

**ICAO**  
**NEW TECHNOLOGIES WORKING GROUP**  
**REQUEST FOR INFORMATION 2007/8**

**1 BACKGROUND**

The International Civil Aviation Organisation (ICAO) Technical Advisory Group on Machine-Readable Travel Documents (TAG MRTD) is responsible for the development of specifications for travel documents with the goal of global interoperability. In addition, the TAG MRTD seeks to advise ICAO on technology issues related to the issuance and use of machine-readable travel documents.

The TAG MRTD, through its New Technologies Working Group (NTWG), issues an RFI every three years in order to keep abreast of new and improving technologies. Relevant information gathered during the RFI process is summarised and shared among the 190 ICAO Contracting States. ICAO also considers this information when international standards are developed.

**2 AREAS OF INTEREST**

Information regarding technologies that may be used in machine-readable passports, visas and card-based travel documents is sought for consideration. The technologies sought are to assist in the following areas:

- assessment of applicant eligibility
- document security and production
- linking documents to holders/bearers
- providing reliable authentication of genuine documents
- facilitating secure and reliable transit of travellers through airports, seaports and other international border control points.

Interested parties are invited to provide technical, application environment and pricing information for technologies in the following categories:

<b>Category</b>	<b>Requirement</b>
1. Multi-application data chip environment	Effective methodology for creating a secure multi-application environment within the data chip, where the e-passport application co-exists securely with other applications (e.g. e-government applications). Secure writing and retrieving without compromising the security of the original data is paramount.
2. Self-service facilitation	Technologies and processes suitable for automated self-identification at international borders and/or entitlement facilities that will enable either unattended border crossing or program enrolment.

3. Data mining technologies	Pattern recognition for applicant and staff behaviours to assist in the identification of external and internal fraud.
4. Travel document security concepts	Document security features, innovative data page materials, substrates, binding materials and adhesives, advanced anti-copying devices (e.g. holographic / cryptographic features or security inks), and security technologies that allow for globally interoperable, machine assisted document authentication and verification.
5. E-government and e-commerce	Electronic online systems that may be applied to secure Internet based passport and visa application processes. Secure communications for multilateral data-sharing.
6. Biometric database management	Integrated ID management tool that enables concurrent, multi-factor biometric searching and matching for profiling and alert management.
7. Biometric verification on the move	Biometric matching in a non-intrusive way with a high tolerance for distance and angles.
8. Portable enrolment and verification stations	Portable multi-modal enrolment enabling the capture and verification of multiple biometrics (particularly fingerprints).
9. Transliteration software	Language software technologies to assist in transliterating non-Latin characters (e.g. Cyrillic or Arabic) into Latin characters.

### 3 CONSIDERATIONS

Interested parties must present their technologies in the context of ICAO Document 9303, which prescribes international format and on-board data storage standards for machine-readable passports, visas, and other official machine-readable travel documents. Interested parties must also be able to substantiate any claims related to performance of the technology proposed.

Proposals will be reviewed against a variety of qualitative and quantitative factors, depending on the category. Generally, this will include such aspects as cost, innovation, and compatibility with current and future document issuance and border control processes. Dependant technologies, reliability, accuracy and speed are also factors that may be considered by the selection panel.

Interested parties should also recognise that in the application of these technologies, the NTWG panel will give particular consideration to the ICAO goals of facilitation, security, and global interoperability.

#### 4 SUBMISSIONS

Written responses to this RFI must be provided by 26th October 2007 to:

David Philp, RFI Coordinator  
ICAO New Technologies Working Group  
c/o New Zealand Passport Office  
Department of Internal Affairs  
PO Box 10-526  
Wellington  
New Zealand

Phone: +64 4 382 3512

Fax: +64 4 382 3403

Email: david.philp@dia.govt.nz.

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

The international selection panel will be reviewing material through virtual/electronic means. All summary papers and additional information must be submitted in a format compatible with this approach. Submissions must be written in English

The summary papers will be used to form a compilation of technology information, which can then be provided to ICAO Contracting States. The format, background material on the requirements, and instructions for completion of the summary paper can be downloaded at **[www.passports.govt.nz/icao-rfi](http://www.passports.govt.nz/icao-rfi)**.

Following the receipt of summary sheets, descriptive literature and information, vendors will be invited to make oral presentations to government members of the New Technologies Working Group, and representatives of ICAO Contracting States. Oral presentations, each lasting no more than 45 minutes, are planned for the week of 28 April – 2 May 2008 in Montreal, Canada. The language of work is 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 sheets 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 sheets, 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 of the ICAO New Technology Working Group.

Requests for copies of ICAO standards documents (ICAO Document 9303, Parts 1 to 3) should be directed to:

ICAO, DOCUMENT SALES UNIT

999 University Street, Montréal, Quebec,

Canada H3C 5H7,

Tel: +1(514)954-8022;

Fax: +1(514)954-6769

E-mail: [sales\\_unit@icao.int](mailto:sales_unit@icao.int)

Online access to publications: [www.icao.int/eshop/](http://www.icao.int/eshop/)

Online ordering: <http://icaodsu.openface.ca/mainpage.ch2>

This Request for Information is placed by the New Zealand Passport Office, Department of Internal Affairs in furtherance of its participation in the TAG/MRTD also being a contracting State of ICAO, a United Nations specialised agency. The New Zealand Government and its employees accept no responsibility for the actions or undertakings of ICAO, ICAO participants, or ICAO staff.

