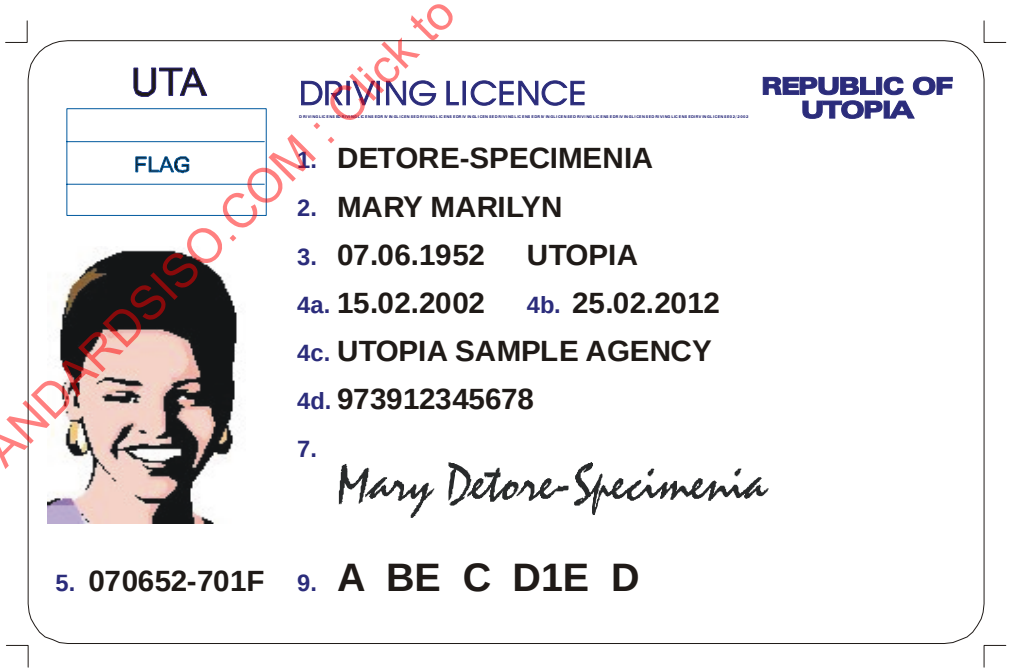


Figure A.1.1 — Informative example (not to scale)

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

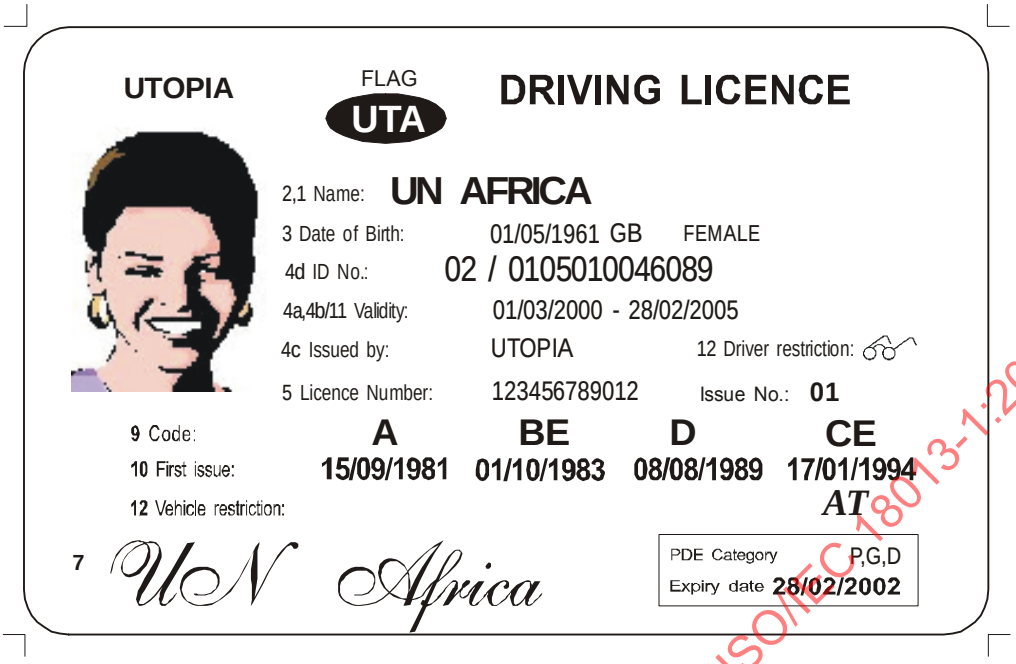


Figure A.1.2 — Informative example (not to scale)

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.1.3 — Informative example (not to scale)

NOTE 4 The depiction of alternative locations for data field 4c (issuing authority) is for illustration purposes; the field shall appear once only. In the example, the field is filled with numbers to show the field's maximum space requirement. If the numerical order of data fields is maintained, field 4c shall be maximum V45ANS in a 6pt font (shown in black). Alternatively, for up to V65ANS data field 4c could be accommodated in a 6pt font at the bottom of the card (shown in *red italic*).

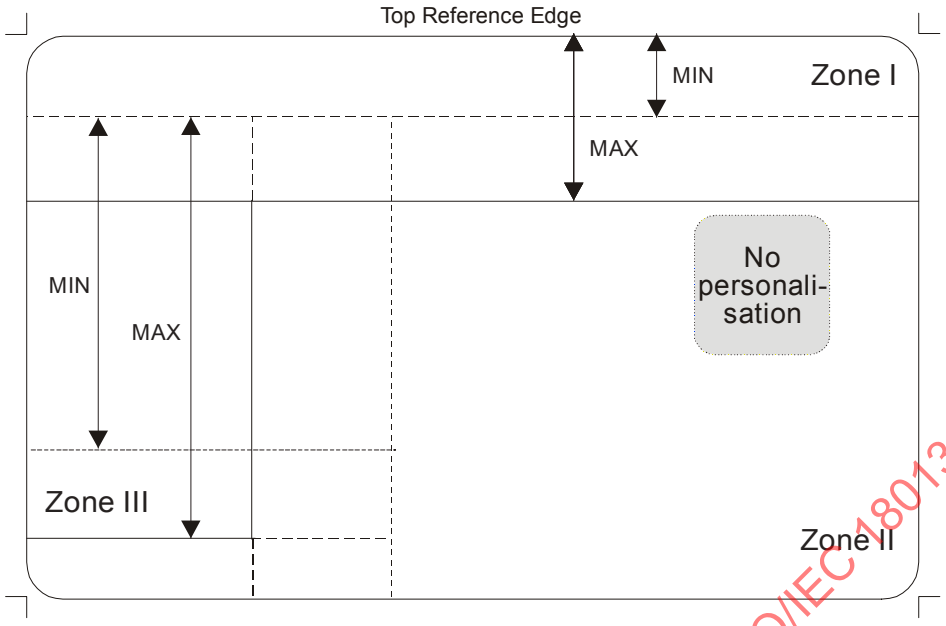


Figure A.2 — Portrait side of IDL - IC with contacts (not to scale)

NOTE 5 No dynamic data element shall be personalised on the portrait side of the card opposite the location of an integrated circuit with contacts.

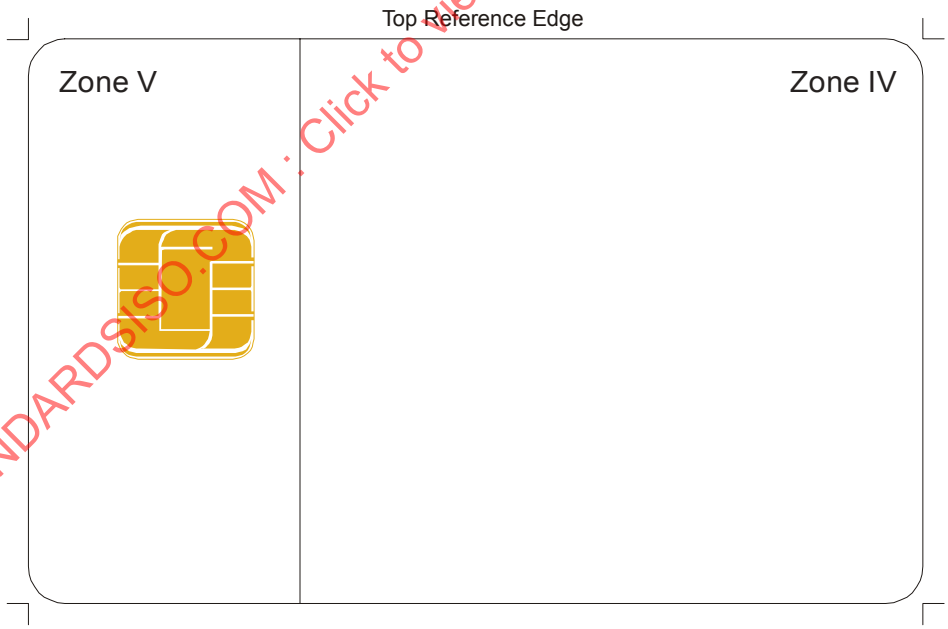


Figure A.3 — Non-portrait side of IDL – Integrated Circuit with contacts (not to scale)

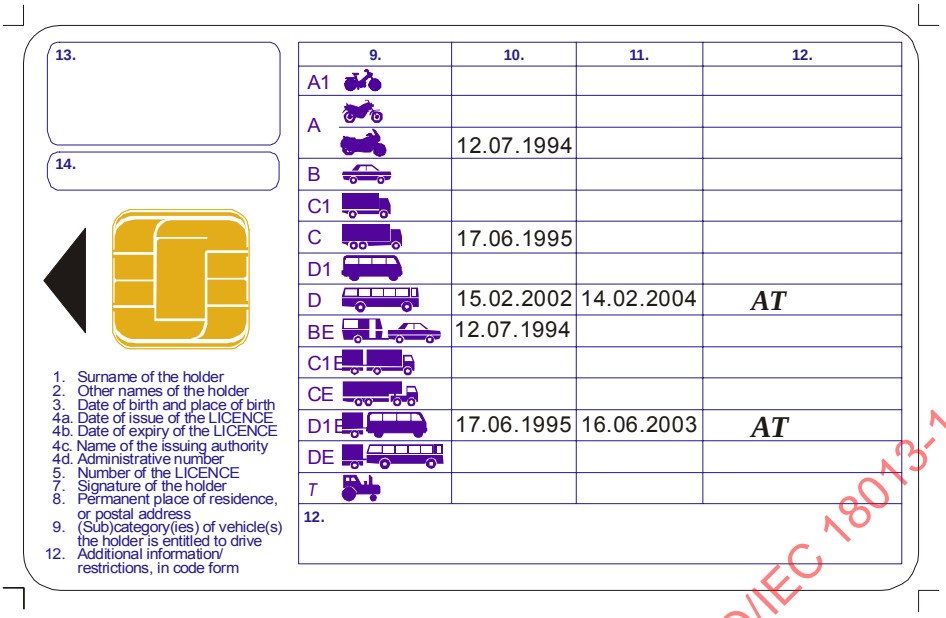


Figure A.3.1 — Informative example (not to scale)

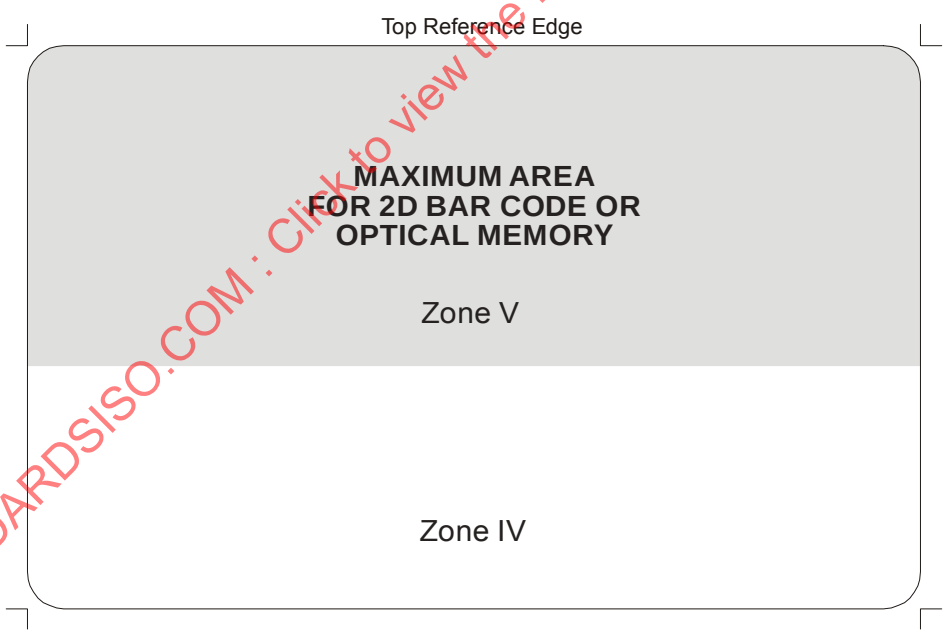


Figure A.4 — Non-portrait side of IDL – 2D bar code or optical memory (not to scale)

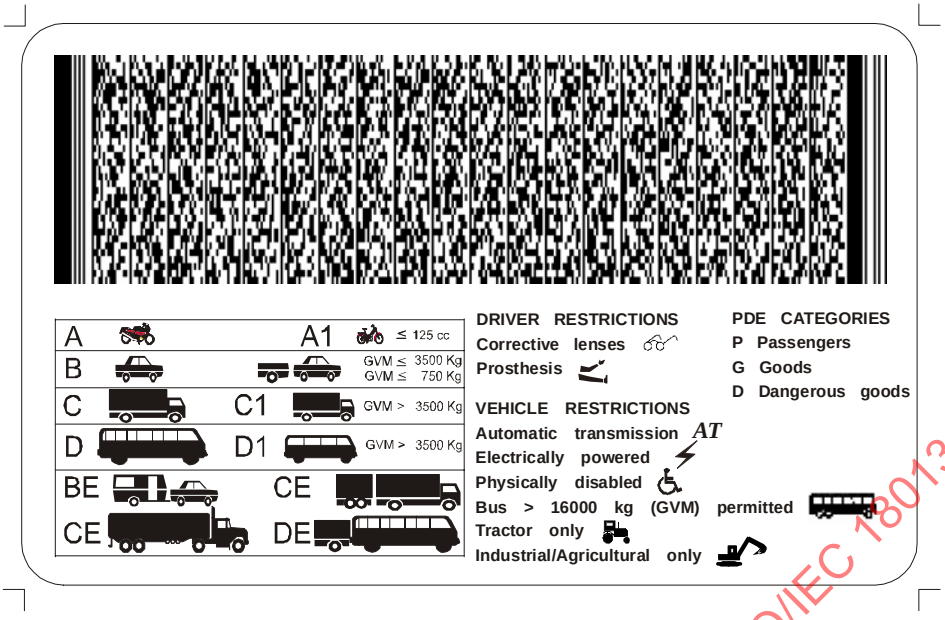


Figure A.4.1 — Informative example (not to scale)

NOTE 6 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 7 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.1.2, where the data fields 10, 11 and 12 are located in Zone II.

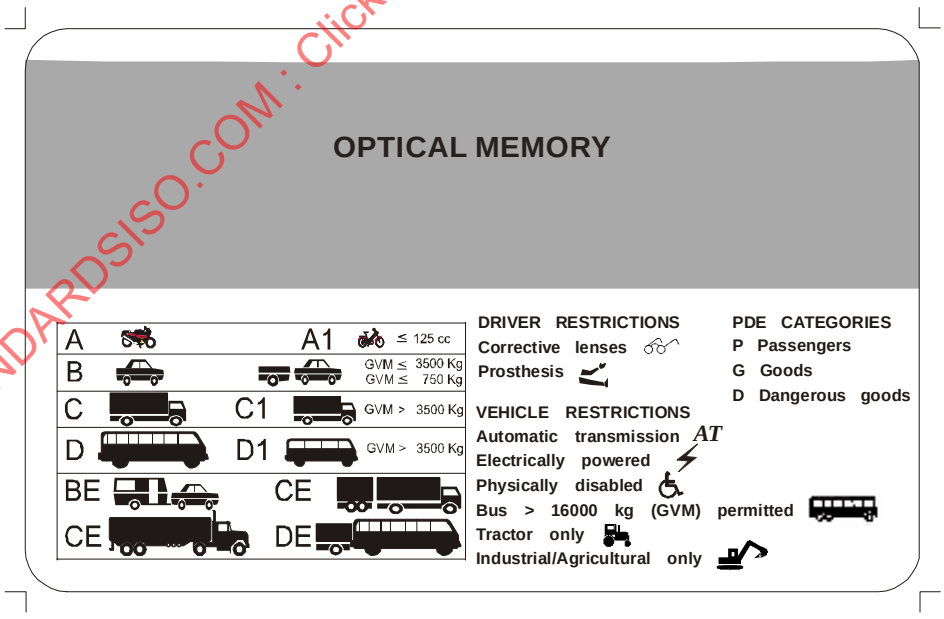


Figure A.4.2 — Informative example (not to scale)

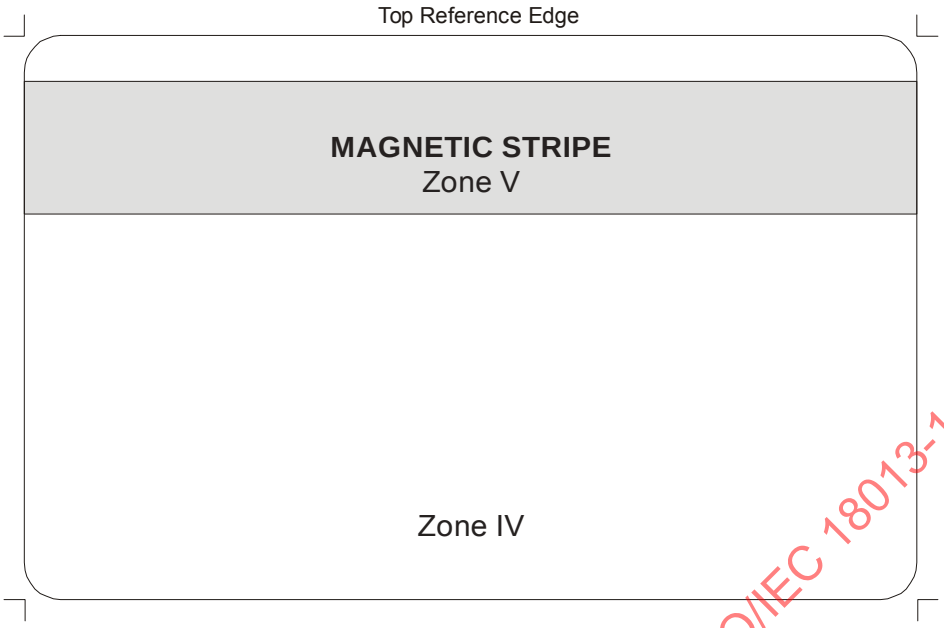


Figure A.5 — Non-portrait side of IDL – magnetic stripe (not to scale)

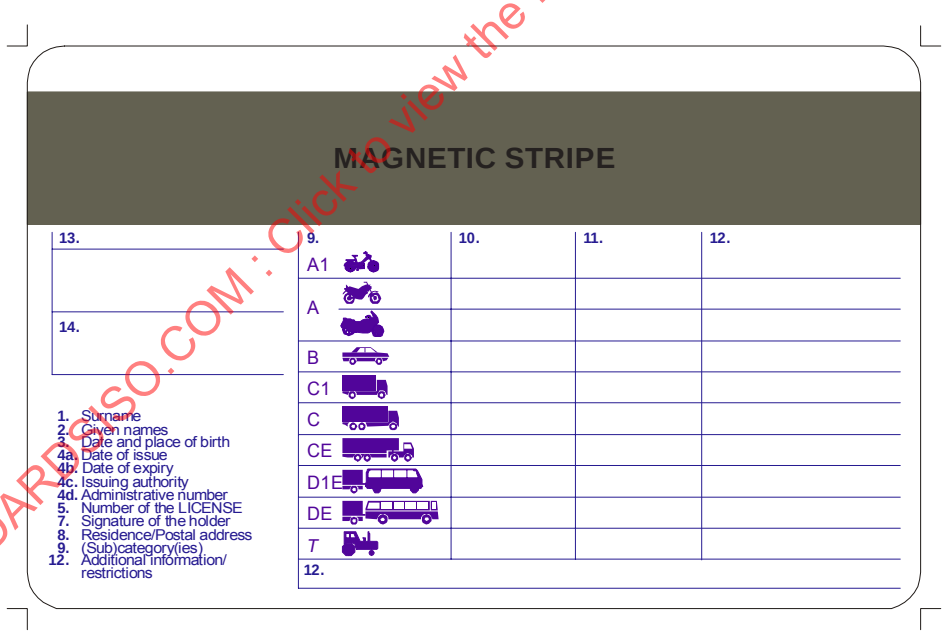


Figure A.5.1 — Informative example (not to scale)

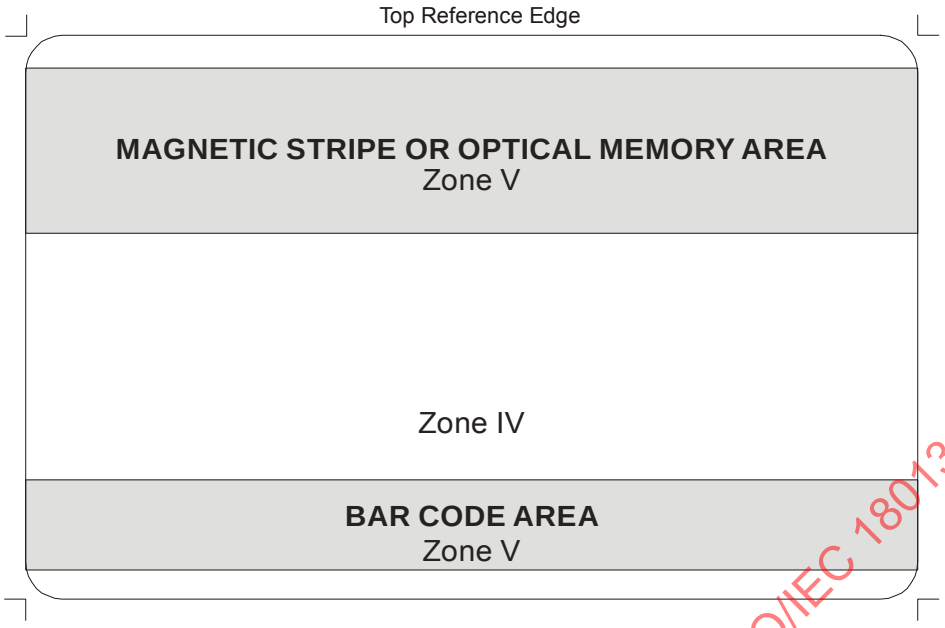


Figure A.6 — Non-portrait side of IDL – magnetic stripe or optical memory and bar code (not to scale)

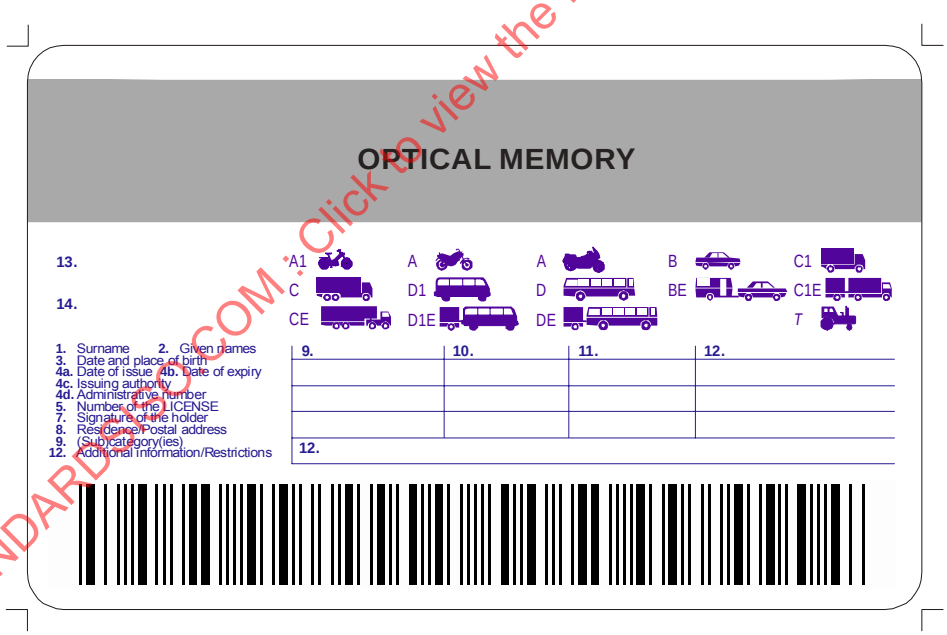


Figure A.6.1 — Informative example (not to scale)

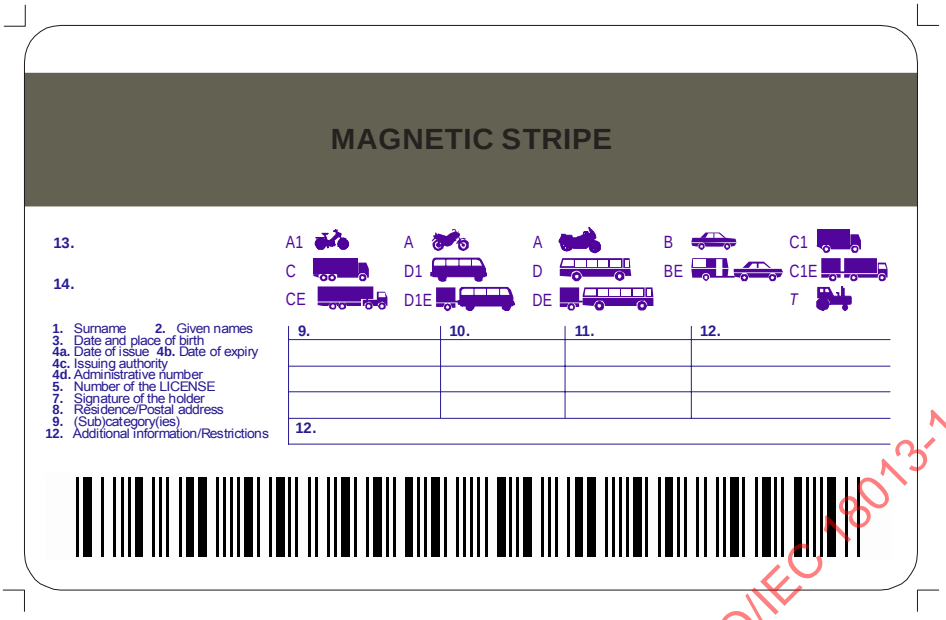


Figure A.6.2 — Informative example (not to scale)

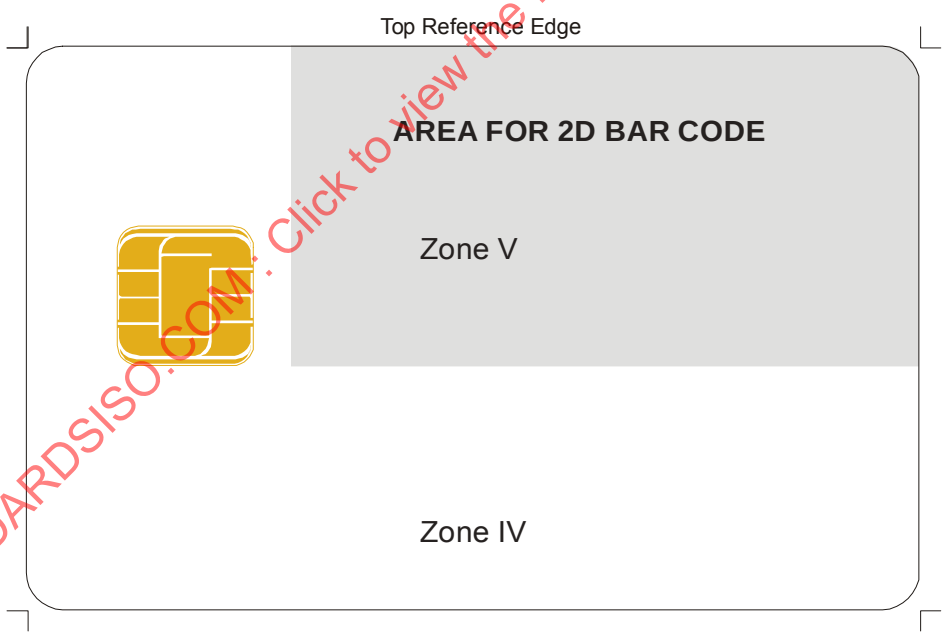


Figure A.7 — Non-portrait side of IDL – IC with contacts and 2D bar code (not to scale)

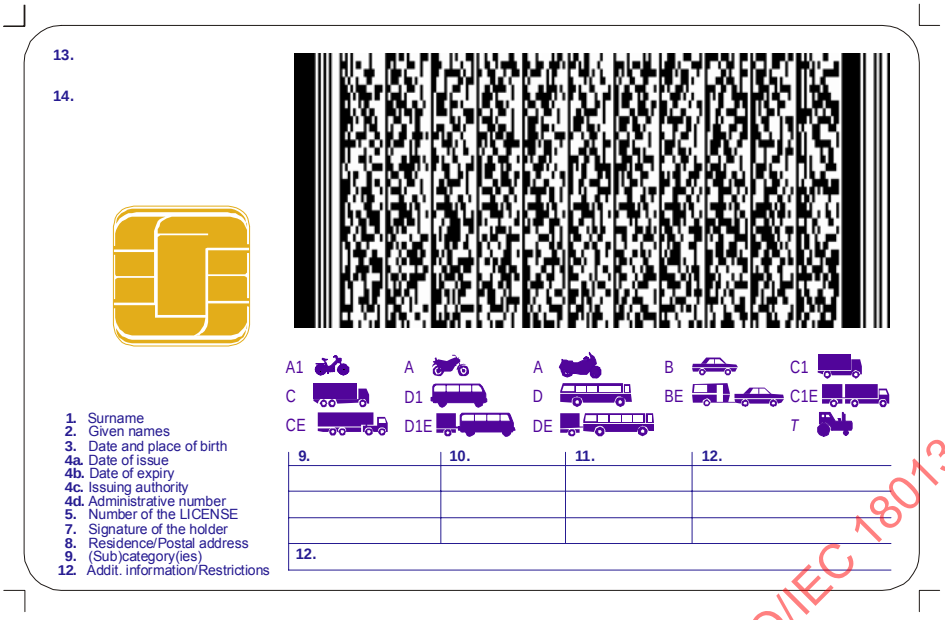


Figure A.7.1 — Informative example (not to scale)

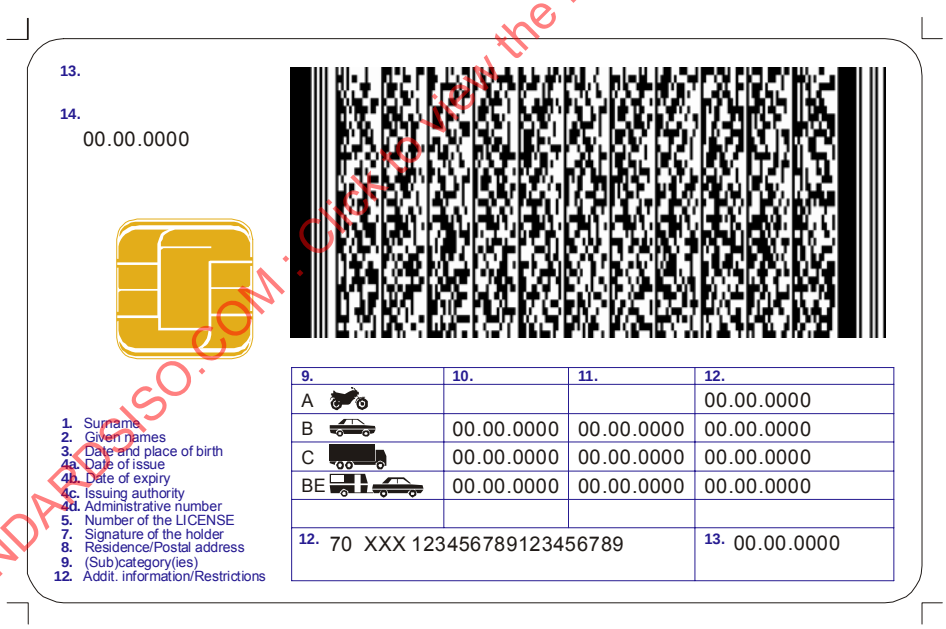


Figure A.7.2 — Informative example (not to scale)

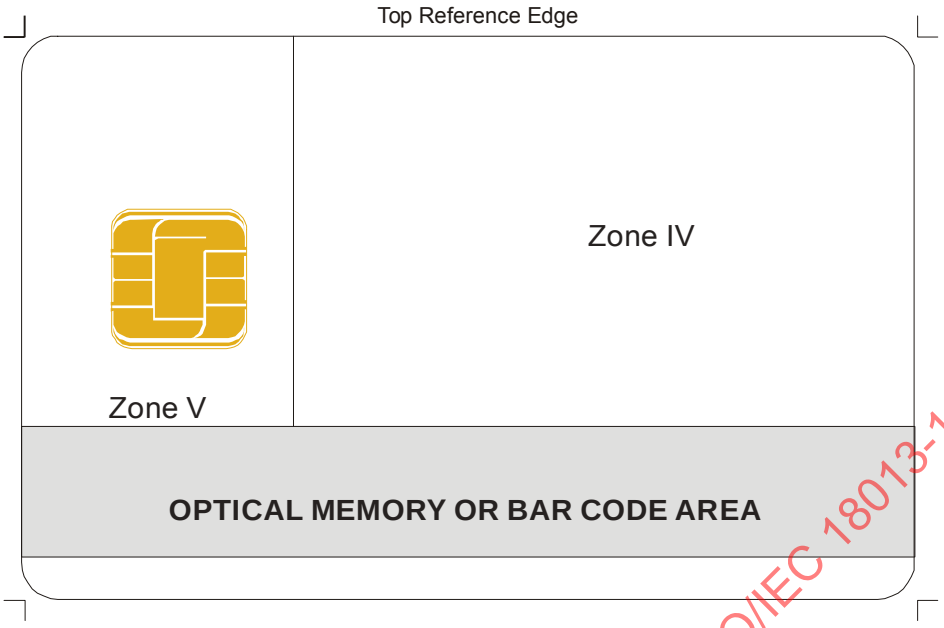


Figure A.8 — Non-portrait side of IDL – IC with contacts and optical memory or bar code (not to scale)

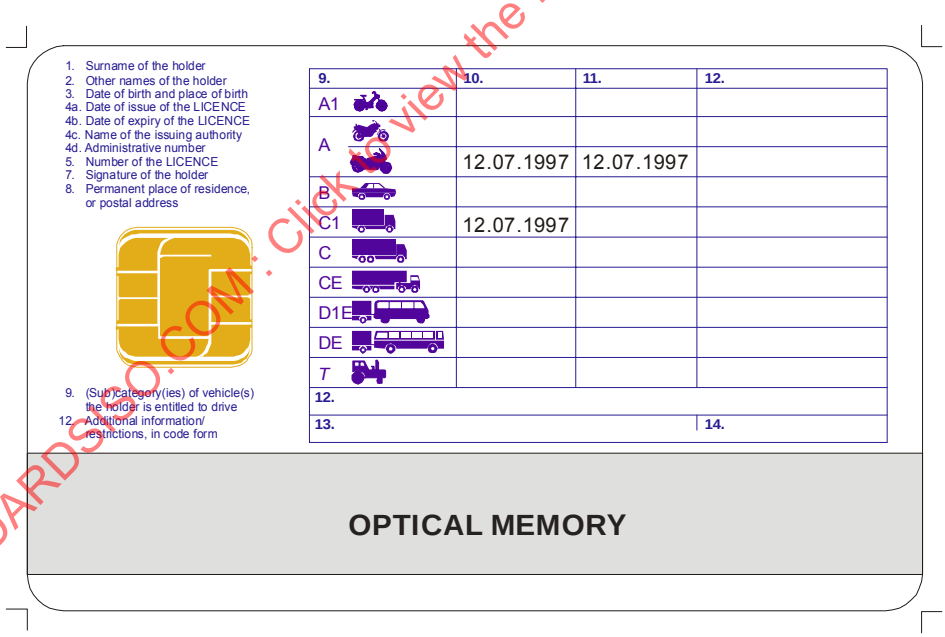


Figure A.8.1 — Informative example (not to scale)

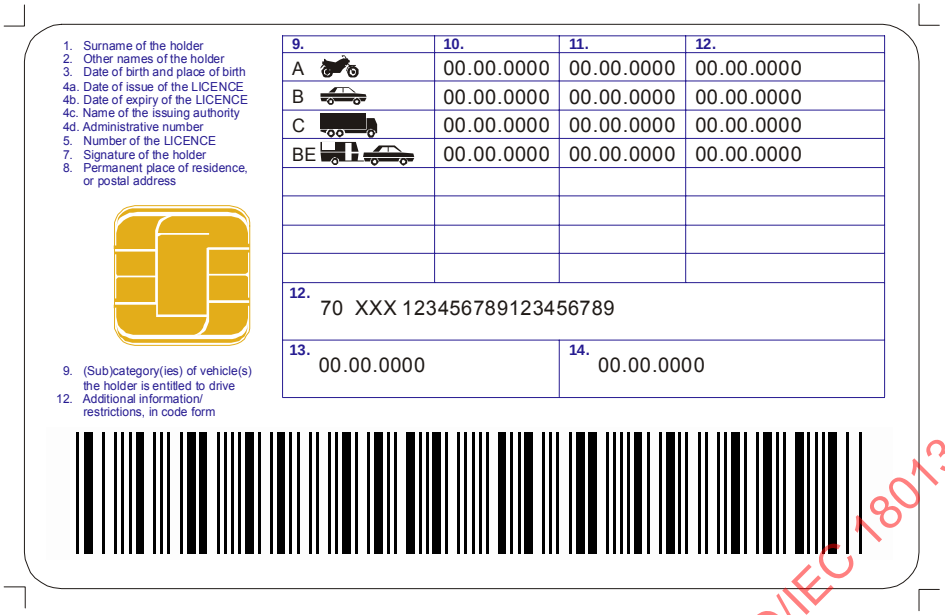


Figure A.8.2 — Informative example (not to scale)

Annex B
(normative)

Coding System and Pictograph Descriptions

B.1 Introduction

This annex contains the code system and pictograph descriptions of vehicle categories and restrictions.

B.2 Scope

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

B.3 Normative references

The following International Standards contain provisions, which through reference herein, constitute provisions of annex B to ISO/IEC 18013:

European Union Council Directive 91/439/EEC of 29 July 1991 O.J. EC No. L 237/1, as amended by:

European Union Council Directive 94/72EC of 19 December 1994 O.J. EC No L 337/86

European Union Council Directive 96/47/EC of 23 July 1996 O.J. EC No. L 235/1

European Union Council Directive 97/26/EC of 2 June 1997 O.J. EC No. L 150/41

Commission Directive 2000/56/EC of 14 September 2000 O.J. EC No L 237/45

UN Convention on Road Traffic, Geneva, 19 September 1949.

UN Convention on Road Traffic, Vienna, 8 November 1968.

B.4 Vehicle categories

B.4.1 Mandatory vehicle categories

Table B.1 defines the mandatory vehicle categories. The vehicle category 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.1 — Mandatory vehicle categories

Code	Description	Definition	Pictograph[a]
A	Motorcycles	Motorcycles, with or without a sidecar	
B	Light vehicles	Motor vehicles other than those in category A with a maximum authorized mass[b] not exceeding 3500 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 3500 kilograms	
C	Goods vehicles	Motor vehicles other than those in category D and whose maximum authorized mass is over 3500 kilograms; motor vehicles in this category may be combined with a trailer having a maximum authorized mass[b] which does not exceed 750 kilograms	
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 3500 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 3500 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)).

B.4.2 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

Code	Description	Definition	Pictograph[a]
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	
B1	Light vehicles	Motor powered tricycles and quadricycles	
C1	Medium sized goods vehicles	Motor vehicles other than those in category D and whose maximum authorized mass is over 3500 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	
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	
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.4.3.

B.4.3 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

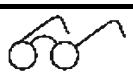
Code	Example	Description
A1	 <=250cm^3 <= 30kW	Motorcycles with a cylinder capacity not exceeding 250cm^3. Motorcycles' power output not exceeding 30kW.
D1	 <= 4 500 kg <= 1+12 P	Motor vehicles with a maximum authorized mass not exceeding 4500kg, and in addition to the driver's seat, at most 12 seats.
NOTE The S comparison operators are =, <, >, <=, >=.		

B.5 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	
78	Licence holder restricted to vehicles with automatic transmission	AT
97	Licence holder restricted to vehicles adapted for physically disabled	
98	Licence holder requires prosthetic device	

Annex C
(normative)

Document Security Elements

C.1 Scope

This normative annex specifies the security requirements for an IDL. The purpose is to discourage forgery, counterfeiting and other fraud related to the misuse of IDLs and to establish an adequate level of confidence in the authentication of genuine documents and the detection of fraudulent ones. This normative annex also specifies some minimum requirements for the materials used in the IDL, and the security printing and copy protection techniques to be employed, including personalisation and the protection of the dynamic data elements in the IDL. Procedural rules for securing the issuance and use of IDLs are of no lesser importance. However, they do not constitute specific properties of the cards and therefore are dealt with in annex D for information only.

C.2 Informative references

ICAO Doc 9303, Part 1 - Machine Readable Passports, Fifth Edition, Annex to Section III – 2003

C.3 Introduction

The growth in international crime and identity fraud have led to increasing concerns over the security of driver licences as well as all other kinds of personal identification documents and what may be done to help improve their resistance to attack or misuse.

With this objective in mind, supranational institutions like the International Civil Aviation Organization (ICAO) decided it would be desirable to publish a set of recommended security standards as a guideline for all countries issuing such documents and have acted accordingly.

This annex, together with the informative annex D, translates such efforts into the specific framework of driving licences without changing the basic approach which is the following: To provide the required level of security it is necessary to perform a risk analysis. The purpose of a risk analysis is to:

- identify the security threats to which an IDL is frequently exposed;
- assess the probable consequences of the various security breaches; and
- identify the counter-measures that may be employed to protect the IDL and the associated personalisation systems.

The lists of security elements and/or techniques offering protection against these threats have been sub-divided into:

i) mandatory security elements and/or techniques, and

ii) optional elements and/or techniques from which issuing authorities are encouraged to select items for providing an enhanced level of security.

This approach recognises that an element or technique that may be necessary to protect one issuing authority's IDLs may be superfluous or of minor importance to another issuing authority using different production systems and vice versa. A targeted approach that allows issuing authorities flexibility to choose from different IDL technologies

(pure plastic cards or combined structures incorporating other materials in the core of the card-body, e.g. paper) and a combination of security elements and/or techniques most appropriate to their particular needs is therefore preferred to a "one size fits all" philosophy. However, to help ensure that a balanced set of security elements and/or techniques is chosen, it is first necessary for each issuing authority to conduct a risk assessment and select optional elements and/or techniques that are appropriate to the particular issuing environment and to meeting any specific security concerns. All this serves the objective of facilitating the task of IDL verification by officials throughout the world and making this task as easy as possible under all practical circumstances.

The aim of this annex in conjunction with annex D is to improve the security of an IDL worldwide by establishing a baseline for issuing authorities. Nothing within these recommendations shall prevent or hinder issuing authorities from implementing other, more advanced security elements, at their discretion, to achieve a standard of security in excess of the minimum mandatory elements and techniques mandated in this annex.

A glossary of technical terms has been included with this annex in C.7.

C.4 Basic principles

Production of an IDL, including the personalisation processes, shall be undertaken in a secure, controlled 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 any card blanks are made, appropriate precautions shall be taken when transporting the blank cards and any associated security materials to safeguard their security in transit.

There shall be full accountability over all the security materials used in the production of good and spoiled IDLs and a full reconciliation at each stage of the production process with records maintained to account for all material usage. The audit trail shall be to a sufficient level of detail to account for every unit of material 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 IDLs.

Materials used in the production of the IDLs should be of controlled varieties and obtained only from bona fide security materials suppliers. Materials whose use is restricted to high security applications should be used within the IDL construction, and materials that are available to the public on the open market should be avoided.

Issuing authorities shall not solely depend upon the use of publicly available graphics design software packages for originating the security backgrounds. (Such software packages may however be used in conjunction with specialist security design software.)

Security elements and/or techniques shall be included in an IDL to protect against unauthorised reproduction, alteration and other forms of tampering, including the removal and substitution of component parts of the IDL. In addition to those elements included to protect any blank cards from counterfeiting and forgery, special attention shall be given to protect the dynamic data elements from removal or alteration. The IDL shall include adequate security elements and/or techniques to make evident any attempt to tamper with it.

The combination of security elements, materials and techniques shall be well chosen to ensure full compatibility and protection for the lifetime of the IDL.

Although this annex deals mainly with security elements that help officials throughout the world to detect counterfeiting and fraudulent alteration of an IDL, there is another class of security elements that are covert (secret) elements, designed to be authenticated either by forensic examination or by specialist verification equipment. Knowledge of the precise substance and structure of such elements shall be restricted to very few people on a "need to know" basis. The purpose of these elements is to enable authentication of an IDL where unequivocal proof of authenticity is a requirement (e.g. in a Court of Law). An IDL shall contain at least one covert security element.

C.5 Main threats to the security of an IDL

The following list of threats to IDL security, which is in no particular order of importance, identifies ways in which the IDL, its issuance and use may be fraudulently attacked.

Counterfeiting a complete IDL.

Photo-substitution of the licence holder's portrait image.

Deletion/alteration of the dynamic data elements.

The construction of a fraudulent IDL, or parts thereof, using materials from a legitimate IDL.

Theft of genuine card blanks or IDL components.

Impostors (assumed identity and altered appearance).

To provide protection against these and other threats, an IDL requires a range of security elements and techniques combined in an appropriate way within the IDL. Although some elements can offer protection against more than one type of threat, no single element can offer protection against them all. Likewise, no security element is 100% effective in eliminating any one category of threat. The best protection is obtained from a balanced set of elements and techniques providing multiple layers of security in the IDL that combine to deter or defeat fraudulent attack.

As noted in C.3, a risk assessment should be used to assist in identifying the required set of elements. The following issues should be considered when performing a risk assessment.

The probability of a document being defrauded is proportional to the value of the document. Thus, the more purposes an IDL serves over and above to confirm the privilege to drive, the bigger the probability that the IDL will be subject to attacks on its security.

It is of utmost importance to protect the total system (including front office administration and production) and not just the IDL card. Persons with criminal intent identify and target the weakest link in the total system, which may not be the physical IDL card. Thus a risk analysis should be performed in respect of the total IDL environment, and not just in respect of the physical card.

The risk in respect of security documents changes as technology evolves and spreads over time. Consequently, risk should be assessed on a regular basis.

The field of document security is complex and no simple solution exists. It is recommended that a multidisciplinary approach (including representation from law enforcement, document design, and driver licence administration) be followed when performing a risk assessment.

The cost of security elements should be compared against the benefits thereof using a formal decision analysis approach (which per definition considers all relevant aspects, including cost, uncertainty, risk, and privacy).

Limit the validity period of IDLs to limit risk. The more frequent an IDL has to be replaced, the easier it becomes to change security features, and the shorter the usefulness of a fraudulent IDL.

Do not overestimate the attention of an honest person. The so-called "man in the street", a person with no criminal intent, is normally relatively ignorant regarding document security and security features. It is therefore important to continually educate the public on this topic.

C.6 Security elements and techniques

In the sections that follow, security elements, techniques and other security measures are categorised according to the phases passed through during the production and personalisation processes involved in the manufacture of an IDL and its components, with regard to:

i) card-body materials;

ii) security printing;

iii) protection against copying, and

iv personalisation techniques.

Issuing authorities shall incorporate all of the mandatory elements in this annex. Issuing authorities are encouraged also to include some additional (optional) security elements in their IDLs to raise the security of their IDLs above the minimum requirement having first completed a risk assessment of the entire IDL lifetime cycle, including the production and issuance processes, field use and withdrawal from circulation. Some examples of these optional security elements are identified in this annex. Unless otherwise indicated, the security elements apply to all parts of an IDL. Care shall be taken to ensure that elements do not interfere with the machine-readability of the IDL wherever this is of essence. Also, the use of these elements shall not interfere with the legibility of the dynamic data elements on the IDL.

C.6.1 Card-body Materials

Mandatory elements

Card-bodies shall either be UV dull or possess a controlled response to UV, such that when illuminated by UV light they exhibit fluorescence distinguishable in colour from the blue used in commonly available fluorescent materials.

If the card-body is a multi-layered structure, there shall be adequate adhesion and/or tamper evident properties to protect the personalised data and security elements contained in the IDL.

Optional elements

Look-through element comprising two or more grey levels visible in transmitted light or alternative measures to check the integrity and genuiness of the card-body material.

Embedded invisible fluorescent fibres, threads and/or planchettes.

Embedded visible (fluorescent) fibres, threads and/or planchettes.

Use of covert taggant substances for genuiness verification.

Core inclusions: the use of a coloured layer, laminated between the central layers of the IDL core.

C.6.2 Security Printing

C.6.2.1 Background and text printing

Mandatory elements

The IDL shall bear a security background pattern designed to be resistant to counterfeit by scanning, printing or copying. To achieve this the background pattern shall not be composed of the primary colours (CMYK colours). The pattern shall contain complex pattern designs in a minimum of two special colours and shall include micro lettering. The pattern shall show no evidence of half-tone dots, or pixel structures typically found in digital printing technologies.

Optional elements

Background pattern composed in such a manner that attempts to remove or alter the personalised data damages the background pattern.

Rainbow printing.

Anti-scan pattern.

Duplex security pattern.

Printing separate elements of the secure design on separate layers of the laminated card-body material, so that no single layer of the IDL contains all the security elements and the entire pattern is only apparent after lamination.

Front to back (see-through) register element printed on a translucent card-body material.

Deliberate error (e.g. spelling) incorporated within microprint.

Use of non-standard type-fonts.

Preprinted serial number on card stock.

C.6.2.2 Inks and other imaging media

Mandatory elements

UV fluorescent ink (visible or invisible) with a spectral response that is distinct in colour from any fluorescence in the card-body material. The UV element shall either be included in the background printing of the IDL or 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.

NOTE 1 UV fluorescence, especially short-wave UV, may be impaired during the personalisation procedure and in cases where this element is subsequently covered with a transparent laminate or overlay. Issuing authorities are advised to check the response of specific inks and laminates/overlays, before commencing production.

NOTE 2 The UV response of some fluorescent dyes and pigments is prone to fading after prolonged exposure to daylight.

Optional elements

Colour-shifting inks

Metallic and/or pearlescent inks

Metameric inks

Infra-red drop-out inks

Thermochromic inks

Photochromic inks

Infra-red fluorescent inks

Phosphorescent inks

Tagged inks

Reactive inks

C.6.3 Protection against copying

The development and availability of digital imaging techniques and the resulting potential for fraud means that high-grade security elements in the form of optically variable elements or other equivalent devices are required as safeguards against copying and scanning. For this application, the optically variable security elements shall be of a type that gives a changing appearance with the angle of viewing. Such devices may take the form of latent patterns, lenticular elements, colour-shifting ink, or diffractive optically variable pattern elements. Priority shall be given to the use of an independent, complex optically variable element technology or other equivalent devices. Appropriate integration of optically variable element components or other equivalent devices in an appropriate position in the structure of the IDL should also protect the data from fraudulent alteration.

C.6.3.1 Anti-copy protection methods

The incorporation of an optically variable element in the IDL is mandatory. To provide adequate protection it is essential only to use those optically variable elements that are difficult to counterfeit. The inclusion of a diffractive optically variable element is recommended to achieve an enhanced level of protection against reproduction.

The following security elements are intended specifically to combat reproduction by colour copiers and scanners and complement those printed security elements identified in C.6.2.

Mandatory elements

An optically variable element providing adequate protection against copying

Optional elements

Tactile characters, symbols or patterns

Graphical patterns using grooves or glance angle variation

Matt areas mixed with glossy areas

Lenticular patterns

Laser embossing

NOTE Surface tactile elements may be employed to assist in the authentication of an IDL. Copiers and scanners cannot reproduce these elements but depending upon the complexity of the pattern, it may be possible to fraudulently simulate the effect by mechanical treatment of the IDL surface.

C.6.4 Personalisation

Personalisation is the process by which the dynamic data elements are applied to the IDL. This data includes the personal details of the licence holder and is at the greatest risk of fraudulent alteration. One of the most frequent types of IDL fraud involves the removal of the portrait image from a stolen or illegally obtained IDL and its replacement with the portrait image of a different person. An IDL with a physically attached photograph is particularly susceptible to photo-substitution. Therefore, this method of personalisation is not allowed and instead, the printing of the dynamic data elements shall be by one of the digital imaging technologies or a process offering equivalent security.

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

Electro-photographic printing

Thermal transfer printing

Ink-jet printing

Photographic processes

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 IDLs to be produced, the construction of the IDL and whether it is to be personalised during the IDL manufacturing process or after a blank card has been assembled. Precautions shall be taken to protect the personalised details against tampering. This is important because even dynamic data elements that are integrated in the IDL remains vulnerable to alteration (e.g. changing an expiry date) and needs to be protected, either within the structure or by a securely bonded tamper-evident laminate or thin film overlay. 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.

Mandatory elements

Integrating the dynamic data, elements into the card-body by digital imaging processes or equivalent methods. Physically attached photographs shall not be used.

Dynamic data elements shall be protected from alteration, substitution or replacement.

NOTE Such protection can be provided by one or more of the following:

securely bonded laminate or overlay

dynamic data printed on the same layer with the security printed background

forming both dynamic data and a security image within the structure of the card-blank

Optional elements

Security background overlapping the portrait image area (Zone III of the card).

An optically variable element superimposed on (but not rendering illegible) the portrait image.

Embedded data incorporated in the portrait image of the licence holder.

Secondary portrait image of licence holder.

Recording the dynamic data elements on the IDL in one or more of the optional machine-readable technologies on the non-portrait side of the IDL to enable verification of the human-readable data.

Covert information incorporated in the personalisation.

Incorporate a machine-verifiable biometric element on the non-portrait side of the card.

C.7 Glossary of terms

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 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.

Card core: The opaque or translucent inner layers of a laminated card upon which the security design is usually printed.

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

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

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'.

Diffraction: An optical effect achieved by the controlled scatter or interference of white light producing patterns that may be seen at specific viewing angles and which may display colour shifts.

Digital signature: A method of securing and validating data by electronic means.

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.

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

Fibres: Small, thread-like particles embedded in a substrate during manufacture.

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 .

Front-to-back (see-through) register: A design printed on both sides of a card which when the page is viewed by transmitted light forms an interlocking pattern.

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 equipment, 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.

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

Laser embossing: A process whereby a laser is used to create tactile features on the card surface.

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 other security elements

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 in transmitted light.

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 a mismatch at other wavelengths.

Micro- printed text: Very small text printed in positive and or negative form, which can only be read with the aid of a magnifying glass.

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

Optically variable element: An element whose appearance in colour and/or design changes dependent upon the angle of viewing or illumination. Examples are: elements including diffraction structures with high resolution ("Diffractive Optically Variable Image Devices"/ DOVID's), holograms, colour shifting inks (e.g. ink with optically variable properties) and other diffractive or reflective materials.

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 are applied to the IDL.

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

Photochromic ink: Ink, which undergoes a reversible colour change when exposed to UV light.

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, particularly when a stick-on photograph instead of a digital imaging of the portrait or equivalent method is used.

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

Planchettes: Small visible (fluorescent) or invisible fluorescent platelets incorporated into an IDL material at the time of its manufacture.

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 controlled merging of the colours similar to the effect seen in a rainbow.

Reactive inks: Inks that contain security reagents to guard against attempts at tampering by chemical erasure (deletion), such that a detectable reaction occurs when bleach and solvents come into contact with the ink.

Secondary image: A repeat image of the licence holder's portrait reproduced elsewhere in the IDL by whatever means.

Security thread: A thin strip of plastic or other material incorporated within the IDL structure similar to the thread used in banknotes. The strip may be metallised or partially de-metallised.

Tactile element: A surface element giving a distinctive 'feel' to the IDL.

Taggants Compounds that are not naturally occurring substances and which can be detected using special equipment.

Tagged inks: Inks containing taggants

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

UV: Ultra violet.

UV dull material: A material that exhibits no visibly detectable fluorescence when illuminated with UV light.

Variable laser element: Element generated by laser engraving or laser perforation displaying changing information dependent upon the viewing angle.

Watermark: A custom design, typically containing tonal gradation, formed in paper during its manufacture, created by the displacement of materials therein and traditionally viewable by transmitted light.

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 a 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.5 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 Standard.

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 devices, 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 a issuing authority's genuine IDLs, detection of counterfeit or forged IDLs is made more difficult.

Annex E
(informative)

Card durability[1)]

E.1 Purpose

This annex specifies durability of an IDL. There are many factors to be considered when attempting to establish durability requirements for an IDL. It is anticipated that specific requirements for durability varies from one issuing authority to the next, depending on the minimum validity period of the IDL and usage patterns that may be specific to each issuing authority's population. Special care should be taken that mandatory data elements of the IDL (see 5.2) are protected over the life of the IDL. Additional 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 Conformance

Basic physical characteristics should conform with ISO/IEC 7810 ID-1.

E.3 References

The following documents contain provisions that may be referenced for testing an IDL:

ISO/IEC 10373-1:1998: Identification cards – Test methods – Part 1: General characteristics tests

ISO/IEC 10373-1:1998/Cor 1:2002

ISO/IEC 10373-2:1998: Identification cards – Test methods – Part 2: Cards with magnetic stripes

ISO/IEC 10373-3:2001: Identification cards – Test methods – Part 3: Integrated circuit(s) cards with contacts *and related interface devices*

ISO/IEC 10373-5:1998: Identification cards – Test methods – Part 5: Optical memory cards

ISO/IEC 10373-6:2001: Identification cards – Test methods – Part 6: Proximity cards

ISO/IEC 10373-6:2001/Amd 2:2003: *Improved RF test methods*

ISO/IEC 10373-7:2001: Identification cards – Test methods – Part 7: Vicinity cards

ANSI NCITS 322-2002: Information technology – Card durability test methods

1) Specifications for card durability are being developed by ISO/IEC JTC1/SC17/WG1/TF2 (card service life). The work of WG1/TF2 is to be added to this annex upon completion of thereof.

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 30 August 2004, is provided in Table F.1.

Table F.1 — Distinguishing signs of countries

Country	Distinguishing sign	Country	Distinguishing sign
Albania	AL	Brazil	BR
Algeria	DZ	Brunei	BRU
Andorra	AND	Bulgaria	BG
Argentina	RA	Cambodia	K
Australia	AUS	Canada	CDN
Austria	A	Central African Republic	RCA
Azerbaijan	AZ	Chile	RCH
Bahamas	BS	China (Republic of)	RC
Bahrain	BRN	Congo	RCB
Bangladesh	BD	Costa Rica	CR
Barbados	BDS	Côte d'Ivoire	CI
Belarus	BY	Croatia	HR
Belize (former British Honduras)	BH[1]	Cuba	[CU][2]
Belgium	B	Cyprus	CY
Benin	DY	Czech Republic	CZ
Bosnia and Herzegovina	BIH	Denmark:	DK
Botswana	BW	Faroe Islands	FR

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

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

Country	Distinguishing sign	Country	Distinguishing sign
Democratic Republic of the Congo (Zaire)	ZRE	Jamaica	JA
Dominican Republic	DOM	Japan	J
Ecuador	EC	Jordan	HKJ
Egypt	ET	Kazakhstan	KZ
Estonia	EST	Kenya	EAK
Fiji	FJI	Kuwait	KWT
Finland	FIN	Kyrgyzstan	KS
France	F	Lao People's Democratic Republic	LAO
Gambia	WAG	Latvia	LV
Georgia	GE	Lebanon	RL
Germany	D	Lesotho	LS
Ghana	GH	Lithuania	LT
Greece	GR	Luxembourg	L
Grenada (Windward Islands)	WG	Madagascar	RM
Guatemala	GCA	Malawi	MW
Guyana	GUY	Malaysia	MAL
Haiti	RH	Mali	RMM
Holy See	V	Malta	M
Hungary	H	Mauritius	MS
Iceland	IS	Mexico	MEX
India	IND	Monaco	MC
Indonesia	RI	Mongolia	MGL
Iran (Islamic Republic of)	IR	Morocco	MA
Ireland	IRL	Myanmar	BUR
Israel	IL	Namibia	NAM
Italy	I	Netherlands:	NL

Country	Distinguishing sign	Country	Distinguishing sign
Netherlands Antilles	NA	Singapore	SGP
New Zealand	NZ	Slovakia	SK
Nicaragua	NIC	Slovenia	SLO
Niger	RN	South Africa	ZA
Nigeria	WAN	Spain (including African localities and provinces)	E
Norway	N	Sri Lanka	CL
Pakistan	PK	St Lucia (Windward Islands)	WL
Papua New Guinea	PNG	St Vincent and the Grenadines (Windward Islands)	WV
Paraguay	PY	Surinam	SME
Peru	PE	Swaziland	SD
Philippines	RP	Sweden	S
Poland	PL	Switzerland	CH
Portugal	P	Syrian Arab Republic	SYR
Republic of Korea	ROK	Tajikistan	TJ
Republic of Moldova	[MD][3]	Thailand	T
Romania	RO	The F.Y.R. of Macedonia	MK
Russian Federation	RUS	Togo	TG
Rwanda	RWA	Trinidad and Tobago	TT
Samoa	WS	Tunisia	TN
San Marino	RSM	Turkey	TR
Senegal	SN	Turkmenistan	TM
Serbia and Montenegro	SCG	Uganda	EAU
Seychelles	SY	Ukraine	UA
Sierra Leone	WAL	United Kingdom:	GB

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

Country	Distinguishing sign	Country	Distinguishing sign
Alderney	GBA	Zanzibar	EAZ
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:		Zambia	RNR
Tanganyika	EAT	Zimbabwe	ZW

Annex G
(normative)

IDL Booklet

G.1 Introduction

Although the human-readable content of the IDL is displayed in the extended Latin character set, the explanatory information printed on the IDL is likely to be in the domestic language of the issuing country (e.g. in German on the German licence). To enable the international interpretation of the IDL, 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 IDL.

G.2 Scope

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

G.3 Informative references

The following international agreements contain provisions, which were considered in defining the requirements of this annex:

- Convention on Road Traffic, Geneva of 19 September 1949, and
- Convention on Road Traffic, Vienna of 8 November 1968.

G.4 The need for a booklet

The need for a booklet to be used in conjunction with the introduction of the IDL is established in the considerations arising from the following options:

- a booklet with some degree of personalisation;
- a booklet with no personalisation, or
- no booklet needed at all.

G.4.1 Booklet with some personalisation

The issuing of an IDL 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 Standard 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 an IDL 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 DDL. This is due to the absence of an integrated system to link the issuing of an IDP to the validity of a DDL 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.4.2 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 IDL. The booklet does not contain any authorisation or validity period (which is the function of the IDL), but merely facilitates the interpretation thereof.

Contrary to the contention that no booklet is needed (see G.4.3), the booklet would thus serve the purpose of being educational and informative, particularly in the transition period.

G.4.3 No booklet

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 licence 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.5 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.
- The background colour of the booklet may be a printed pattern and shall be predominantly grey.
- The words “Explanation of ISO compliant 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.6 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.1, 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.1. The insert pocket protects the machine-readable components that may be included on the card, such as magnetic stripe or optical memory.

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 150g/m^2 paper and the inner pages should not exceed 80g/m^2 paper.

G.7 Layout

G.7.1 Cover

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

G.7.1.1 Front

The logo of the issuing country. The logo shall be reproduced exactly to the design and proportions (width and height) specified in Figure G.1.

The words “Explanation of ISO compliant driving licence” (English) and "Permis de Conduire conforme aux normes ISO" (French).

G.7.1.2 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.

G.7.2 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.7.2.1 English

The English text of the notice is as follows:

"Important Notice to Holder!

(1) This booklet is not a licence, but merely translates your driving privileges into the languages agreed upon for international recognition in the United Nations (UN) Conventions on Road Traffic.

(2) Your valid ISO compliant Driving Licence must accompany this booklet at all times.

(3) It is understood that an ISO compliant Driving Licence shall in no way affect the obligation of the holder to conform strictly to the laws and regulations relating to residence or to the exercise of a profession which are in force in each country through which he travels."

G.7.2.2 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 en cours de validité, et conforme aux normes ISO en vigueur, doit accompagner ce livret à tout moment.

(3) Il est entendu que la possession d'un permis de conduire conforme aux normes ISO n'affecte en aucune sorte l'obligation où se trouve son porteur de se conformer entièrement, dans tous les pays où il circule, aux lois et règlements en vigueur relatifs à l'établissement d'une résidence ou à l'exercice d'une profession."

G.7.3 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.7.3.1 English

The English text of the notice is as follows:

"Recognition of IDL

An ISO compliant Driving Licence (IDL) card can be recognised from the following common features on the front of the card:

- The words "DRIVING LICENCE" 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 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.7.3.2 French

The French text of the notice is as follows:

"Reconnaisance du PCI

Le Permis de Conduire conforme aux normes ISO (PCI) est reconnaissable par les caractéristique générales suivantes présentes au recto de la carte:

- La mention "PERMIS DE CONDUIRE" traduite dans une des trois langues, anglais ("DRIVING LICENCE") ou français ("PERMIS DE CONDUIRE") ou espagnol ("PERMISO DE CONDUCCIÓN") doit être imprimée en lettres noire le long de l'arête supérieure de la carte, ou faire partie intégrante du fond de la carte.

- La couleur du fond de la carte devra être à prédominance rose dans un bandeau de 10mm de large situé sur la partie haute de la carte.

- La photographie du titulaire est reportée uniquement sur la partie gauche de la carte."

G.7.4 Multi language descriptions

These pages include text descriptions in English, French, Russian and Spanish (the official languages prescribed by the UN Conventions), and the additional languages included at the discretion of the issuing authority (may be limited to six other languages) 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 identifies the various text elements that are involved. Note that the page has been rotated through 90° and enlarged to facilitate easy reading.

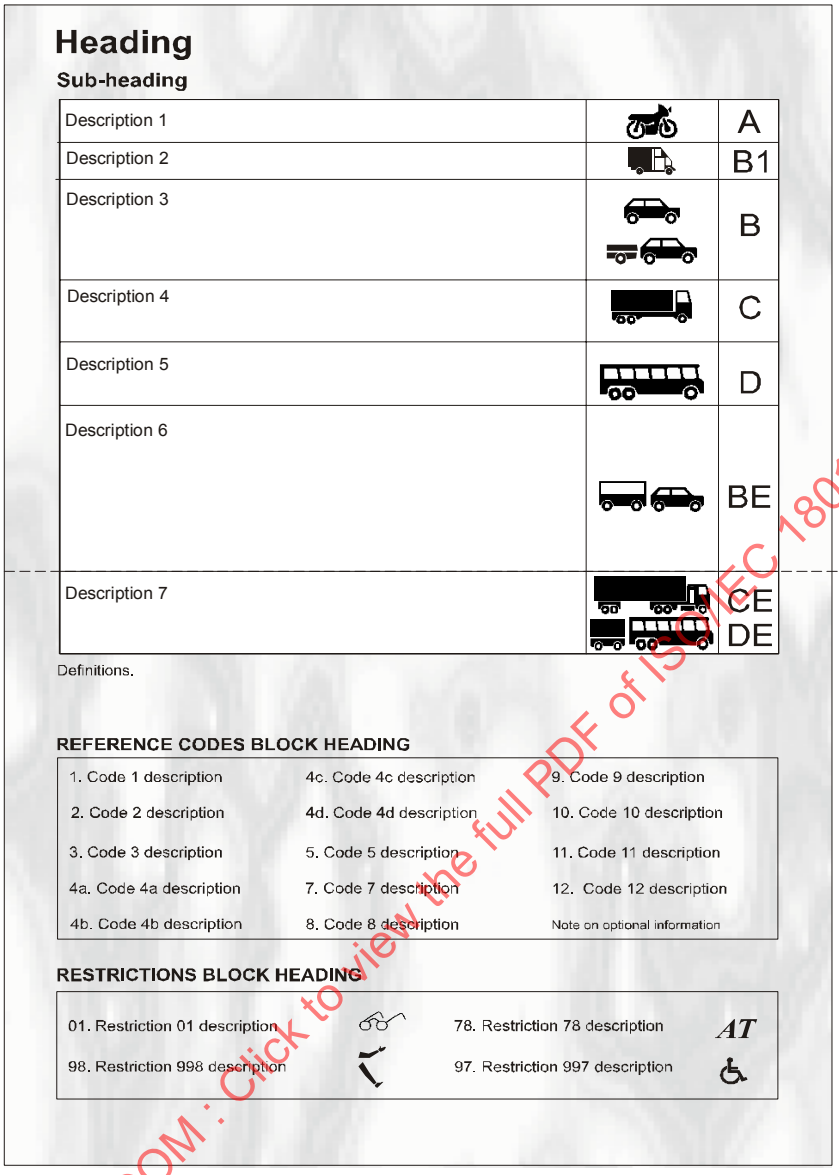


Figure G.1 — Text elements on driving licence descriptions page.

The English version and translation for each of the text elements for the other three mandatory languages are provided in Tables G.1 to G.4. Tables G.5 to G.10 provide the translation for a selection of other languages.

Table G.1 — English version of text elements

Text element	English version
Heading	Particulars Concerning the Driving Licence
Sub-heading	Vehicles authorised by codes appearing on the licence:
Description 1	Motorcycles, with or without a sidecar.
Description 2	Motor powered tricycles and quadricycles

Text element	English version
Description 3	Motor vehicles other than those in category A with a maximum authorized mass not exceeding 3,500 kilograms (7,700 lbs) 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 which does not exceed 750 kilograms (1,650 lbs), **or** combinations of a tractor vehicle in category B and a trailer, the maximum authorized mass of which exceeds 750 kilograms (1,650 lbs) but does not exceed the unladen mass of the tractor vehicle, where the maximum authorized mass of the combination does not exceed 3,500 kilograms (7,700 lbs).
Description 4	Motor vehicles other than those in category D and whose maximum authorized mass is over 3,500 kilograms (7,000 lbs); motor vehicles in this category may be combined with a trailer having a maximum authorized mass which does not exceed 750 kilograms (1,650 lbs).
Description 5	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, which does not exceed 750 kilograms (1,650 lbs).
Description 6	Combination of motor vehicles consisting of the tractor vehicle in category B above and a trailer the maximum authorized mass of which exceeds 750 kilograms (1,650 lbs) and the unladen mass of the tractor vehicle (but the maximum authorized mass of the combination does not exceed 3,500 kilograms (7,000 lbs)), **or** combinations of a tractor vehicle in category B and a trailer, the maximum authorized mass of which exceeds 750 kilograms (1,650 lbs) but does not exceed the unladen mass of the tractor vehicle (where the combined maximum authorised mass exceeds 3,500 kilograms (7,000 lbs)).
Description 7	Combination of motor vehicles consisting of the tractor vehicle in categories C or D above and its trailer(s) having a maximum authorized mass exceeding 750 kilograms (1,650 lbs).
Definitions	"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)).
Reference codes block heading	Driving licence 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	Licence valid from
Code 4b description	Licence valid to
Code 4c description	Issuing Authority
Code 4d description	(Administrative Number)*
Code 5 description	Licence Number
Code 7 description	Signature
Code 8 description	(Place of Residence)*
Code 9 description	Licence Categories
Code 10 description	Category valid from
Code 11 description	Category valid to
Code 12 description	Information/restriction codes
Note on optional information	* Optional, if available/known only
Restrictions block heading	Restrictions:
Restriction 01 description	Driver requires eyesight correction
Restriction 98 description	Driver requires prosthetic device
Restriction 78 description	Vehicles with automatic transmission only
Restriction 97 description	Vehicles adapted for physically disabled only

Table G.2 — French translation of text elements

Text element	Translation
Heading	Indications relatives au permis de conduire
Sub-heading	Catégories de véhicules pour lesquelles le permis est valable:
Description 1	Motocyclettes avec ou sans side-car.
Description 2	Tricycles et quadricycles à moteur.
Description 3	Véhicules automobiles ayant un poids total autorisé en charge (PTAC) qui n'excède pas 3 500 kilogrammes, affectés au transport de personnes et comportant, outre le siège du conducteur, huit places assises au maximum, **ou** affectés au transport de marchandises. Aux véhicules de cette catégorie peut être attelée une remorque dont le poids total autorisé en charge (PTAC) n'excède pas 750 kilogrammes.
Description 4	Véhicules automobiles isolés autres que ceux de la catégorie D dont le poids total autorisé en charge (PTAC) excède 3 500 kilogrammes. Aux véhicules de cette catégorie peut être attelée une remorque dont le poids total autorisé en charge (PTAC) n'excède pas 750 kilogrammes.
Description 5	Véhicules automobiles affectés au transport de personnes comportant plus de huit places assises outre le siège du conducteur ou transportant plus de huit personnes, non compris le conducteur. Aux véhicules de cette catégorie peut être attelée une remorque dont le poids total autorisé en charge (PTAC) n'excède pas 750 kilogrammes.
Description 6	Véhicules relevant de la catégorie B, attelés d'une remorque dont le poids total autorisé en charge (PTAC) excède 750 kilogrammes, lorsque: le poids total autorisé en charge de la remorque excède le poids à vide du véhicule tracteur **ou** la somme des poids totaux autorisé en charge (véhicule tracteur & remorque) excède 3,500 kilogrammes.
Description 7	Véhicules à moteur relevant de la catégorie C ou D, et attelés d'une remorque dont le poids total autorisé en charge (PTAC) excède 750 kilogrammes.
Definitions	Le terme “poids total autorisé en charge (PTAC)” d'un véhicule désigne le poids 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
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

Text element	Translation
Code 12 description	Information / restrictions
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 98 description	Ne peut conduire que muni d'une prothèse
Restriction 78 description	Ne peut conduire que des véhicules avec transmission automatique
Restriction 97 description	Ne peut conduire que des véhicules adaptés aux infirmes physiques

Table G.3 — Spanish translation of text elements

Text element	Translation
Heading	Detalles con respecto al permiso de conducción
Sub-heading	Vehículos autorizados por los códigos que aparecen en el permiso:
Description 1	Motocicletas con o sin sidecar.
Description 2	Triciclos y cuadriciclos motorizados.
Description 3	Automóviles que se usan en el transporte de pasajeros y que comprenden, además del asiento del conductor, de un máximo de ocho asientos; **o** los que se usan para el transporte de productos y que tienen una masa máxima autorizada que no exceda 3,500 kilogramos. Los vehículos en esta categoría podrán llevar enganchado un remolque cuyo peso no exceda 750 kilogramos.
Description 4	Automóviles que se usan para el transporte de productos, cuya masa máxima autorizada excede 3,500 kilogramos. Los vehículos en esta categoría podrán llevar enganchado un remolque cuya masa máxima no exceda 750 kilogramos.
Description 5	Automóviles que se usan para el transporte de pasajeros y que comprenden, además del asiento del conductor, de más de ocho asientos. Los vehículos en esta categoría podrán llevar enganchado un remolque cuya masa máxima no exceda 750 kilogramos.
Description 6	Conjuntos de automóviles acoplados compuestos por un vehículo tractor de la categoría B indicada previamente y un remolque, cuya masa máxima autorizada excede 750 kilogramos y excede la masa en vacío del vehículo tractocamión (pero cuya masa máxima autorizada del conjunto de vehículos acoplados no exceda 3500 kilogramos) **o** conjuntos de vehículos acoplados compuestos de un vehículo tractocamión en la categoría B y un remolque, cuya masa máxima autorizada excede 750 kilogramos pero que no exceda la masa en vacío del vehículo tractocamión (donde la masa máxima autorizada del conjunto de vehículos acoplados excede 3500 kilogramos).
Description 7	Automóviles de las categorías C o D como se define previamente, con un remolque cuya masa máxima excede 750 kilogramos.
Definitions	La expresión “masa máxima autorizada” de un vehículo significa la masa del vehículo y su carga máxima cuándo el vehículo está listo para circular.
Reference codes block heading	Códigos de referencia de los datos del permiso de conducción:
Code 1 description	Apellido
Code 2 description	Nombre de pila y otros nombres
Code 3 description	Fecha (y lugar)* de nacimiento
Code 4a description	Permiso válido desde
Code 4b description	Permiso válido hasta
Code 4c description	Autoridad expedidora

Text element	Translation
Code 4d description	(Número administrativo)*
Code 5 description	Número del permiso
Code 7 description	Firma
Code 8 description	(Lugar de residencia)*
Code 9 description	Categorías del permiso
Code 10 description	Categoría válida desde
Code 11 description	Categoría válida hasta
Code 12 description	Códigos de información y restricciones
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 98 description	Conductor requiere un dispositivo de prótesis
Restriction 78 description	Únicamente vehículos con transmisión automática
Restriction 97 description	Únicamente vehículos adaptados para personas físicamente discapacitadas

Table G.4 — Russian translation of text elements

Text element	Translation
Heading	Подробные сведения относительно Водительских прав
Sub-heading	Транспортные средства, разрешенные кодовыми обозначениями употреблямыми на правах
Description 1	Мотоциклы с коляской или без коляски.
Description 2	Трехколесные и четырехколесные транспортные средства с мотором.
Description 3	Моторный транспорт используемый для перевозки пассажиров и состоящий, в дополнение к водительскому креслу, из не более чем восьми пассажирских кресел, или транспорт, используемый для перевозки грузов и имеющий максимально разрешенную массу не превышающую 3 500 кг. Транспортные средства в этой категории могут быть соединены с прицепом, чья максимальная масса не превышает 750 кг.
Description 4	Моторный транспорт, используемый для перевозки грузов и имеющий максимально разрешенную массу не превышающую 3 500 кг. Транспортные средства в этой категории могут быть соединены с прицепом, чья максимальная масса не превышает 750 кг.
Description 5	Моторный транспорт используемый для перевозки пассажиров и состоящий, в дополнение к водительскому креслу, из более чем восьми пассажирских кресел. Транспортные средства в этой категории могут быть соединены с прицепом, чья максимальная масса не превышает 750 кг.
Description 6	Сочетание моторного транспорного средства состоящего из трактора в обозначенной свыше категории B с прицепом,чья максимально разрешенная масса превышает 750 кг и превышает массу самого трактора без груза (максимально разрешенная масса всего сочетания не дожна превышать 3 500 кг), или сочетание трактора категории B с прицепом,чья максимально разрешенная масса превышает 750 кг (но не превышает массу трактора без груза),
Description 7	Моторный транспорт категории C, или D (обозначенный свыше) с прицепом, чья максимальная масса превышает 750 кг.
Definitions	«Максимально разрешенная масса» транспорта означает массу самого средства и его максимальнуй груз до начала движения.«Максимальный груз» означает

Text element	Translation
	массу груза, разрешенную соответствующими официальными органами страны, где транспортное средство зарегистрировано.
Reference codes block heading	Блок кодовых ссылок
Code 1 description	Фамилия
Code 2 description	Имя
Code 3 description	Дата и место рождения
Code 4a description	Права годны от
Code 4b description	Права годны до
Code 4c description	Органы, выдающне водительские права
Code 4d description	(Административный номер)*
Code 5 description	Номер водительских прав
Code 7 description	Роспись
Code 8 description	(Место проживания)*
Code 9 description	Категории водительских прав
Code 10 description	Категория годна от
Code 11 description	Категория годна до
Code 12 description	Информационные/ограничительные коды
Note on optional information	* Дооднительная информация, если известна
Restrictions block heading	Блок кодовых ограничений
Restriction 01 description	Водителю требуется коррекция зрения
Restriction 98 description	Водителю требуется протез
Restriction 78 description	Транспорт с автоматической передачей
Restriction 97 description	Транспорт адаптированный только для инвалидов

Table G.5 — German translation of text elements

Text element	Translation
Heading	Angaben über den Führerschein
Sub-heading	Fahrzeugklassen, für die der Führerschein gilt:
Description 1	Krafträder mit oder ohne Seitenwagen.
Description 2	Dreirädrige Krafträder und vierrädrige Krafträder.
Description 3	Kraftfahrzeuge die nicht zur Klasse A gehören mit einem zulässigen Gesamtgewicht, das 3500 kg nicht übersteigt und mit höchstens 8 Sitzen zusätzlich zum Führersitz (wobei solche Fahrzeuge einen Anhänger mitführen dürfen, dessen Gesamtgewicht 750 kg nicht übersteigt); **oder** Kraftfahrzeugkombination aus einem Zugfahrzeug der Klasse B und einem Anhänger, dessen Gesamtgewicht 750 kg übersteigt aber das Leergewicht des Zugfahrzeugs nicht übersteigt (wobei das zulässige Gesamtgewicht der Kombination 3500 kg nicht übersteigt).
Description 4	Kraftfahrzeuge die nicht zur Klasse D gehören mit mehr als 3,500 kg zulässigem Gesamtgewicht. Solche Fahrzeuge dürfen einen Anhänger mitführen, dessen Gesamtgewicht 750 kg nicht übersteigt.
Description 5	Kraftfahrzeuge zur Personenbeförderung mit mehr als 8 Sitzen zusätzlich zum Fahrersitz. Solche Fahrzeuge dürfen einen Anhänger mitführen, dessen Gesamtgewicht 750 kg nicht übersteigt.

Text element	Translation
Description 6	Kraftfahrzeugkombination aus einem Zugfahrzeug der obigen Klasse B und einem Anhänger, dessen Gesamtgewicht 750 kg übersteigt und das Leergewicht des Zugfahrzeugs übersteigt (aber das Gesamtgewicht der Kombination 3,500 kg nicht übersteigt), **oder** Kraftfahrzeugkombination aus einem Zugfahrzeug der Klasse B und einem Anhänger, dessen Gesamtgewicht 750 kg übersteigt aber das Leergewicht des Zugfahrzeugs nicht übersteigt (wobei das zulässige Gesamtgewicht der Kombination 3,500 kg übersteigt).
Description 7	Kraftfahrzeugkombination bestehend aus einem Zugfahrzeug der obigen Klassen C oder D und einem Anhänger oder mehreren Anhängern, dessen oder deren Gesamtgewicht 750 kg übersteigt.
Definitions	"Zulässiges Gesamtgewicht" eines Fahrzeugs ist das Gewicht des fahrbereiten Fahrzeuges einschliesslich Nutzlast.
Reference codes block heading	Zuordnung der auf dem Führerschein verwendeten Datenkennungen:
Code 1 description	Nachname
Code 2 description	Vornamen oder weitere Namen
Code 3 description	Geburtsdatum (und Geburtsort)*
Code 4a description	Führerschein gültig ab
Code 4b description	Führerschein gültig bis
Code 4c description	Ausstellende Behörde
Code 4d description	(Verwaltungsnummer)*
Code 5 description	Führerscheinnummer
Code 7 description	Unterschrift
Code 8 description	(Wohnort)*
Code 9 description	Fahrerlaubnisklassen
Code 10 description	Erteilungsdatum der Klasse
Code 11 description	Klasse gültig bis
Code 12 description	Codes für Zusatzangaben/ Beschränkungen
Note on optional information	* Optional, nur soweit bekannt oder vorhanden
Restrictions block heading	Beschränkungen
Restriction 01 description	Fahrzeugführer benötigt Sehhilfe
Restriction 98 description	Fahrzeugführer benötigt Prosthese
Restriction 78 description	Nur Fahrzeuge mit automatischem Getriebe
Restriction 97 description	Nur Fahrzeuge mit Behindertenausrüstung

Table G.6 — Afrikaans translation of text elements

Text element	Translation
Heading	Besonderhede van die bestuurderslisensie
Sub-heading	Voertuie gemagtig deur kodes wat op die lisensie verskyn:
Description 1	Motorfietse met of sonder syspan.
Description 2	Driewiel- en vierwielmotorfietse.
Description 3	Motorvoertuie behalwe dié in kategorie A met 'n maksimum toelaatbare massa van hoogstens 3,500 kg en wat benewens die bestuurder se sitplek, hoogstens agt sitplekke het; motor voertuie in hierdie klas kan 'n sleepwa met 'n maksimum