

Australian Standard™

Machine readable identity cards



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Australian Standard™

Machine readable identity cards

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT/12, Information Systems, Security and Identification Technology.

This Standard is the result of a consensus among representatives on the Joint Committee to produce it as an Australian Standard.

This Standard is based on but is not equivalent to International Civil Aviation Organisation ICAO Doc 9303 Part 3, *Machine Readable Travel Documents*.

The objective of this Standard is to provide generic formats and minimum mandatory data elements to form the basis for standardization of machine readable identity cards while allowing for flexibility of document design, so as to maintain the desired harmonization of basic data elements and machine readability.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

Any recommendations for expanding the data elements set should be directed to Standards Australia.

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STANDARDS AUSTRALIA

Australian Standard

Machine readable identity cards

S E C T I O N 1 S C O P E A N D G E N E R A L

1.1 SCOPE

This Standard specifies requirements for the construction, content and design of machine readable identity cards such as drivers' licences, membership cards, internal security passes or access control cards for any organization, and possibly electronic passports. The Standard applies to cards that establish that the person identified is authorized by the issuing organization to have access to areas, activities or privileges controlled by that organization. It does not apply to multipurpose identity cards that verify the identity of a person to any inquirer in any context, and which take the form of smartcards, cards with a magnetic stripe, optical cards, or combinations thereof.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
1436	Alphanumeric character set OCR-B for optical recognition
2570	Printing specifications for optical character recognition
3521	Identification cards—Physical characteristics
ISO	
1831	Printing specifications for optical character recognition
8601	Data elements and interchange formats—Information interchange—Representation of dates and times

1.3 DEFINITIONS

For the purposes of this Standard, the definitions below apply.

1.3.1 Counterfeit

The unauthorized reproduction of an entity by whatever means.

1.3.2 Forgery

The fraudulent alteration of any component of an entity.

1.3.3 Imposter

A person misrepresenting himself or herself to be some other person.

SECTION 2 TECHNICAL SPECIFICATIONS FOR SIZE - 1 TRAVEL DOCUMENT FOR IDENTIFICATION PURPOSES

2.1 GENERAL

2.1.1 Official Identity Document

The size-1 Official Identity Document (ID-1) is a card that conforms with the dimensions specified in AS 3521 for the ID-1 Type card (excluding thickness) and suitable for machine reading in accordance with this Standard. These requirements apply to official documents of identity which can, where issued by an organization or government body and accepted by a receiving body, be used for the purposes of identifying that person as belonging to that organization or government body. The ID-1 shall contain on the front and the rear the data specified herein in a form that is both legible visually and by optical character recognition methods or some form of machine reading.

2.1.2 Non-official Identity Document

Where an organization wishes to produce an identity document for its sole internal use, the requirements for the ID-1 set out in Clause 2.1.1 shall not apply.

2.2 PHYSICAL CHARACTERISTICS

2.2.1 General

The ID-1 shall, in normal use throughout its period of validity, meet the requirements of Clauses 2.2.2 to 2.2.7.

2.2.2 Deformation

The ID-1 shall be of such construction that deformation due to normal use (e.g. bends, not creases) can be reduced to flatness by the reading device without impairing the use of the ID-1 or the functioning of the reader.

2.2.3 Toxicity

The ID-1 shall present no toxic hazards in the course of normal use (see also AS 3521).

2.2.4 Resistance to chemicals

The ID-1 shall be resistant to chemical effects arising from normal handling and use (see also AS 3521).

2.2.5 Temperature stability

The ID-1 shall remain machine readable at operating temperatures ranging from -10°C to $+50^{\circ}\text{C}$. The ID-1 should not lose its reliability after being stored at temperatures ranging from -35°C to $+80^{\circ}\text{C}$.

2.2.6 Humidity

The ID-1 shall be machine readable at a relative air humidity ranging from 5 percent to 95 percent, with a maximum wet bulb temperature of 25°C (see also AS 3521). The ID-1 should not lose its reliability after being stored at a relative air humidity ranging from 0 percent to 100 percent.

2.2.7 Light

The ID-1 and its printed text shall resist deterioration from exposure to light encountered during normal use (see also AS 3521).

2.3 CHOICE OF MATERIALS

The choice of construction material shall be at the discretion of the issuing organization.

2.4 DIMENSIONS OF ID-1

2.4.1 Nominal dimensions

The nominal dimensions of the ID-1 shall be in accordance with AS 3521 for the ID-1 type card, i.e. 54.0 mm × 85.6 mm.

2.4.2 Margins

The dimensional specifications refer to the outer limits of the ID-1. A margin of 2.0 mm along each outer edge, with the exception of the header zone (Zone 1), shall be left clear of data (see Section 5).

2.4.3 Edge tolerances

The edges of the ID-1 shall be within the area circumscribed by the following concentric rectangles as illustrated in Figure 2.1:

- (a) Inner rectangle: 53.25 mm × 84.85 mm.
- (b) Outer rectangle: 54.75 mm × 86.35 mm.

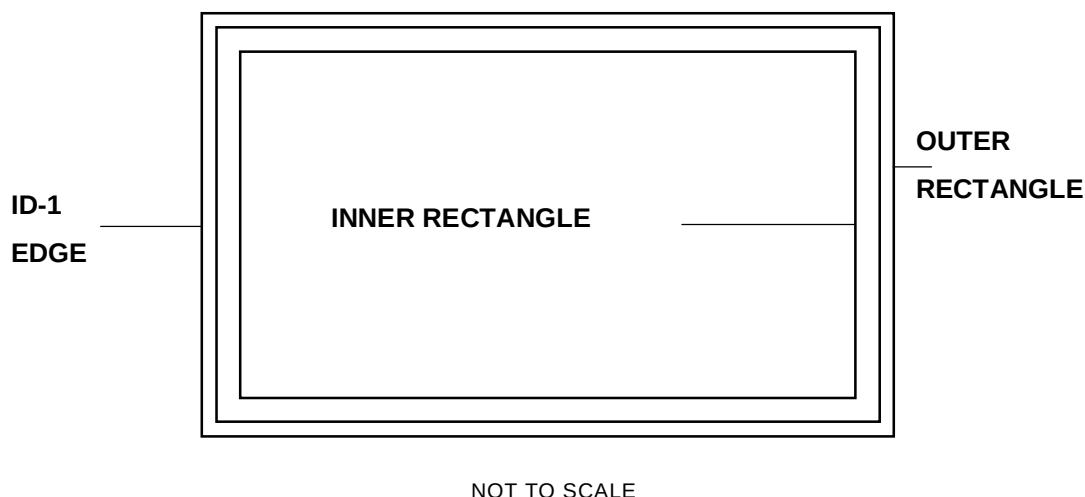


FIGURE 2.1 ID-1 DIMENSIONAL ILLUSTRATION

2.4.4 Thickness

The thickness of the ID-1, including laminate, shall be as follows:

- (a) Minimum: 0.25 mm.
- (b) Maximum: 1.25 mm.

The thickness of the area within the machine readable zone shall not vary by more than 0.10 mm.

SECTION 3 SECURITY ASPECTS

3.1 GENERAL

The ID-1 should incorporate safeguards as deemed appropriate by the organization. Any security features incorporated in the ID-1 should permit reliable verification. Security features shall not interfere with machine reading. Production of the ID-1 shall be in accordance with Clauses 3.2 to 3.5.

3.2 FORGERY

Features shall be incorporated to facilitate the detection of any unauthorized alteration to the ID-1. Visual and automated inspections shall be carried out.

3.3 COUNTERFEIT

To facilitate the visual and automated detection of counterfeits, a combination of reliable security features shall be incorporated in the ID-1.

3.4 IMPOSTERS

Security features shall be incorporated to facilitate the visual and automated detection of the fraudulent use of a ID-1 by an imposter.

3.5 MATERIALS

Whenever possible materials should be of controlled varieties that cannot be easily acquired for other than official purposes. Where materials are not of a controlled variety, additional security features should be integrated with these materials. Where different types of materials are integrated to form the ID-1 (e.g. paper substrate with laminate), they shall be assembled in such a manner that will prevent re-use and re-assembly following separation for purposes of fraudulent alteration.

SECTION 4 PRIVACY ASPECTS

4.1 GENERAL

The ID-1 shall incorporate privacy safeguards where required by law. The ID-1 should be in accordance with the privacy principles set out in Clauses 4.2 to 4.7.

4.2 INCLUSION OF PERSONAL DATA

The personal data recorded on the ID-1 should be restricted to that which is relevant and necessary to the purpose of the card. The purpose of the ID-1 is to verify that the person identified is authorized by the issuing organization to have access to an area, participate in activities or enjoy privileges controlled by that organization. The need for any item of personal information in addition to the photograph and the person's name must be assessed carefully.

4.3 PERSONAL DATA QUALITY

Organizations should take reasonable steps to ensure that the personal information they collect, hold and use is of good quality, taking into account the purpose(s) for which it is collected, held and used.

4.4 USE AND DISCLOSURE OF PERSONAL DATA

The personal data recorded on the card should be used only for the purpose(s) for which the organization has collected it and it should not otherwise be used or disclosed without the person's consent unless required by law. Organizations issuing identity cards should be mindful of strong resistance within the community to any possibility that members of the public will be expected to carry identity cards that can be produced on demand to verify their identity in any circumstance, except as required by law, e.g. driver's licence. The less personal the data is that is stored on an identity card, particularly that which is visibly legible, the less likely it is that other organizations or individuals will demand that the person produce the card for their purposes.

4.5 ACCESS TO AND CORRECTION OF PERSONAL DATA

Organizations should ensure that the person whose details appear on the card knows what those details are, is able to have access to the data on request, and can ask to have the information corrected if necessary.

4.6 IDENTIFICATION NUMBERS

An organization should not assign to individuals an identification number that is used by any other organization, nor use another organization's identification number for its own purposes.

4.7 SECURITY

Organizations should take reasonable steps to protect the personal information they hold from misuse and loss and from unauthorized access, modification or disclosure. (See Section 3.)

SECTION 5 GENERAL LAYOUT

5.1 GENERAL

To accommodate the various requirements of differing issuing organizations and to achieve maximum standardization within those divergent requirements, the ID-1 shall be divided into seven zones as follows:

Side	Zone	Zone description
Front of ID-1	I	Mandatory header
	II	Mandatory and optional personal data elements
	III	Mandatory and optional document data elements
	IV	Mandatory cardholder's signature or usual mark
	V	Mandatory identification feature
Rear of ID-1	VI	Optional data elements
	VII	Mandatory machine readable zone (MRZ)

Zones I to V and VII shall contain mandatory elements which represent the minimum requirements for the ID-1. The optional data elements in Zones II, III and VI shall accommodate the diverse requirements of different organizations, allowing for presentation of additional data, while achieving the desired level of standardization.

The sequence of data elements within zones shall be as set out in Appendix A. The dimensional specifications for the ID-1 shall be in accordance with Appendix B. The technical specifications for the printing of machine readable data shall be in accordance with Appendix C.

NOTES:

- 1 Appendix D outlines the guidelines for positioning and adjusting the dimensional specifications of Zones I to V to accommodate the flexibility desired by organizations, and should be read in conjunction with Section 7.
- 2 Examples of personalized ID-1s are shown in Appendix E.

5.2 CONTENT, USE AND DIMENSIONAL FLEXIBILITY OF ZONES

The data elements to be included in the zones, the treatment of the zones and the guidelines for dimensional layout of zones shall be in accordance with Clauses 5.3 to 5.7.

5.3 MANDATORY ZONES

Zone I shall identify the issuing organization and the name of the document.

To facilitate the checking and control authorities in the checking of identity, the essential personal details of the holder shall appear in a standard sequence in Zone II. For ease of reference this zone should be highlighted by the use of a background colour or shade of grey distinct from any other background colours in the rest of the ID-1.

Essential details about the document shall appear in a standard sequence in Zone III.

Zones II and III may each contain a field in which optional data elements are included. Any such optional field in Zone II shall be used for personal data elements and any such optional field in Zone III for document-related details. Where an organization does not use the optional fields in Zones II and III there is no need to reserve the space for them on the ID-1.

Zone IV shall contain the cardholder's signature. Zone V shall contain the personal identification feature, which shall include a photograph of the cardholder. At the discretion of the issuing body the surname and given name fields in Zone II and the cardholder's signature in Zone IV may overlay Zone V provided this does not hinder the recognition of the data in any of the three zones.

Zone VII, shall be located on the rear of the ID-1, and shall contain the machine readable data. To accommodate the required data, three lines of machine readable data shall be included in the MRZ. Zone VII shall conform in height to the MRZ so that the machine readable data lines fall within the effective reading zone (ERZ) specified in Clause 9.5, thus allowing a single reader to be used for all ID-1s when required.

All MRZ data elements shall be shown as defined in Clause 5.6.

5.4 OPTIONAL ZONE

Zone VI shall be located on the rear of the ID-1. Zone VI is an optional zone for use at the discretion of the issuing organization, but as the ID-1 is a card, Zone VI shall appear irrespective of whether or not it is used.

5.5 DIMENSIONAL FLEXIBILITY OF ZONES I TO V

Zones I to V shall be adjusted in size and shape within the overall dimensional specifications of the ID-1 to accommodate the diverse requirements of issuing bodies. All zones, however, shall be bounded by straight lines and all angles, where straight lines join, shall be right angles (i.e. 90°). The nominal position of the zones shall be as shown in Appendix G.

When an issuing body chooses to produce a ID-1 that contains a transparent or otherwise unprintable border around the card, this will result in a reduction of the available area within the zones in which to place data. The full ID-1 dimensions and zone boundaries shall be measured from the outside edge of this border, being the external edge of the ID-1.

Zone I shall be along the top edge of the ID-1 and extend across the full 85.6 ± 0.75 mm dimension. The issuing organization may vary the vertical dimension of Zone I, as required, but it shall be of sufficient dimension to allow legible interpretation of the data elements and shall not be greater than 11.0 mm as defined in Appendix H.

NOTE: See also the guidelines given in Appendix D.

Zone V shall be located such that when a chip is not used, its left edge is coincident with the left edge of the ID-1.

NOTE: See Appendices I, J and K for examples of positioning.

Zone V may vary in size. However, it shall not exceed the maximum dimensional tolerance of 35.0 mm.

NOTE: See Appendix I.

Where a chip is used the position of the zone shall be as defined in Appendix S.

Zone V may move vertically along the left edge of the ID-1 and overlay a portion of Zone I provided individual details contained in either zone are not obscured. Zone V may, as a result, have its lower external boundaries coincident with the bottom edge of the ID-1 and its upper external boundary coincident with the top edge of the ID-1.

NOTE: See Appendix J.

The upper boundary of Zone II shall be coincident with the lower boundary of Zone I.

When there is a specific requirement for the surname and given name field to extend across the ID-1, Zone II may extend up to the full 85.5 ± 0.75 mm dimension of the ID-1 as illustrated.

Where the full dimension is used, Zone II shall overlay a portion of Zone V. Issuing organizations shall ensure that data contained in either zone are not obscured.

NOTE: See Appendix K for an example of a Zone II design less than the full 85.6 ± 0.75 mm dimensions.

The lower boundary of Zone II may be positioned at the discretion of the issuing organization.

NOTE: See Appendices L and M for an illustration of the above.

Adequate space shall be left for Zone III and IV below the boundary. The boundary may be other than straight across the 85.6 ± 0.75 mm dimension of the ID-1.

NOTE: Appendix M illustrates a Zone II with a lower boundary extending as a staircase across the ID-1. The flexible design for the Zone II illustrated in Appendix M is in accordance with Clause 5.5.

Zone III shall start at the right vertical boundary of Zone V and may extend, at the discretion of the issuing organization, to be coincident with the right edge of the ID-1.

NOTE: Appendix N illustrates a Zone III bounded by Zones V, II and IV.

Zone IV shall be at the bottom of the ID-1, its lower boundary coincident with the bottom edge of the ID-1 as illustrated in Appendix O.

Zone IV may also overlay Zone V. Issuing organizations shall ensure that individual details contained in either zone are not obscured.

5.6 PRINT SPACING

The design of the ID-1 in Zones II and III should be based on a maximum horizontal printing density of 15 characters per 25.4 mm (see also Clause 7.4.1). This printing density has been chosen as the smallest in which information is clear and legible. If any optional field of data element is not used, the data may be spread more evenly in the visual zone of the ID-1 consistent with the requirement for sequencing zones and data elements. This horizontal printing density and the font and the vertical line spacing may be adjusted at the discretion of the issuing organization, provided that in the visual inspection zone (VIZ) all data shall be printed in a size such that they can be easily read and assimilated by a person with normal eyesight, with a horizontal printing density of 10 characters per 25.4 mm.

NOTE: See Appendix E.

5.7 DETAILS LAYOUT

5.7.1 Visual inspection zone (VIZ)

All data in the VIZ, namely (Zones I to VI), shall be clearly legible.

5.7.2 Field names

Captions shall be used to identify all mandatory data elements in the visual zone except as specified in Table 5. Captions may be in the language of the issuing organization.

5.7.3 Unused fields

When a field is not used, the caption shall not appear in the ID-1.

5.7.4 Data element directory

The data elements in the visual inspection zone are specified in Table 5.1.

5.7.5 Sex, nationality and date of birth

Where an organization wishes to use the document for its sole internal use these fields may be treated as optional.

TABLE 5.1
DATA ELEMENT DIRECTORY OF THE VISUAL INSPECTION ZONE

Field/Zone No.	Data element	Specifications	Maximum No. of character positions	References and notes
01/I	Issuing organization	The name of the organization issuing the document. This should be preprinted, the font being selected at the discretion of the issuing organization.	Variable	Notes 1, 3, 5, 8
02/I	Name of the document	The name of the document.	Variable	Notes 1, 2, 3, 5, 8
03/II	Primary identifier	Family name of holder. If the document holder has only one name (surname or given name), it shall be placed in the surname field (03) and the given name field (04) shall be filled with three capital Xs (XXX). In cases where composite names cannot be shown in full owing to space limitations, the predominant name used by the holder shall be inserted.	Variable	Clause 7.3; Notes 1, 3, 8
04/II	Secondary identifier	Forename(s) given to the holder. The predominant name(s) used by the holder shall be inserted in full, up to the maximum dimensions of the field frame. Other names, where necessary, may be represented by initials. This data element shall be completed with XXX where the holder has only one name (surname or given name) and this is entered in the surname field. Where a given name is entered, it shall be preceded by a comma and a space shall be allowed between each succeeding name or initial.	Variable	Clause 7.3; Notes 1, 3, 8
05/II	Sex	Sex of holder, to be specified by use of the single initial F or M.	3	Notes 1, 3, 6, 8
06/II	Nationality	In accordance with the codes set out in AS 2632.	3	Note 1
07/II	Date of birth	Holder's date of birth as recorded by the issuing organization. For unknown dates see Clause 6.3.	15	Clause 6.2; Notes 1, 2, 3, 8
08/II Optional element in mandatory zone	Optional personal data elements	Optional personal data elements e.g. personal identification number or fingerprint, at the discretion of the issuing organization. If a fingerprint is included in this field, it should be presented as a 1:1 representation of the original.	Variable	Notes 1, 2, 3, 4, 7, 8
09/III	Document number	As given by the issuing organization to uniquely identify the document.	Variable	Notes 1, 2, 3, 8, 9

(continued)

TABLE 5.1 (continued)

Field/Zone No.	Data element	Specifications	Maximum No. of character positions	References and notes
10/III	Date of expiry	Date of expiry of the document.	15	Clause 6.2; Notes 1, 2, 3, 8
11/III	Optional document data elements	Optional data elements relating to the document, e.g. date and place of issue, at the discretion of the issuing organization.	Variable	Clause 6.2; Notes 1, 2, 3, 4, 7, 8
12/IV	Holder's signature or usual mark	Signature or usual mark of the holder.		Note 5
13/V	Identification feature	This field shall contain a photograph. The photograph shall be not larger than 45.0 mm × 35.0 mm nor smaller than 32.0 mm × 26.0 mm. The head size from chin to crown shall be between 70 and 80 percent of the vertical dimension of the photograph area. The position of the field concerned shall be aligned to the left of Zones II and III. The photograph may be in black and white or in colour. At the option of the issuing organization, this field may contain another biometric identifier or security feature provided this does not obscure the photograph. A fingerprint, if included, should be presented as a 1:1 representation of the original.		Note 5
14/VI	Optional data elements	Additional optional data elements at the discretion of the issuing organization.		Notes 1, 2, 3, 4, 7, 8

NOTES:

- 1 Alphabetic characters (A to Z) as defined in Appendix P. In the MRZ only those characters specified in Appendix P and the transliteration from the extended character set (see Clause 8.4.2) are to be used.
- 2 Numeric characters (0 to 9) as defined in Appendix P. In the MRZ only those characters specified in Appendix P are to be used.
- 3 Punctuation or other special characters. In the MRZ only those characters specified in Part A or Appendix P and the transliterations for the extended character set (see Clause 8.4.2) are to be used.
- 4 Optional data elements may appear in Zone VI.
- 5 The field name is not printed on the document.
- 6 Where a person does not wish his/her sex to be identified or where an organization does not want to show this data, the filler character shall be used in this field in the MRZ and an X in this field in the VIZ.
- 7 The use of a field name is at the option of the issuing organization.
- 8 Space.
- 9 The number of characters in the VIZ may be variable; however, if the document number has more than nine characters, the nine principal characters shall be shown in the MRZ in character positions 6 to 14. They shall be followed by a filler character instead of a check digit to indicate a truncated number. The remaining characters of the document number shall be shown at the beginning of the field reserved for optional data elements (character positions 16 to 30 of the upper machine readable line) followed by a check digit and a filler character.

SECTION 6 MACHINE READABLE ZONE (MRZ)

6.1 GENERAL

This Section specifies requirements for the machine readable zone, Zone VII.

6.2 MRZ POSITION

The MRZ shall be located on the rear of the ID-1. Appendix C shows the nominal position of the data in the machine readable zone.

6.3 DATA ELEMENTS

The data elements corresponding to Fields 01 to 07, 09 and 10 of the visual inspection zone shall be printed in machine readable form, in the MRZ, from left to right in the sequence indicated in the data structure specification set out in Table 6.1.

6.4 PRINT SPECIFICATIONS

Machine readable data shall be printed in OCR-B type font, size 1, constant stroke width, as specified in Sections 8 and 9.

6.5 PRINT POSITION

Reference centre-lines for the OCR lines and a nominal starting position for the first character of each line shall be in accordance with Appendix C. The positioning of the characters is indicated by those reference lines and by the printing zones for the three codelines in Appendix C.

6.6 DATA STRUCTURE

6.6.1 Upper machine readable line

The data structure of the upper machine readable line shall be as set out in Table 6.1.

TABLE 6.1
UPPER MACHINE READABLE LINE

MRZ character positions (line 1)	Field No. in VIZ	Data element	Specification	Number of characters	References and notes*
1 to 2	02	Type of document	Two characters, the first of which shall be A, C or I, shall be used to designate the particular document. The second character shall be as specified in Note 11.	2	Notes 1, 2, 3, 5, 11
3 to 5	01	Issuing state	The three-letter code specified in AS 2632 shall be used. Spaces shall be replaced by filler character (<).	3	Notes 1, 3, 5
6 to 14	09	Document number	As given by the issuing organization, to uniquely identify the document. Spaces shall be replaced by filler characters (<).	9	Notes 1, 2, 5, 10
15		Check digit	See Section 6.	1	Notes 2, 3, 10
16 to 30	8, 11 or Zone VI	Optional data elements	For optional use. Unused character positions shall be completed with filler character (<) repeated up to position 30 as required.	15	Notes 1, 2, 3, 5, 10

* Notes are located below Table 6.3.

6.6.2 Middle machine readable line

The data structure of the middle machine readable line shall be as set out in Table 6.2.

TABLE 6.2
MIDDLE MACHINE READABLE LINE

MRZ character positions (line 2)	Field No. in VIZ	Data element	Specification	Number of characters	References and notes*
1 to 6	07	Date of birth	The structure is YYMMDD, where— YY = Year (2 positions) MM = Month (2 positions) DD = Day (2 positions).	6	Clause 6.4; Notes 2, 3, 5
7	05	Check digit	See Section 6.	1	Note 2
8		Sex	F = Female; M = Male; < = non-specified.	6	Notes 1, 3, 5, 6
9 to 14		Data of expiry	Structure is YYMMDD, where— YY = Year (2 positions) MM = Month (2 positions) DD = Day (2 positions).	6	Clause 6.4; Notes 2, 5
15	06	Check digit	See Section 6.	1	Note 2
16 to 18		Nationality	In accordance with the codes in AS 2632. Spaces are replaced with filler characters (<).	3	Notes 1, 3, 5, 8
19 to 29		Optional data elements	For optional use of the issuing organization. Unused character positions shall be completed with filler character (<) repeated up to position 29 as required.	11	Notes 1, 2, 3, 5
30	08, 11 or Zone VI	Overall check digit	Overall check digit to verify the data element of the upper and middle machine readable lines. The final check digit is calculated on the basis of all figures shown on the upper and middle machine readable line, including values for letters that are a part of the number fields and their check digits (character positions 6 to 30 of upper machine readable line and character positions 1 to 7, 9 to 15 and 19 to 29 of the middle machine readable line).		Section 6; Note 2

* Notes are located below Table 6.3.

6.6.3 Lower machine readable line

The data structure of the lower machine readable line shall be as set out in Table 6.3.

TABLE 6.3
LOWER MACHINE READABLE LINE

MRZ character positions (line 3)	Field No. in VIZ	Data element	Specification	Number of characters	References and notes
1 to 30	03	Surname, given name(s)	When the document holder has only one name (surname or given name), it shall be placed first in the character positions for surname and given name(s), filler characters (<) being used to complete the remaining character positions of the MRZ.	30 (surname, given name(s) and fillers)	Notes 1, 3, 5
	04	Double or composite surnames or given names Special characters or spaces in surname or given name(s) Name suffixes Separator between surname and given name(s) or initial(s)	Double or composite surnames or names shall be separated by one filler character (<). Each special character (apostrophe, hyphen) or space appearing in the surname or given name(s) shown in the VIZ (fields 03 and 04) shall be represented in the MRZ by a single filler character (<). Name suffixes (such as Jr., Sr., II or III, etc.) shall be printed in capital letters (like other MR data) as the last part of the surname and separated from it or from themselves by one filler character (<), without commas or periods, and followed by two filler characters (<<) to separate the surname from the given name(s) as specified immediately below. Two filler characters (<<).		
	04	Given names(s) (see also under surname above)	If more than one given name and/or initials are used, they shall be separated by one filler character (<).	See under surname above	Notes 1, 3, 5

(continued)