International Civil Aviation Organization

WORKING PAPER

TECHNICAL ADVISORY GROUP ON MACHINE READABLE TRAVEL DOCUMENTS (TAG-MRTD)

EIGHTEENTH MEETING

Montréal, 5 to 8 May 2008

Agenda Item: 1: **Activities of the NTWG**
Agenda Item: 1.12: The Strategic Focus for Future Work of the NTWG

THE STRATEGIC FOCUS FOR FUTURE WORK OF THE NTWG

Presented by New Technologies Working Group (NTWG)

1. PURPOSE OF THE DOCUMENT

1.1 This document describes NTWG's strategy for ongoing work in the development of standards using advanced technologies in travel documents and related systems to facilitate international travel while maintaining appropriate levels of security. Its purpose is to seek approval of ICAO/TAG-MRTD for the strategy, and inform future NTWG work programmes.

2. BACKGROUND

2.1 NTWG have conducted regular strategy reviews. Most recently, at TAG-MRTD 16 in September 2005, the TAG endorsed WP 13 that focused on a range of issues and subsequent strategies to be employed in a post ePassport implementation environment. While many of the work items identified in WP 13 have yet to be completed (and in some cases not even started) it is useful to undertake a review of planned activity to ensure that it best meets the needs of ICAO member states.

2.2 There are many factors in the travel document environment that have remained constant since 2005 however, in the development of future NTWG work programmes there are a number of more recent environmental factors and issues to consider. These have been grouped under broad headings as follows:

2.2.1 **Mandatory Standards**

    a) There has been little further progress towards the universal adoption of MRTD's required by 1 April 2010 (ICAO Council Amendment 19 to Annex 9, 8 March 2005).

b) ICAO alone does not have the resources to adequately address this issue.

2.2.2   ePassports and Biometrics

a) Globally, more than 50% of new passports issued are ePassports. Processes and technology related to the issuance of these, write once read many, documents is relatively mature.

b) ePassports are beginning to be routinely verified using the PKI scheme The ICAO Public Key Directory (PKD) is deployed and operational.

c) Border control authorities are beginning to understand the potential of ePassport technology to allow for data updates by either issuing authorities or third parties.

d) The use of biometrics at border controls is beginning to be applied particularly in relation to confirmation of identity and alert checks.

e) States are beginning to deploy biometrics-matching technology in passport and visa application processing systems.

2.2.3   Information Sharing between States and Authorities

a) Continued developments in global communications provide an opportunity for greater real time information sharing between member states to combat fraud.

b) Travel document applicants will increasingly expect to receive services "on-line" (for both passports and visas).

c) There are a number of multi-lateral and global schemes in place (e.g INTERPOL MIND/FIND and RMAS) that enable effective validation of travel document information.

d) States are requiring more and more information on passengers prior to departure or during transit. There is little application of standardisation to these requirements, which have significant impact on carriers.

2.2.4   Travel Document Issuance and Identity Management

a) Identity fraud has a high profile globally with states developing cross agency and multi lateral identity management strategies in an environment that is not standardised.

b) The security and integrity offered by ePassports will lead to a shift in emphasis by fraudsters from counterfeiting and alteration of travel documents to a focus on obtaining genuine documents by fraudulent means and look-alike substitutions.

c) The explosion of information matching schemes for security and border control is driving a demand for sophisticated multilingual text based name matching technology.

2.2.5   **Technology deployment**

      a) Globally, governments expect a higher level of sophistication and speed in the deployment of technologies in relation to border security and identity management.

      b) There is uncertainty over the future acceptance of emergency travel documentation, that does not have an IC, when presented without a visa.

      c) Biometric technology continues to evolve in terms of speed and accuracy.

      d) Continued advances in computing may threaten the security of current PKI schemes.

3.   **ONGOING ACTIVITY**

3.1   While the more recent environmental issues will drive the future focus of the NTWG there are a range of ongoing maintenance activities reoccur over time. It is proposed that the NTWG will undertake the following key maintenance activities:

      a) Reviewing new technology applications in relation to travel documents through the three yearly ICAO RFI process.

      b) Ongoing updates to the specifications relating to the deployment of the e-Passport in its current format.

      c) The refinement and harmonisation of existing DOC 9303 specifications.

      d) Support the ICAO secretariat in the communication of issues and advice through the provision of relevant technical expertise and the preparation of papers for publication including promotion of the Universal Implementation of MRTD Programme.

      e) Continued liaison and joint activity with ISO/SC17/WG3.

      f) Continued liaison with other ISO working groups (e.g. SC37 work on biometrics).

      g) Provide effective technical support to the ICAO PKD Board.

4.   **FUTURE STRATEGIC FOCUS**

4.1   To address both existing and more recent environmental factors, the NTWG is proposing to apply the following broad strategies. These are:

      a) Develop detailed guidance material on a range of issues to support the secure issuance of travel documents including the issue of identity management and online applications.

b) Develop specifications that enable states to leverage off the full functionality of eMRTD's.

c) Develop guidance material to promote the use of eMRTD's not only in border control but also in the wider community in activities that rely on identity verification.

d) Develop guidance material and specifications to both standardise and enhance the practical but secure validation of travel document data, amongst states and authorities, in real-time. The focus will include specifications that will allow multilateral border crossing without physical documents.

e) Monitor and respond to the evolution of computing to ensure access control and PKI schemes continue to provide a secure infrastructure for eMRTD's and data validation.

f) Continue to evolve the working group membership skills and competencies to ensure that future challenges can be effectively met.

5.   **CONCLUSION**

5.1   The NTWG has a broad range of activities and strategies planned to ensure that the continued evolution of e-MRTD's and issuance processes are well supported by technical expertise and specifications.

6.   **ACTION BY TAG/MRTD**

6.1   The NTWG invites the TAG/MRTD to endorse the continued maintenance activity and future focus of the NTWG.

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