**New Technologies Work Group**

**Request for Information 2019/2020**

# 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. In addition, the TAG/TRIP provides advice to ICAO on technology issues related to the issuance and use of machine-readable travel documents.

The TAG/TRIP, through its New Technologies Working Group (NTWG), is responsible for research, analysis, standards and reporting on new technologies available today, or in the near future, for use in machine-readable travel documents (MRTDs). The NTWG also has a broad interest in technologies available for application in traveller identification to effectively facilitate passengers and to uniquely identify individuals in the travel continuum.

The NTWG will hold a Request for Information (RFI) on new and emerging technologies relevant for use with machine-readable travel documents (MRTD) and electronic machine-readable travel documents (eMRTD). The RFI is open to entities interested in providing information on strengthening electronic machine-readable travel documents (eMRTD), leveraging existing eMRTD technologies and future forms of eMRTD’s. The RFI is issued approximately every three years to inform and update the NTWGs levels of knowledge on specifications, developments and implementation of new tools, systems and technologies available. 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.

# INFORMATION SOUGHT

Interested and responding parties must present their technologies in the context of: ICAO Document 9303 7th edition (2015); ICAO Technical Reports that supplements Doc 9303; Standards & Recommended Practices (SARPS) for adjudication, issuance and lifecycle management of MRTDs; and how they apply to the United Nations Convention of International Aviation 15th edition (2017) and in particular Annex 9 Facilitation.

Submissions are welcome from industry, government entities, universities, air transport associations, research bodies and other parties involved with facilitation of passengers.

The 2019-2020 RFI seeks submissions of information on new technologies, application of systems, innovations or research available, or will be available in the near future, that link to the following themes:

1. Strengthen Electronic Machine Readable Travel Document (eMRTD) - identifying solutions that will increase the security of the passport book, construction methods and materials used, improvements in cryptographic protection and its usability in manual or automated border control;
2. Leverage 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 eMRTD - how holders data is gathered, stored, protected 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.

The entire travel journey is the main focus of the 2019-2020 RFI, we are interested to hear responses that cover a either single, multiple or all parts of passenger facilitation from check-in, border departure control, aircraft boarding – disembark/transit, border controls and customs clearance. The NTWG also welcomes responses that address other information areas that might fit into the above themes.

# CONSIDERATIONS

Submissions will be reviewed against a variety of qualitative and quantitative factors, based on the themes identified in section 2 above. Generally, this will include aspects such as cost, innovation, and compatibility with current and future document issuance and border control processes. Other factors such as dependent technologies, reliability, accuracy and speed may also be considered by the selection panel.

Interested parties must be able to substantiate any claims related to performance of the technology proposed or information provided. The NTWG panel will give particular consideration to the submissions on how they meet ICAO goals of facilitation, security, and global interoperability.

# SUBMISSIONS

The Summary Response Template named 01c-ICAO\_NTWG\_RFI\_2019-2020\_Summary\_Paper\_1.1.docx must be used.

Electronic responses will only be accepted and are to be sent to: NTWG-RFI2020@dfat.gov.au by no later than midnight, UTC 00:00:00, 27 February 2020. Submissions received after this time **may not** be included for review. A confirmation email will be provided on receipt of a conforming submission.

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 considered.

The international selection panel, comprised of government officials, will review material through virtual/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/rfi2020.aspx>

Following the receipt of summary papers, descriptive literature and information, selected responses will be invited to make oral presentations to government members only of the New Technologies Working Group, representatives of ICAO Contracting States. Oral presentations are planned to take place 16 -18 September in Ispra, Italy. 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, parts 1 to 12) are available at:

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

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