International Civil Aviation Organization

New Technologies Work Group Request for Information 2024

1. Introduction

The International Civil Aviation Organization (ICAO) Technical Advisory Group on Traveller Identification Programme (TAG/TRIP) is responsible for the development of specifications for travel documents with the goal of global interoperability.

The New Technologies Working Group (NTWG) within TAG/TRIP explores, sets standards, and reports on current and upcoming technologies for machine-readable travel documents (MRTDs) and traveler identification, enhancing passenger facilitation and unique identification throughout the travel process.

The NTWG invites submissions for a Request for Information (RFI) on innovative technologies for MRTDs and electronic MRTDs (eMRTDs). This RFI seeks insights into new tools, systems, and technologies to improve eMRTDs and inform the development of international standards. Relevant information gathered during the RFI process is summarized and shared among the 193 ICAO Contracting States. ICAO also considers this information when international standards are being developed.

2. Information Sought

The 2024 RFI welcomes submissions from industry, government entities, universities, air transport associations, research bodies and other parties involved with facilitation of passengers. Submissions should be provided in the context of the following guiding specifications, recommendations, and themes.

Specifications and recommendations:

- ICAO Document 9303 8th Edition (2021):
- ICAO Technical Reports that supplements Doc 9303.
- Specifications & Recommended Practices (SARPS) for adjudication, issuance, and lifecycle management of MRTDs; and how they apply to the United Nations Convention of International Aviation and in particular Annex 9 Facilitation.

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Themes:

Improving the security and issuance process of the passport book or travel card:
 Identifying solutions that will increase the security of the passport book including construction methods and materials, cryptographic protection, and its usability in manual or automated border control.

2. Leveraging existing eMRTD capabilities:

Advancements in authentication practices, biometric capabilities, their use in or outside of the travel continuum, their use in smart devices e.g., eSIM and improvements to border control use; and

3. Future forms of eMRTDs and associated systems:

How holders' data is gathered, stored, protected, trusted, and transmitted, how quantum computer considerations and mitigation measure can be applied as well as how facial recognition on the move can help facilitation of passenger movements through the entire travel continuum, from ticketing, check-in, boarding, inflight services, disembarking, transit, border control, quarantine services and identity credential use after journeys completion.

3. Evaluation Criteria

Responses will be evaluated by a panel of NTWG members based on innovation, cost-effectiveness, and compatibility with existing and future document and border control processes. Submissions must provide evidence to support claims regarding technology performance, focusing on reliability, accuracy, speed, and contribution to ICAO's goals of facilitation, security, and interoperability.

4. Submission Guidelines

Submissions **must** use the specified Summary Response Template (ICAO_NTWG_RFI_2024_Summary_Paper_v1.0.docx) and **must** be sent electronically to ntwg-rfi2024@dia.govt.nz by 31 May 2024, 00:00 UTC. Late submissions **may not** be considered.

Supporting information and descriptive literature may be included as part of the response. However, a succinctly written three (3) page summary paper **must** be included in all electronic responses. Submissions that do not include this summary paper **will not** be

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considered.

The selection panel, comprised of government officials, will review material through virtual or electronic means. All summary papers and additional information must be submitted in a format compatible with this approach. The file format for submissions shall be either PDF or MS word compatible documents. Submissions must be written in English.

The summary papers used in the response will form a compilation of technology information, available to requesting ICAO Contracting States. The format, background material on the requirements, and instructions for completion of the summary paper are available for download at: http://www.icao.int/Security/FAL/TRIP/Pages/rfi.aspx

Following the receipt of summary papers and descriptive literature and information, a panel of government representatives from the NTWG will review all submissions. The panel will select those submissions that meet the requirements of the RFI and invite those interested parties to make presentations to government members of the NTWG and representatives of ICAO Contracting States.

The presentations, expected to be no longer than 45 minutes, are planned to be held from the 16th to 17th of September 2024 in Copenhagen, Denmark at the United Nations High Commission for Refugees Facility. Preference will be given to presenters who are able to provide in-person oral presentations, however consideration will be given to supporting online presentations of strong interest. The language used for presentations will be in English.

Interested parties are advised that ICAO is under no obligation to designate any standard or take any further action with any party as a result of this Request for Information. Summary papers supplied in response to this RFI will be made available to Contracting States.

Accompanying information and descriptive literature may also be made available to Contracting States. With the exception of the summary paper, any other information that is considered non-disclosable to all ICAO Contracting States should be identified as such. Non-disclosable information will be retained exclusively for the use of the government members only of the ICAO New Technologies Working Group.

ICAO standards documents (ICAO Document 9303 8th edition, parts 1 to 13) are available at:

https://www.icao.int/publications/pages/publication.aspx?docnum=9303

This Request for Information is placed by the New Zealand Department of Internal Affairs as part of its participation in the ICAO TAG/TRIP and as a contracting State of ICAO, a United Nations specialized agency. The New Zealand Government and its employees and contracted partners accept no responsibility for the actions or undertakings of ICAO, ICAO participants, or ICAO staff.