

# Doc 9303 New Developments and Deadlines

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**Technical Advisory Group**

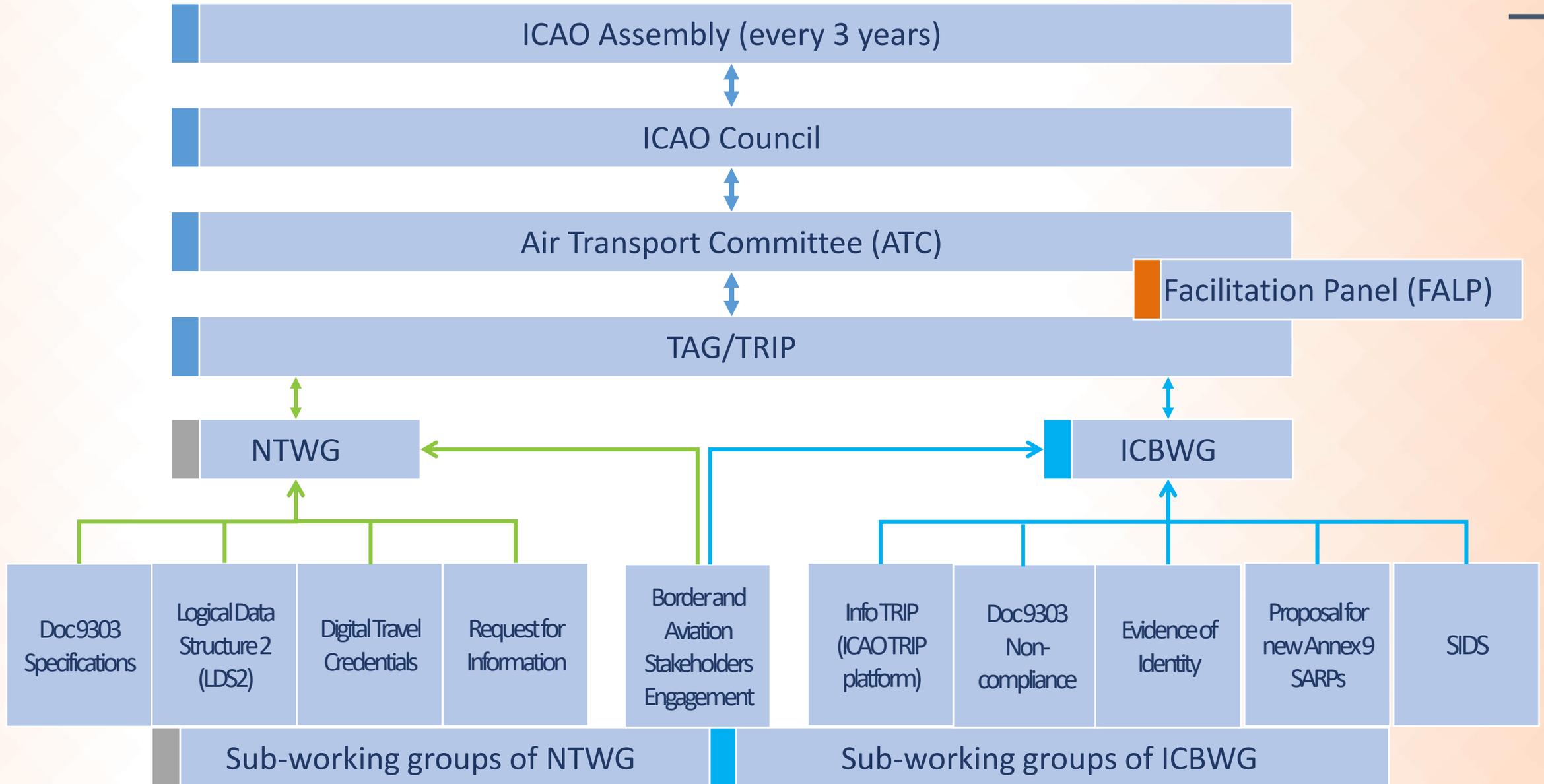
Implementation &  
Capacity Building  
Working Group

New Technologies  
Working Group

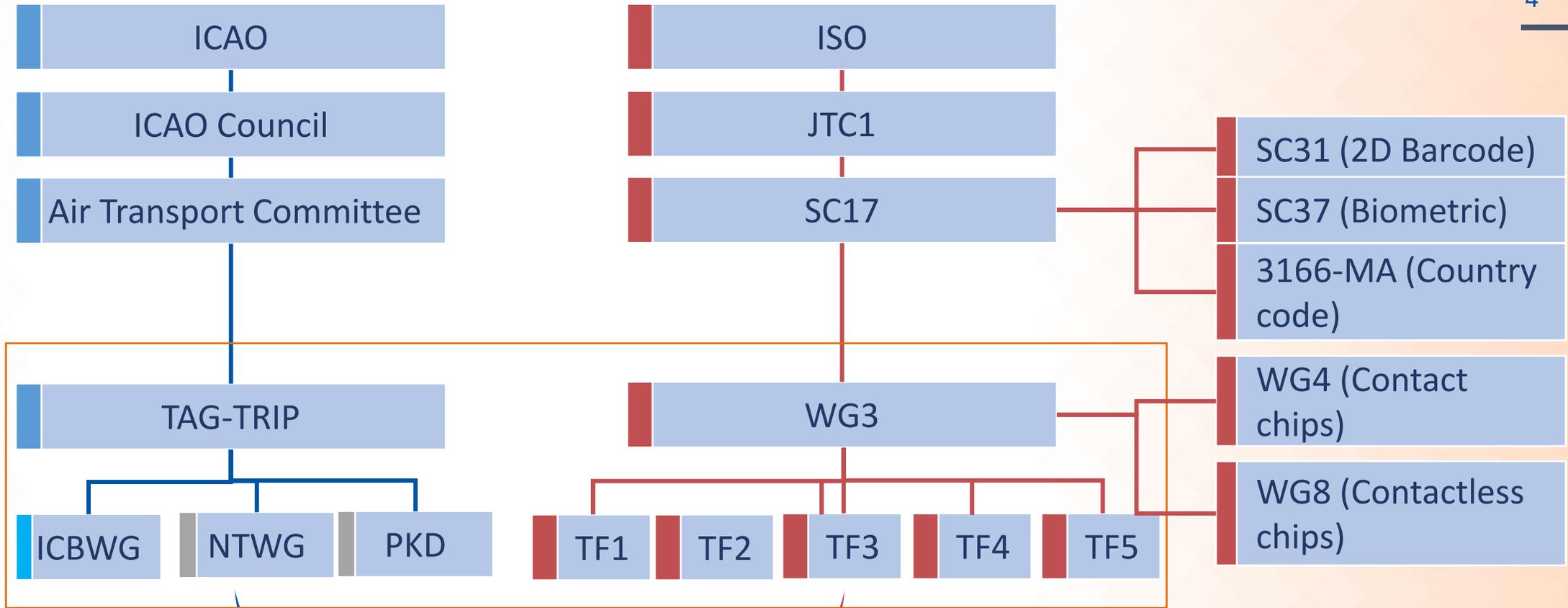
Relationship governed by MOU between ICAO and ISO/IEC JTC1



# TAG/TRIP Structure



# Working Relationship between ICAO and ISO



**ICAO Doc 9303 / ISO-IEC 7501**

# Two letter document type

- TAG/TRIP/3 endorsed the NTWG proposal to introduce a second letter in the Visual Inspection Zone (VIZ) and Machine-Readable Zone (MRZ) indicating the document type
- Use of Automated Border Controls and Advanced Passenger Information systems to identify the document type.
- TAG/TRIP/3 further endorsed a mandatory implementation date of January 1, 2026
- Amendments made to Doc 9303-4
- TAG/TRIP/4 approved the following
  - Issuers that use the second letter in their passports **MUST** use the new codes from 2026
  - Issuers not using second letter **MUST** use the new codes from 2028

National Passport – PP  
Emergency Passport – PE  
Single Sheet ETD - PU  
Diplomatic Passport – PD  
Official/Service Passport – PO  
Refugee Passport – PR  
Alien Passport – PT  
Stateless Passport – PS  
Laissez-passer type documents – PL  
(UN, EU, Interpol, CARICOM, ECOWAS etc)  
Single Sheet ETD - PU







**The MRZ has been developed for semi-automated use**  
The MRTD itself was always physically handed to a border guard for inspection of the cover and document number



**National passport**

**Diplomatic passport**

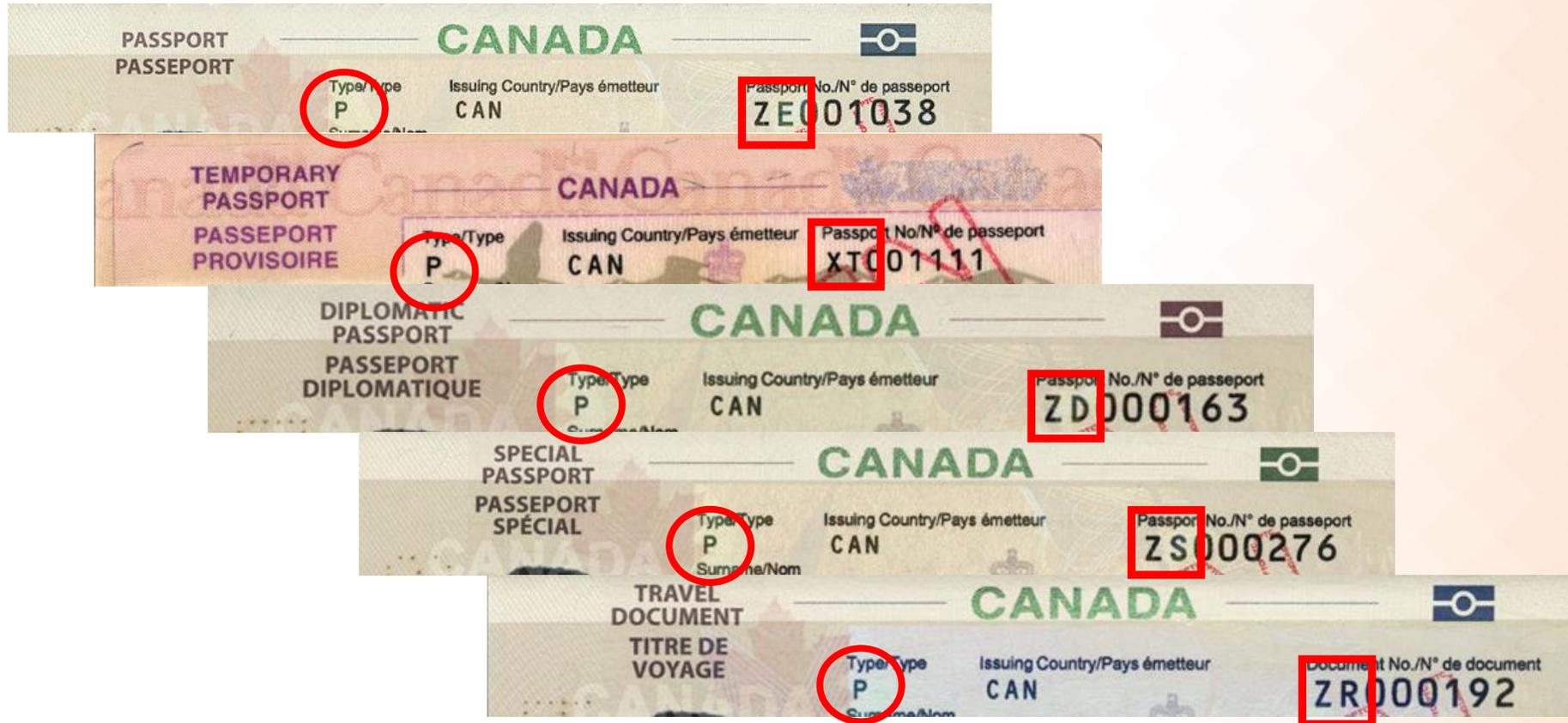
**Service passport**

**Refugee Passport Convention 28-07-1951**

**Alien Passport**

**Emergency passport**

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**The MRZ has been developed for semi-automated use**  
The MRP itself was always physically handed to a border guard, but nowadays we use electronic MRTDs instead of MRTD and make use of ABC systems



## **The MRZ has been developed for semi-automated use**

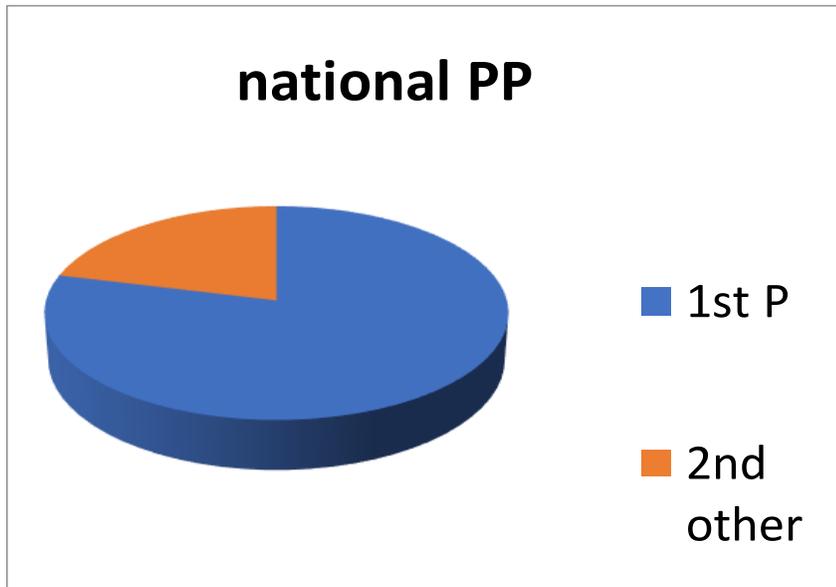
The MRP itself was always physically handed to a border guard

Nowadays we use electronic MRTDs instead of MRTD and make use of ABCs

However, ABCs cannot differentiate between the different types of passports

**THIS MEANS THAT ALL MRPs  
MUST BE PROVIDED  
WITH A **SECOND LETTER**  
AFTER THE P (for passport) TO  
INDICATE THE TYPE OF THE MRP**

## Research to investigate the presence of the second letter after the "P" for passports to indicate the type of the MRP.



- **146** Countries issue passports with P
- **39** other combinations; S, PA, PB, PC, PE, PL, PM, PN, PO, PR and PV.

## **ACTION TAKEN BY THE TAG/TRIP 2021**

**Endorsed the mandatory introduction of a second letter in the MRZ after the 'P' to indicate the type of MRP as defined in 3.1;**

<b>NATIONAL PASSPORT</b>	<b>PP</b>
<b>EMERGENCY PASSPORT</b>	<b>PE</b>
<b>DIPLOMATIC PASSPORT</b>	<b>PD</b>
<b>OFFICIAL/SERVICE PASSPORT</b>	<b>PO</b>
<b>REFUGEE TRAVEL DOCUMENT</b>	<b>PR</b>
<b>ALIEN PASSPORT</b>	<b>PT</b>
<b>STATELESS PASSPORT</b>	<b>PS</b>
<b>TRAVEL DOCUMENTS (eu, interpol etc)</b>	<b>PL</b>

## **ACTION TAKEN BY THE TAG/TRIP/3 2021**

- **Endorsed that this document type indication is also mentioned in the VIZ (Visual Inspection Zone);**
- **Endorsed that member states have to introduce this from 01-01-2026;**
- **Instructed NTWG and ISO/JTC1/WG3 to incorporate these specifications in Document 9303.**

## Benefits

**“Increasing uniformity in the use of the second letter in the MRZ after “P” will**

- **not affect the current structure of the MRZ and**
- **eventually assist Automated/Assisted Border Control and other systems in recognising every type of MRP.”**

# Deprecation of Basic Access Control

- Password Authenticated Connection Establishment (PACE) is successor to Basic Access Control
- Till December 31, 2017 – Countries had to issues passports that had both BAC and PACE
- From Jan 1, 2018 – Countries allowed to issue passports with PACE only
- From **Jan 1, 2025** – PACE is Mandatory
- From **Jan 1, 2028** – BAC MUST be dropped

# ISO/IEC 39794-5 Application Profile

- SC37 has published 39794 in 2021 – not backward compatible with 19794
- NTWG agreed to transition from 19794 to 39794 for DG2, DG3 and DG4
- TF5 worked on Application Profile for Facial image
  - Applicable only to the first facial image stored in DG2
  - DG3 and DG4 encoding currently out of scope
  - Some metadata elements have additional restrictions
  - Gender (Sex) – Male, Female, Other – in line with Doc 9303
  - Image representation block – only 2D representation allowed
  - Image data formats – JPEG, JPEG2000 lossy and JPEG2000 lossless
  - 2D Face Image Kind – restricted to MRTD
  - 3D shape representation block – MUST NOT be used
  - ASN1 for 39794-1 and 39794-5 published to WG3 Github page

# ISO/IEC 39794-5 Application Profile

- Doc 9303-10 amended to clarify the tags used to detect which encoding is used.
- Approved by TAG/TRIP/4
- Inspection Systems must implement by **Jan 1, 2026**
- Issuer must switch by **Jan 1, 2030**
- WG3 working on a silver data set for testing – will be published to WG3 github site
- Similar Application Profile will be created for Fingerprint and Iris.

# Guidance document on Physical conformance

- ICBWG and ICAO working on Compliance scheme to Doc 9303
- Requested WG3/TF4-D to work on physical compliance test specifications TR
- The Technical Report contains a summary of the ICAO [Doc9303-3] and [Doc9303-4] compliance check to be performed on (e)MRTD specimens. The structure defined for this Technical Report will:
  - identify if a feature is either MANDATORY, OPTIONAL, CONDITIONAL or could not be tested
  - list the criteria/ methodology defined to evaluate the feature
  - if available, appropriate remarks are given to identify details of expected results
- To receive a final PASS result of the conformance test; all tests defined as MANDATORY MUST be passed.
- GUIDANCE DOCUMENT ON PHYSICAL CONFORMANCE –  
COMPLEMENTARY TESTS TO DOC 9303-PART 3&4, Version 1.0, 07.2023  
– approved by TAG/TRIP/4

# RF and Protocol Testing

- PART 3 - Test standard for eMRTD, application and logical data structure tests are specified – updated to support the 8<sup>th</sup> edition of Doc 9303
- PART 5 - Test standard for eMRTD, tests for PKI objects are specified – update to support the 8<sup>th</sup> edition of Doc 9303
- PART 6 – Tests for Visible Digital Seal - new
- All TRs approved by TAG/TRIP/4

# ICAO Datastructure for Barcode (IDB)

- Doc 9303 currently specifies Visible Digital Seal (VDS)
- VDS – created for primary use on visa stickers and constrained spaces – cryptographic signature mandatory – binary – cannot be read by scanners in travel industry
- VDS-NC was specified for Health Proofs and Digital Travel Authorization (DTA) – human readable with signature optional
- SMB – New barcode requirement to allow for encoding CAN and MRZ-space constrained but without signature and human readable for new TD1 layout

# ICAO Datastructure for Barcodes

- NTWG agreed that an attempt should be made to define a single barcode structure that could be applied to all use cases that VDS, VDS-NC and SMB are defined for. Each of the use cases would then be defined as a message type, and additional use cases can be added as a new message type
- This new structure should also cater for extensibility, allowing for national uses cases to be encoded along with the ICAO use cases, into a single barcode
- The barcode must be readable by scanners currently in use in the travel continuum
- Technical Report ICAO Datastructure for Barcode V1.10
  - Currently has worked examples for Secure Messaging Parameters. Others will be added later – worked examples published on ISO SC17/WG3 github site
- TR endorsed by TAG/TRIP/4



# Review of Data Elements in MRTDs

- The data elements used in MRTDs were defined in the early days of Doc 9303 and have remain unchanged for a long time
- Newer innovations like Digital Travel Authorization (DTA) or ICAO Datastructure for Barcodes (IDB) used the same data elements as already defined in Doc 9303
- With new innovations like the additional layout for TD1 cards and IDB, a review of the relevance of existing data elements and possibility of new data elements to be considered
- Modern implementations of passenger flows may require additional information to be included in travel documents or existing information to be removed
- Approved as a New Work Item by TAG/TRIP/4

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Thank you!

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