

III. TECHNICAL SPECIFICATIONS FOR MACHINE READABLE PASSPORTS COMMON TO ALL MACHINE READABLE TRAVEL DOCUMENTS

Scope

1. This section defines specifications that are common to all machine readable travel documents (MRTDs) and, hence, the machine readable passport (MRP). Reference to the MRTD in Section III shall therefore constitute reference to the MRP. A reference to the layout of eye readable and machine readable data shall be interpreted as a reference to the machine readable data page of the MRP. All other specifications in this section apply to the full MRP.

Physical characteristics

2. Issuing States and Organizations have the freedom to choose the materials to be used. Nevertheless, the MRTD shall, in normal use throughout its period of validity, meet the following requirements.

2.1 *Deformation.* The MRTD shall be of such nature that bends (not creases), i.e. deformation due to normal use, can be flattened by the reading device without impairing the use of the MRTD or the functioning of the reader.

2.2 *Toxicity.* The MRTD shall present no toxic hazards in the course of normal use (see also ISO/IEC 7810 : 1995).

2.3 *Resistance to chemicals.* The MRTD shall be resistant to chemical effects arising from normal handling and use, except where chemical sensitivity is added for security reasons.

2.4 *Temperature stability.* The MRTD shall remain machine readable at operating temperatures ranging from -10°C to +50°C (14°F to 122°F). The MRTD should not lose its reliability after being stored at temperatures ranging from -35°C to +80°C (-31°F to 176°F).

2.5 *Humidity.* The MRTD shall be machine readable at a relative air humidity ranging from 5 per cent to 95 per cent, with a maximum wet bulb temperature of 25°C (77°F) (see also ISO/IEC 7810 : 1995). The MRTD should not lose its reliability after being stored at a relative air humidity ranging from 0 per cent to 100 per cent.

2.6 *Light.* The MRTD shall resist deterioration from exposure to light encountered during normal use (see also ISO/IEC 7810 : 1995).

2.7 While material choices remain at the discretion of the individual issuing State or Organization, no materials shall adversely affect any other component in the MRTD.

Security aspects

3. The MRTD shall incorporate safeguards as deemed appropriate by the issuing State or Organization. Security features incorporated in the MRTD should permit reliable verification but shall not interfere with machine reading. Doc 9303 does not specify the security precautions to be taken against counterfeit and fraudulent alteration. However, the following security principles shall be observed in the production of the MRTD.

3.1 *Forgery.* Reliable security measures shall be incorporated to facilitate the visual detection of any alteration to the MRTD. Such security measures should, if possible, also facilitate the automated detection of alterations. “Forgery” is defined as the fraudulent alteration of any part of the MRTD.

3.2 *Counterfeit.* To facilitate the visual and/or automated detection of counterfeits, a combination of reliable security features shall be incorporated in the MRTD. “Counterfeit” is defined as the unauthorized reproduction of the MRTD by whatever means.

3.3 *Imposters.* Security features should be incorporated to facilitate the visual and/or automated detection of the fraudulent use of the MRTD by an imposter. “Imposter” is defined as someone representing himself or herself to be some other person.

3.4 *Materials.* Whenever possible, materials should be of controlled varieties which cannot be easily acquired for other than official purposes. Where materials are not of a controlled variety, it is recommended that additional security features be integrated with these materials. Where different types of materials are integrated to form the MRTD or any part thereof (e.g. paper substrate with laminate), they shall be assembled in a manner to prevent reuse and reassembly following separation for purposes of fraudulent alteration.

General layout of MRTD

4. The MRTD follows a standardized layout to facilitate reading of data on a global basis by both eye readable and machine readable means (global interoperability).

4.1 To accommodate the various requirements of States’ laws and practices and to achieve the maximum standardization within those divergent requirements, the MRTD is divided into seven zones as listed below. Zones I through VI constitute the visual inspection zone (VIZ). Zone VII is the machine readable zone (MRZ).

- Zone I Header
- Zone II Personal data elements (mandatory and optional)
- Zone III Document data elements (mandatory and optional)
- Zone IV Holder’s signature or usual mark
- Zone V Identification feature
- Zone VI Optional data elements
- Zone VII Mandatory machine readable zone (MRZ)

4.2 The locations and dimensional specifications of zones are set out in the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303.

Content, use and dimensional flexibility of zones

5. The content and use of zones, while common in large part to all MRTDs, vary to accommodate the unique requirements of the different types of MRTDs and the diverse requirements of issuing States and Organizations.

6. *Visual inspection zone (VIZ) (Zones I through VI)*

6.1 The VIZ consists of zones designated mandatory and optional to accommodate the diverse requirements of issuing States and Organizations while maintaining sufficient uniformity to ensure global interoperability for all MRTDs.

6.2 Captions in VIZ. Mandatory captions are defined for key data elements in the VIZ. Details are set out in the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303.

6.3 *Entered data in VIZ*

6.3.1 Selection of typeface and type size used within the VIZ is at the discretion of the issuing State or Organization. However, OCR-B, size 1, constant stroke width characters with a width spacing of 2.54 mm (0.1 in) as specified in ISO 1073-2 : 1976 are recommended.

6.3.2 The horizontal printing density and the vertical line spacing may be adjusted at the discretion of each issuing State or Organization, provided that in the VIZ all data are printed in a size such that they can be easily read and assimilated by a person with normal eyesight.

*Note.— Where OCR-B, size 1, is **not** used, a maximum horizontal printing density of 15 characters per 25.4 mm (1.0 in) should not be exceeded. This printing density has been chosen as the smallest in which information is clear and legible.*

6.3.3 If any optional field is not used, the entered data may be spread out in the VIZ consistent with the requirement for sequencing zones and data elements specific to the different types of MRTDs.

6.3.4 Use of upper case characters is recommended.

6.3.5 Diacritical marks may be used with either lower or upper case letters, at the option of the issuing State or Organization.

6.4 *Use of languages with non-Latin alphabet characters.* For entered data in the visual zone, national languages with non-Latin characters should be transliterated or transcribed into the Latin alphabet. Where representation in the national language with non-Latin alphabet is required, each data element shall first appear as prescribed in the data element directory for the relevant type of MRTD, followed by a blank space, an oblique character and another blank space, followed by the same data element in the national language, subject to available space in the field concerned. Case and size of font for the non-Latin alphabet data entries may be selected at the discretion of the issuing State or Organization. Whenever possible, however, the same size of font should be used as for the machine readable zone. In all other respects, the layout, fields and data elements for the VIZ, as set out in the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303, shall be observed.

6.5 *Zone position/data position/data elements/print specifications/print position in VIZ.* Details are set out in the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303.

7. *Mandatory machine readable zone (MRZ) (Zone VII)*

7.1 *Purpose of the MRZ*

7.1.1 MRTDs produced in accordance with Doc 9303 incorporate an MRZ to facilitate inspection of travel documents and reduce the time taken up in the travel process by administrative procedures. In addition, the MRZ provides verification of the information in the VIZ and may be used to provide search characters for a database inquiry. Equally, it may be used to capture data for registration of arrival and departure or simply to point to an existing record in a database.

7.1.2 The MRZ provides a set of essential data elements in a standardized format for each type of MRTD that can be used by all receiving States regardless of their national script or customs.

7.1.3 The data in the MRZ are formatted in such a way as to be readable by machines with standard capability worldwide.

7.2 *Properties of the MRZ*

7.2.1 In consideration of national privacy laws, the data in the MRZ must be visually readable as well as machine readable. Data presentation must conform to a common standard such that all machine readers configured in conformance with Doc 9303 can recognize each character and communicate in a standard protocol (e.g. ASCII) that is compatible with the technology infrastructure and the processing requirements defined by the receiving State.

7.2.2 To meet these requirements OCR-B typeface is specified in Doc 9303 as the medium for storage of data in the MRZ. The MRZ as defined herein is recognized as the machine reading technology essential for global interchange, and is therefore mandatory in all types of MRTDs.

7.3 *Constraints of the MRZ*

7.3.1 The characters allowed in the MRZ are a common set (as defined in Appendix 2 to this section) which can be used by all receiving States. National characters generally appear only in the computer-processing systems of the receiving States in which they apply and are not available globally. They shall not, therefore, appear in the MRZ.

7.3.2 Diacritical marks are not permitted in the MRZ. Even though they may be useful to distinguish names, the use of diacritical marks in the MRZ would confuse machine-reading equipment, resulting in less accurate database searches and slower clearance of travellers.

7.3.3 The number of character positions available for data in the MRZ is limited, and varies according to the type of MRTD. The lengths of the data elements inserted in the MRZ must conform to the sizes of the respective fields as specified in the data element directory in the applicable part of Doc 9303.

7.4 *Data position/data elements/check digits/print specifications/print position in MRZ*

7.4.1 *Data position.* Appendices to the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303 define the location of the MRZ and the nominal position of the data therein.

7.4.2 *Data elements.* The data elements corresponding to specified fields of the VIZ shall be printed, in machine readable form, in the MRZ beginning with the left most character position in each field in the sequence indicated in the data structure specifications for each document type. Details on the data elements to be included in the MRZ are set out in the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303.

7.4.3 *Check digits.* The data structure of the machine readable lines provides for the inclusion of check digits. The position of check digits and the data used in their calculation differ between MRTDs, and a table defining this information is set out in the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303.

7.4.4 *Print specifications.* Machine readable data shall be printed in OCR-B type font, size 1, constant stroke width characters, at a fixed width spacing of 2.54 mm (0.1 in); i.e. horizontal printing density of 10 characters per

25.4 mm (1.0 in) as specified in ISO 1073-2 : 1976. Printed characters are restricted to those defined in Appendix 2 to this section.

7.4.5 *Print position.* Reference centre lines for the OCR lines within the MRZ and a nominal starting position for the first character of each line are set out in Appendices to the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303.

8. *Dimensional flexibility of zones*

8.1 *Visual inspection zone (VIZ).* The dimensions of individual zones within the VIZ (i.e. Zones I through VI) may be adjusted to accommodate the diverse requirements of issuing States and Organizations. Details are set out in the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303.

8.2 *Machine readable zone (MRZ).* The dimensions of the MRZ (Zone VII) are fixed for each type of MRTD. Details are set out in the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303.

Convention for writing the name of the holder

9. *Visual inspection zone (VIZ)*

9.1 The issuing State shall establish which part of the name is the primary identifier — this may be the family name, the main name, the surname, and in some cases, the entire name. This shall be entered in the field for the primary identifier in the VIZ. It is recommended that upper case letters be used.

9.2 The remaining parts of the name are the secondary identifier. These may be the forenames, familiar names, given names, or any other secondary names. These names shall be written in the field for the secondary identifier in the VIZ. It is recommended that upper case letters be used throughout. If a single field is used for the name, then the secondary identifier should be separated from the primary identifier by a single comma (,). A comma is not needed if multiple fields are used.

9.3 It is recommended that prefixes and suffixes including titles, professional and academic qualifications, honours, awards, and hereditary status, not be included in the VIZ. However, if an issuing State considers a prefix or suffix to be legally part of the name, the prefix or suffix can appear in the VIZ. Numeric characters should not be written in the name fields of the VIZ. Where the use of numeric characters is a legal naming convention in the issuing States, these should be represented in Roman numerals.

9.4 National characters may be used in the VIZ. If the national characters are not Latin-based, then a transliteration into Latin characters must be provided.

10. *Machine readable zone (MRZ)*

10.1 In the MRZ the name of the holder shall be printed using uppercase characters without diacritical marks.

10.2 The primary identifier, using the Latin character transliteration (if applicable), shall be written in the appropriate machine readable line, with the starting character position as set out in the section(s) specific to the

preparation of the different types of MRTDs contained in the applicable part of Doc 9303. It shall be followed by two filler characters (<<). The secondary identifier, using the Latin character transliteration (if applicable), shall be written starting in the character position immediately following the two filler characters.

10.3 If the primary or secondary identifiers have more than one name component, each component shall be separated by a single filler character (<).

10.4 Filler characters (<) should be inserted immediately following the final secondary identifier (or following the primary identifier in the case of a name having only a primary identifier) through to the last character position in the machine readable line.

10.5 The number of character positions in the name field is limited and differs for the different types of MRTDs. If the primary and secondary identifiers, written in the relevant machine readable line using the above procedure, exceed the available character positions, then truncation shall be carried out using the procedure set out in the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303. In all other cases, the name shall not be truncated.

10.5.1 In truncating the name components, the last character of the name field shall be an alpha character (A to Z inclusive) as an indication that truncation has occurred (see the Data Element Directory of the MRZ in the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303).

Note.— Where long names extend to the last character position in the name field, the presence of an alpha character means that the name must be treated as though truncation had occurred.

10.5.2 Examples of truncation of names are contained in the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303.

10.6 Prefixes and suffixes, including titles, professional and academic qualifications, honours, awards, and hereditary status, shall not be included in the MRZ except where the issuing State considers these to be legally part of the name. In such cases prefixes or suffixes shall be represented as components of the secondary identifier(s).

10.7 *Numeric characters shall not be used in the name fields of the MRZ.*

10.8 Punctuation characters are not allowed in the MRZ. Where these appear as part of a name, they should be treated as follows:

Apostrophe:

This shall be omitted; name components separated by the apostrophe shall be combined and no filler character shall be inserted in its place in the MRZ.

Example VIZ: D'Artagnan MRZ: DARTAGNAN

Hyphen:

Where a hyphen appears between two name components, it shall be represented in the MRZ by a single filler character (<).

Example VIZ: Marie-Elise MRZ: MARIE<ELISE

Comma:

Where a comma is used in the VIZ to separate the primary and secondary identifiers, the comma shall be omitted in the MRZ, and the primary and secondary identifiers shall be separated in the MRZ by two filler characters (<<).

Example VIZ: ERIKSSON, Anna Maria MRZ: ERIKSSON<<ANNA<MARIA

Other Punctuation Characters:

All other punctuation characters shall be omitted from the MRZ (i.e. no filler character shall be inserted in their place in the MRZ).

10.9 *Transliteration of national characters in name in the MRZ*

10.9.1 Names in the MRZ are represented differently from those in the VIZ. National characters must be transliterated using only the allowed OCR character set defined in Appendix 2 to this section. Within this constraint, individual issuing States or Organizations must decide how the national characters shall be transliterated in the MRZ. Transliterations reported and used by issuing States and Organizations are presented in Appendix 3 to this section.

Portrait of the holder

11. *Portrait.* Where required, a portrait of the holder shall be located in Zone V of the VIZ and have a head size, from chin to crown, between 70 per cent and 80 per cent of the vertical dimension of the portrait area as defined for Zone V in the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303. The portrait may be in black and white or colour and either a photograph securely afixed to the substrate of the MRTD or a digitally printed reproduction. Necessary measures shall be taken by the issuing State or Organization to ensure that the portrait of the holder is resistant to substitution.

**Representation of issuing State or Organization
and nationality of holder**

12. *Visual inspection zone (VIZ)*

12.1 The issuing State or Organization and nationality of the holder shall be represented as set out in the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303.

13. *Machine readable zone (MRZ)*

13.1 The three-letter codes listed in Appendix 1 to this section shall be used to complete the fields identifying the issuing State or Organization and the nationality of the holder. The codes listed in Appendix 1 are based on the Alpha-3 codes for entities specified in ISO 3166 : 1993, with extensions for certain States and Organizations being identified by an asterisk.¹

¹

When required by an issuing State or Organization and upon request to ICAO, amended or additional three-letter codes will be submitted to the Technical Advisory Group on Machine Readable Travel Documents (TAG/MRTD) for recommendation as to inclusion in the list. In so doing, liaison with the ISO Maintenance Agency for ISO 3166 : 1997 will be provided.

Representation of dates

14. Representation of dates on MRTDs conforms with a convention to achieve global interoperability. Details are set out in the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303.

Machine reading requirements and the effective reading zone

15. *Effective reading zone.* A fixed dimensional reading area (effective reading zone or ERZ of 17.0 mm × 118.0 mm (0.67 in × 4.65 in)), sized to accommodate the largest MRTD, is defined to allow use of a single machine reader where desired by a State. The location of the ERZ is as defined in Appendix 4 to this section. The provision of the ERZ is not intended to allow additional tolerance to the printing positions defined in the appendices of the section(s) specific to the preparation of the different types of MRTDs contained in the applicable part of Doc 9303. The ERZ is intended to allow for variances due to the manual placement of MRVs and the fanning effect of the pages that takes place when reading an interior page of an MRP. It also allows for the reading of MRTDs with either two or three lines of machine readable data.

15.1 To combat the threat to travel document security posed by, for example, photocopiers, security features are permitted in the MRZ, and any such security feature shall not interfere with accurate reading of the OCR characters at the B900 range, as defined in ISO 1831 : 1980. While OCR characters must be visible as specified in 7.2.1 to ensure that all MRTDs including those with security features in the MRZ can be successfully read, the OCR characters in the MRZ shall be machine read only in the near infra-red portion of the spectrum (i.e. the B900 band defined in ISO 1831 : 1980).

APPENDIX 1 to Section III

THREE-LETTER CODES

(Based on Alpha-3 codes for entities specified in ISO 3166,
with extensions for certain States being identified by an asterisk)

Part A — Codes for designation of nationality or place of birth

Entity (short name)	Code	Entity (short name)	Code
Afghanistan	AFG		
Albania	ALB		
Algeria	DZA		
American Samoa	ASM		
Andorra	AND		
Angola	AGO		
Anguilla	AIA		
Antarctica	ATA		
Antigua and Barbuda	ATG		
Argentina	ARG		
Armenia	ARM		
Aruba	ABW		
Australia	AUS		
Austria	AUT		
Azerbaijan	AZE		
Bahamas	BHS		
Bahrain	BHR		
Bangladesh	BGD		
Barbados	BRB		
Belarus	BLR		
Belgium	BEL		
Belize	BLZ		
Benin	BEN		
Bermuda	BMU		
Bhutan	BTN		
Bolivia	BOL		
Bosnia and Herzegovina	BIH		
Botswana	BWA		
Bouvet Island	BVT		
Brazil	BRA		
British Indian Ocean Territory	IOT		
Brunei Darussalam	BRN		
Bulgaria	BGR		
Burkina Faso	BFA		
Burundi	BDI		
Cambodia	KHM		
Cameroon	CMR		
Canada	CAN		
Cape Verde	CPV		
Cayman Islands	CYM		
Central African Republic	CAF		
Chad	TCD		
Chile	CHL		

China CHN
Christmas Island CXR
Cocos (Keeling) Islands CCK
Colombia COL
Comoros COM
Congo COG
Cook Islands COK
Costa Rica CRI
Côte d'Ivoire CIV
Croatia HRV
Cuba CUB
Cyprus CYP
Czech Republic CZE
Democratic People's Republic
of Korea PRK
Denmark DNK
Djibouti DJI
Dominica DMA
Dominican Republic DOM
East Timor TMP
Ecuador ECU
Egypt EGY
El Salvador SLV
Equatorial Guinea GNQ
Eritrea ERI
Estonia EST
Ethiopia ETH
Falkland Islands (Malvinas) FLK
Faroe Islands FRO
Fiji FJI
Finland FIN
France FRA
France, Metropolitan FXX
French Guiana GUF
French Polynesia PYF
French Southern Territories ATF
Gabon GAB
Gambia GMB
Georgia GEO
Germany D*
Ghana GHA
Gibraltar GIB
Greece GRC
Greenland GRL
Grenada GRD
Guadeloupe GLP
Guam GUM
Guatemala GTM
Guinea GIN
Guinea-Bissau GNB
Guyana GUY
Haiti HTI
Heard and McDonald Islands HMD
Holy See (Vatican City State) VAT
Honduras HND
Hong Kong HKG
Hungary HUN
Iceland ISL
India IND

Indonesia IDN
Iran, Islamic Republic of IRN
Iraq IRQ
Ireland IRL
Israel ISR
Italy ITA
Jamaica JAM
Japan JPN
Jordan JOR
Kazakhstan KAZ
Kenya KEN
Kiribati KIR
Kuwait KWT
Kyrgyzstan KGZ
Lao People's Democratic Republic LAO
Latvia LVA
Lebanon LBN
Lesotho LSO
Liberia LBR
Libyan Arab Jamahiriya LBY
Liechtenstein LIE
Lithuania LTU
Luxembourg LUX
Macau MAC
Madagascar MDG
Malawi MWI
Malaysia MYS
Maldives MDV
Mali MLI
Malta MLT
Marshall Islands MHL
Martinique MTQ
Mauritania MRT
Mauritius MUS
Mayotte MYT
Mexico MEX
Micronesia, Federated States of FSM
Monaco MCO
Mongolia MNG
Montserrat MSR
Morocco MAR
Mozambique MOZ
Myanmar MMR
Namibia NAM
Nauru NRU
Nepal NPL
Netherlands, Kingdom of the NLD
Netherlands Antilles ANT
Neutral Zone NTZ
New Caledonia NCL
New Zealand NZL
Nicaragua NIC
Niger NER
Nigeria NGA
Niue NIU
Norfolk Island NFK
Northern Mariana Islands MNP
Norway NOR
Oman OMN

Pakistan PAK
Palau PLW
Panama PAN
Papua New Guinea PNG
Paraguay PRY
Peru PER
Philippines PHL
Pitcairn PCN
Poland POL
Portugal PRT
Puerto Rico PRI
Qatar QAT
Republic of Korea KOR
Réunion REU
Romania ROM
Russian Federation RUS
Rwanda RWA
St. Helena SHN
Saint Kitts and Nevis KNA
Saint Lucia LCA
St. Pierre and Miquelon SPM
Saint Vincent and the Grenadines VCT
Samoa WSM
San Marino SMR
Sao Tome and Principe STP
Saudi Arabia SAU
Senegal SEN
Seychelles SYC
Sierra Leone SLE
Singapore SGP
Slovakia SVK
Slovenia SVN
Solomon Islands SLB
Somalia SOM
South Africa ZAF
South Georgia and the South
Sandwich Islands SGS
Spain ESP
Sri Lanka LKA
Sudan SDN
Suriname SUR
Svalbard and Jan Mayen
Islands SJM
Swaziland SWZ
Sweden SWE
Switzerland CHE
Syrian Arab Republic SYR
Taiwan, Province of China TWN
Tajikistan TJK
Thailand THA
The former Yugoslav Republic
of Macedonia MKD
Togo TGO
Tokelau TKL
Tonga TON
Trinidad and Tobago TTO
Tunisia TUN
Turkey TUR
Turkmenistan TKM

Turks and Caicos Islands TCA
Tuvalu TUV
Uganda UGA
Ukraine UKR
United Arab Emirates ARE
United Kingdom
British
— Citizen GBR
— Dependent territories citizen GBD*
— National (Overseas) GBN*
— Overseas citizen GBO*
— Protected person GBP*
— Subject GBS*
United Republic of Tanzania TZA
United States USA
United States Minor Outlying Islands UMI
Uruguay URY
Uzbekistan UZB
Vanuatu VUT
Vatican City State (Holy See) VAT
Venezuela VEN
Viet Nam VNM
Virgin Islands (British) VGB
Virgin Islands (U.S.) VIR
Wallis and Futuna Islands WLF
Western Sahara ESH
Yemen YEM
Zaire ZAR
Zambia ZMB
Zimbabwe ZWE

Part B — Codes for United Nations Laissez-passer

- *UNO — Designates an official of the United Nations Organization in the machine readable zone, lower line, character positions 11 to 13 (ordinarily reserved for three-letter nationality code).
- *UNA — Designates an official of a Specialized Agency of the United Nations in the machine readable zone, lower line, character positions 11 to 13 (ordinarily reserved for three-letter nationality code).

Part C — Codes for persons without a defined nationality

- *XXA — Stateless person, as defined in Article 1 of the 1954 Convention Relating to the Status of Stateless Persons.
- *XXB — Refugee, as defined in Article 1 of the 1951 Convention Relating to the Status of Refugees as amended by the 1967 Protocol.
- *XXC — Refugee, other than as defined under the code XXB above.
- *XXX — Person of unspecified nationality, for whom the issuing State does not consider it necessary to specify any of the codes XXA, XXB or XXC above, whatever that person's status may be. This category may include a person who is neither stateless nor a refugee but who is of unknown nationality and legally residing in the State of issue.

* These are the extensions to the ISO 3166 Codes referred to paragraph 13.1.

APPENDIX 2 to Section III

SUBSET OF OCR-B CHARACTERS FROM ISO 1073/II FOR USE IN MACHINE READABLE TRAVEL DOCUMENTS (constant stroke width)

(for illustrative purposes only)

1. Machine readable zone (MRZ)

Only the following characters shall appear in the machine readable zone.

0123456789
ABCDEFGHIJKLMNOPQRSTUVWXYZ
<

The above characters are shown approximately three times actual size. The typeface is OCR-B, size 1, constant stroke width with a character width spacing of 2.54 mm (0.10 in); i.e. a horizontal printing density of 10 characters per 25.4 mm (1.0 in).

2. Visual inspection zone (VIZ)

The typeface and type size used within the VIZ is at the discretion of the issuing State or Organization, although use of OCR-B, size 1, is preferred. Irrespective of typeface used, the printing density should not exceed 15 characters per 25.4 mm (1.0 in).

APPENDIX 3 to Section III

TRANSLITERATIONS REPORTED AND USED BY STATES

APPENDIX 4 to Section III

SCHEMATIC DIAGRAM OF MRTD EFFECTIVE READING ZONE

Note.— The dimensions of the effective reading zone illustrated are based on a standardized ERZ for all machine readable travel documents to allow use of a single machine reader where desired by a State.