

INTERNATIONAL CIVIL AVIATION ORGANIZATION

TECHNICAL ADVISORY GROUP

ON

MACHINE READABLE TRAVEL DOCUMENTS

FOURTEENTH MEETING

Montreal, 6 - 9 May 2003

REPORT

LETTER OF TRANSMITTAL

То:	Chairman, Air Transport Committee				
From:	Chairman, Technical Advisory Group on Machine Readable Travel Documents				
Advisory Group	I have the honour to submit herewith the Report of the fo on Machine Readable Travel Documents, which was h				
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INTRODUCTION

- General. The Fourteenth Meeting of the Technical Advisory Group on Machine Readable Travel Documents (TAG/MRTD) was held at ICAO Headquarters, Montreal, Canada, from 6 to 9 May 2003. Ms. Anne McGinley, Chairman of the Air Transport Committee, opened the plenary meeting and welcomed the participants. Recognizing the value of the expertise of the TAG/MRTD to ICAO, she expressed great satisfaction with its work. Mr. M. Elamiri, Director, Air Transport Bureau, also welcomed the participants.
- 0.2 **Attendance**. In attendance were ten members and three alternate members of the TAG with their advisers, as well as observers from fifteen Contracting States and six international organizations. The attendance list is set out in **Appendix A**.
- 0.3 **Officers and Secretariat**. Ms. Annette Offenberger (New Zealand) was elected Chairman of the Meeting. Ms. Mary K. McMunn, Chief, Facilitation Section, was the Secretary of the Meeting. She was assisted by Mr. Jitu Thaker, Technical Officer, Facilitation and Mr. Mauricio Siciliano, Consultant.
- 0.4 Agenda (WP/1). The Agenda for the Meeting was as shown in Appendix B.
- 0.5 **Documentation**. Twenty-five working papers and three information papers were submitted for consideration by the meeting, as listed in **Appendix C**.
- 0.6 **Working arrangements and procedures**. The meeting was conducted in English, French, Russian and Spanish. This report was written after the meeting and presents a summary of the proceedings and conclusions.

1. **AGENDA ITEM 1**

Review of new and recent developments related to specifications for MRTDs

- 1.1 Tutorials were presented by selected experts to update members and observers on current issues, new specifications and technical reports (guidance material).
- 1.2 Mr. Gary McDonald, Chairman of the New Technologies Working Group (NTWG) presented an overview of the recent technical reports drafted by the NTWG.
- 1.3 Mr. Terry Hartmann, Adviser from Australia, made a presentation on biometrics.
- 1.4 Mr. John Mercer, Chairman of the Document Content and Format Working Group (DCFWG), made a presentation on "The State of Standards: What's New, What's Coming".
- 1.5 Mr. Malcolm Cuthbertson, Observer from ISO, made a presentation on the "Complexity of Modern Travel Documents and Associated Issuing Systems".

2. **AGENDA ITEM 2**

Development of specifications and guidance material

- 2.1 Two technical presentations were made under Agenda Item 2:
- 2.1.1 The first presentation was by Mr. Sunny Ho, Observer from Singapore, on his country's "Smart Visa for Identification with Passport".
- 2.1.2 The second presentation was made jointly by Ms. Silvia Kolligs, Observer from the European Commission and Dr. Edgar Friedrich, Adviser from Germany, on "The Uniform Format for Visas of the European Union".

2.2 Development of new editions of Doc 9303

- 2.2.1 WP/2 examined the work of the Document Content and Format Working Group (DCFWG) with regard to the development and current status of the three parts of Doc 9303.
- 2.2.2 Part 1, *Machine Readable Passports*, was published in February 2003. During the editorial phase, a technical report on MRTD Security Standards, developed jointly by DCFWG and NTWG, was submitted to ICAO for incorporation into Part 1 as an informative annex. A normative annex outlining the use of contactless integrated circuits (ICs) in machine readable passports was also submitted for inclusion in Part 1. The use of contactless ICs will, in the future, be the subject of a much more detailed specification, now under development.
- 2.2.3 A draft of the Third Edition of Part 2, *Machine Readable Visas*, is with the Secretariat for editorial work and subsequent publication. Two changes from the current edition are noteworthy: only one person can be included on a visa (as opposed to four per visa, in previous editions); and a space for the

holder's portrait will be mandated in the new edition although the portrait itself remains optional. If a visa is not intended to contain a portrait, the issuing State is required to state this fact on the visa itself as an additional security feature.

- 2.2.4 Doc 9303, Part 3, *Machine Readable Official Travel Documents*, the 2nd edition of which was published in 2002, is about to be formally submitted for ISO endorsement after a few minor amendments have been made.
- 2.2.5 During the discussion, concern was expressed that because of continuing amendments to the texts of the parts, the approximately eleven-month balloting process required to gain their endorsement as international standards by the International Organization for Standardization (ISO) was being delayed. Major changes were expected in the near future because of ongoing work within the working groups. The Secretary informed the TAG/MRTD that all future amendments to the specifications will be incorporated into the next editions of the specifications so that ISO endorsement of the existing editions would not be hindered.
- 2.2.6 The TAG/MRTD approved the work done by the DCFWG on the development of the new editions of Doc 9303.

2.3 G-8 proposal for minimum security measures for handling and issuance of passports

- 2.3.1 The appendix to WP/3 set out the recommended practices developed by the G-8 to enhance the security of the issuance process for machine readable and other passports. The proposal establishes measures for use by all governments with the object of minimizing the vulnerabilities that are within every passport handling and issuance process.
- 2.3.2 The TAG/MRTD invited the participants to send their comments on the text, if any, to the Chair of the DCFWG by the end of June 2003 and recommended that the practices presented in the appendix to WP/3 be published by ICAO. The Secretary informed the meeting that the text would probably be published as guidance material, by way of an ICAO Circular.

2.4 Methodology for quality assurance of MRTDs

- 2.4.1 WP/4 recommended that a formal evaluation programme be established to assess the quality of MRPs and other products developed according to Doc 9303 specifications, and of the associated production process. Such a programme is deemed necessary because of: (a) the growing number of governments contacting ICAO to seek assurances that their new passports and other travel documents meet ICAO specifications; and (b) informal reports received by the Secretariat of poor-quality machine readable passports being supplied to States.
- 2.4.2 Concerns were raised about possible liability issues arising out of disputes with vendors over the evaluations provided under the quality assurance programme. It was agreed that the terms of reference of the evaluation team should be drafted with legal counsel to protect these experts and their employers from lawsuits.
- 2.4.3 The TAG/MRTD agreed that there is a need for a formal evaluation function in the promotion of worldwide adoption of machine readable travel documents. The TAG/MRTD also invited comments from participants on the proposed prototype evaluation criteria enumerated in paragraph 2 of WP/4.

2.4.4 It was also agreed that, in light of WP/3, a set of questions on the issuance process should also be developed in time for the next meeting of the TAG/MRTD.

2.5 Seafarers' Identity Document

- 2.5.1 WP/5 described the work being undertaken by the International Labour Office (ILO) to amend its legal instrument specifying a standardized Seafarers' Identity Document (SID). ICAO has provided input to this work, particularly with regard to the security and format of Doc 9303-compliant travel and identity documents.
- 2.5.2 The representative of the ILO informed the meeting that the main objectives of the new ID would be to facilitate maritime transport, to provide holders with facilitated entry into the territories of signatory States and to instill, in States, sufficient confidence in the identities of seafarers. The document would conform to the international Doc 9303 format.
- 2.5.3 TAG/MRTD acknowledged the cooperative work done to date with the ILO on the development of a revised seafarers' ID and agreed that this work should be further supported.

2.6 Steganography

- 2.6.1 WP/6 described the art of "steganography," that of hiding information within an image. The paper gave examples of how, for the purposes of travel documents, visual information about the document holder or the document can be hidden in the document itself, thereby protecting this information.
- 2.6.2 During the discussions on this paper, doubts were raised whether ICAO should be developing specifications on this topic because it was a matter of software, there was a variety of products and all were proprietary in nature. Nevertheless, it was acknowledged that this technique provides another document security feature.
- 2.6.3 The TAG/MRTD noted the significance of the steganographic technique in the protection of visual information and agreed that the NTWG would take the matter of steganography as a work item.

2.7 Stock numbers of passports and travel documents in the MRZ

- 2.7.1 WP/20, presented by the Chairman of the DCFWG, explained the difference and importance and use of the inventory control number ("stock" number) of a passport and the passport number itself, particularly in regard to lost or stolen blank passports and lost or stolen passports that have been issued. In order to increase the interdiction of lost and stolen documents, the paper recommended the harmonization of both numbers.
- 2.7.2 It was pointed out that the recommendation would be ineffective if passport stock were stolen before it was personalized, because the thief would be unlikely to put the number in the MRZ. On the other hand, the usefulness of the initiative was recognized, because Doc 9303 does not differentiate between the stock number and the passport number, and a clarification of the specification should be explored.
- 2.7.3 The DCFWG therefore decided to take the paper back for additional work.

2.8 **Durability**

- 2.8.1 WP/22 described the work undertaken by the "Durability Sub-committee" of DCFWG to determine test methods for the durability measurements of MRTDs. The appendix to the paper set out detailed recommendations on these methods.
- 2.8.2 It was pointed out that it was premature to adopt the appendix, in itself a useful document, as a technical report for posting to the ICAO Web Site. The document required further work. However, a recommendation was made that it should be made available on the Web for discussion and dissemination, as appropriate. A suggestion was made that the existing ISO Task Force 2 (TF2) on the Standards Council of Canada (SCC) web site could be renamed as a joint TF2-DCFWG folder, and on-line discussions on ongoing DCFWG work could be undertaken there. It was therefore agreed that the folder would be so renamed and the durability recommendations would be posted there, for information and discussion.
- 2.8.3 Thus, the TAG/MRTD, in noting the work done by the Durability Sub-committee in preparing the set of test methods for durability measurement, agreed that the SCC site would host the work of TF2 and DCFWG, and the durability methods would be posted therein for discussion. The TAG/MRTD also requested the assistance of ISO/IEC SC17 WG3 to determine the appropriate ISO/IEC procedural approval for this compendium of test methods.

2.9 MRP data page thickness

- 2.9.1 WP/23 came about because of advice received from the International Criminal Police Organization (ICPO) that the MRP data page should be relocated from an inside cover to an inner page in order to make photo-substitution more difficult. Many States, therefore, now use either page 2 or the penultimate page of a passport as the data page. The minimum thickness of a data page, prescribed in Doc 9303 as 0.25mm, is not always met on an inner page, particularly when a thin laminate is used.
- 2.9.2 The need to prevent damage to the data page when passed through a "swipe" reader is expected to continue, since over 70% of readers used by airlines are of that type. However, in order to avoid the problems indicated in the paper, airlines have learned to accommodate thin pages by swiping them together with the cover.
- 2.9.3 The TAG/MRTD eventually decided not to take any action on this item.

2.10 Report of the DCFWG

- 2.10.1 WP/24 set out the combined work report of both the DCFWG and its counterpart in the International Standards Organization (ISO), Task Force 2 on Harmonization, a subsidiary body of ISO's Sub-Committee 17's Working Group 3.
- 2.10.2 Since the conclusion of TAG/MRTD-13 in February 2002, DCFWG had four meetings: Amsterdam, The Netherlands (April 2002); Vilamoura, Algarve, Portugal (October 2002); Buenos Aires, Argentina (March 2003); and Montreal, Canada (May 2003). These meetings had resulted in the several working papers presented at TAG/MRTD-14.
- 2.10.3 The TAG/MRTD noted the report and approved the future work plan of the DCFWG as follows:

- a) to resolve questions about the Doc 9303 family of standards and develop amendments incorporating the new specifications;
- b) to continue to refine the study on durability measurement;
- c) to develop information on fantasy and camouflage passports;
- d) to continue to support the ICAO FAL Secretariat as needed; and
- e) to continue to collaborate with the NTWG and EPWG as needed.
- 2.10.4 With regard to the necessity for a "visa card" standard, the TAG/MRTD agreed that the Secretariat, in consultations with both the DCFWG and NTWG, would decide which of the two groups would work on this item.

3. **AGENDA ITEM 3**

New technologies and related issues

- 3.1 Before beginning with agenda item 3 the Secretary made a presentation on the structure of ICAO and explained the how the TAG-MRTD's recommendations would be presented to the Air Transport Committee for approval.
- 3.1.1 The TAG/MRTD stressed that it was important that ICAO rapidly approve the recommendations of this, the fourteenth meeting, particularly the recommendations on the deployment of biometric technologies in MRTDs. The sense of urgency stems from the need for States in the "visa waiver" programme, plus the United States and Canada, to have begun procurement processes to deploy biometric technology for identify confirmation in their passports by October 2004.

3.2 Report of the New Technologies Working Group (NTWG)

- 3.2.1 The Chairman of the New Technologies Working Group presented WP/19 which summarized the TAG/MRTD's recommendations resulting from the 13th meeting of the TAG that resulted in follow-up by the NTWG, other work accomplished by the Group since TAG-13 and the future work of the NTWG.
- 3.2.2 The TAG/MRTD noted the work of the NTWG to date and the approaches it has taken and approved in principle the future direction and activities of the NTWG as follows:
 - a) continue its general reviews of technologies, their application and the role of MRTDs in facilitating international travel;
 - b) continue the ongoing work as outlined in paragraph 3 of WP/19;
 - c) develop a comprehensive approach to the policy and process issues that arise from the use of advanced technologies in MRTDs;
 - d) in cooperation with border control authorities, outline the functional requirements for an integrated automated border clearance system; and

e) examine the uses of steganography in MRTDs (see para. 2.6.3 above).

3.3 Strategy for travel documents using advanced technologies: biometric enabled passports

- 3.3.1 WP/15 described the NTWG's strategy for the use of advanced technologies in travel documents to facilitate international travel and maintain appropriate levels of security. IP/1, which introduced the technical report on the logical data structure (LDS) for optional capacity expansion technologies on MRTDs, complemented WP/15.
- 3.3.2 The current security climate, including illegal migration and the increase in the fraudulent use of travel documents, has focussed the NTWG's work primarily on the issue of biometrics in MRTDs. The development of contactless chip technology suitable for use in passport books and improvements to database checks at border controls have served as catalysts in this work. The NTWG's work was accelerated by an increased demand for information from airlines and border control authorities and the recognition from G-8 and other government groups that the additional security offered by biometrics is imperative and should be implemented quickly, particularly in passports.
- 3.3.3 The need for NTWG to nominate one primary biometric and one primary data storage medium to facilitate global inter-operability and ensure rapid adoption of biometric-based security has preoccupied recent meetings of the group. At a meeting in New Orleans, early in 2003, the NTWG adopted the following resolution:

"ICAO TAG-MRTD/NTWG recognises that Member States currently and will continue to utilise the facial image as the primary identifier for MRTDs and as such endorses the use of standardised digitally-stored facial images as the globally interoperable biometric to support facial recognition technologies for machine assisted identity verification with machine-readable travel documents.

ICAO TAG-MRTD/NTWG further recognises that in addition to the use of a digitally stored facial image, Member States can use standardised digitally-stored fingerprint and/or iris* images as additional globally interoperable biometrics in support of machine assisted verification and/or identification.

Member States, in their initial deployment of MRTDs with biometrics identifiers, are encouraged to adopt contactless IC media of sufficient capacity to facilitate on-board storage of additional MRTD data and biometric identifiers."

3.3.4 In support of its new approaches, the NTWG has produced a number of technical reports which are sufficiently detailed to enable individual States to prepare for biometric enabled passports. In the following months the NTWG will develop the information in the reports into specifications to be incorporated into Doc 9303.

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^{*} Subject to the resolution of intellectual property issues.

3.3.5 The TAG/MRTD endorsed the overall strategy of the NTWG, including the New Orleans Resolution reproduced in para 3.3.3 above. The TAG/MRTD also recommended that ICAO publish the LDS Technical Report on its Web Site.

3.4 Biometric testing reports

- 3.4.1 WP/13 and the attachment were a report on the various test projects undertaken by Australia, Canada, Germany, Japan, the Netherlands, New Zealand, Singapore, the United Kingdom and the United States to implement facial recognition, fingerprint and iris scan technologies.
- 3.4.2 The TAG/MRTD noted the efforts by individual States for their test projects, and thanked them for their ongoing assistance by freely sharing the test results and scenario and operational evaluations.

3.5 Intellectual property issues associated with use of biometrics based on iris

- 3.5.1 WP/18 described issues for the MRTD Programme arising from the patents owned by Iridian Technologies on the iris scan biometric technology. The NTWG has recommended that the facial recognition biometric be used as the primary identifier for travel documents. In addition, both fingerprints and iris have been identified as globally interoperable biometrics.
- 3.5.2 However, there are difficulties in including iris technology in any standard because it is subject to a concept patent. It is a well-established policy in ICAO and ISO not to endorse proprietary products as a standard because endorsement creates increased monopoly power. A single source of supply also poses business continuity risks. Therefore, in negotiations, Iridian Technologies have been asked whether the company is willing to release the concept patents at least for applications in travel documents. It has also been proposed that the negotiations be time limited and should be completed by the end of August 2003, failing which the NTWG would withdraw iris technology from the TAG/MRTD's biometrics technical report.
- 3.5.3 The TAG/MRTD endorsed the negotiating stand taken with respect to Iridian Technologies over their iris concept patents.

3.6 Technical report on biometrics deployment

- 3.6.1 WP/7 introduced the technical report on Biometrics Deployment in Machine Readable Travel Documents.
- 3.6.2 The technical report explains the technical and practical considerations in deploying biometric technologies in MRTDs. It recommends the use of facial recognition as the globally interoperable biometric for machine-assisted identity confirmation. It acknowledges that States may elect to use fingerprint and/or iris recognition as additional biometrics to support machine-assisted verification and/or identification. The report also recommends the use of high-capacity contactless integrated circuit chips as the electronic data storage technology to be employed in MRTDs.
- 3.6.3 During the discussion, a doubt was raised about the recommendation, in the technical report, that the preferred storage medium for the biometric, i.e. the contactless IC, necessitated that passports should

now have a five-year, instead of ten-year, validity. It was clarified that this was not a recommendation for States, but merely a consideration and that the technical report would be amended accordingly.

- 3.6.4 The TAG/MRTD noted the work and approach taken by the NTWG on the identification of biometrics for global inter-operability using MRTDs. It was recommended that the NTWG would need to pay continued attention to the issue of biometric deployment in MRTDs because of the dynamic character of the subject.
- 3.6.5 The TAG/MRTD recommended that ICAO approve the approach and ongoing work by the NTWG on the development of procedures for utilizing biometrics for global inter-operability in MRTDs, based on the following actions:
 - a) immediate publication of the draft technical report on biometrics deployment; and
 - b) development of specifications governing biometric data recorded in optional data storage technologies used in MRTDs, for eventual introduction in Doc 9303.

3.7 Adoption of contactless IC(s) as the technology to ensure global interoperability of MRTDs

- 3.7.1 WP/16 described the investigations undertaken, and the conclusions reached by the NTWG since TAG-MRTD/13, to investigate the technical implications of using contactless ICs in MRPs, as well as other forms of MRTDs. The conclusion is that the only data storage medium that should be recommended for biometrics in MRTDs, in the interests of global interoperability and sufficient storage space, is the contactless IC, which is covered by two ISO standards.
- 3.7.2 To explain the results and conclusion of the investigations, Mr. Mike Ellis, representing ISO, made a presentation entitled "Technical Report on use of contactless ICs in MRTDs."
- 3.7.3 It was noted that the NTWG would be testing chips to determine if the logical data structure (LDS) would fit onto them, and would make the results publically available, if permitted by the chip manufacturers. The LDS is a programming framework for encoding data elements into the various optional data storage technologies approved for use with MRTDs.
- 3.7.4 The TAG/MRTD noted the work of the NTWG to date, leading to adoption of contactless IC(s) as the optional capacity expansion technology for ensuring global interoperability of MRTDs, and approved the immediate publication of the related technical report. The TAG/MRTD also instructed the NTWG to take the necessary steps to resolve specifications governing the use of contactless IC(s) as the capacity expansion technology for MRTDs, for subsequent publication in future editions of all parts of Doc 9303.

3.8 **2-D** barcodes

3.8.1 WP/11 was a review of the continued use of 2-D barcodes for travel document applications. The NTWG is of the opinion that 2-D barcodes are not suitable as the primary data storage technology for the deployment of MRTDs with biometric identifiers because of their lower storage capacity. However, it was recommended that they be retained in Doc 9303 specifications to permit their use in travel documents for storing data in national applications and for bilateral and multilateral agreements.

- 3.8.2 The TAG/MRTD noted the recommendation of the NTWG.
- 3.9 Continuing work on Public Key Infrastructure (PKI) enabled digital signatures for MRTDs
- 3.9.1 WP/12 discussed the specific developments in the area of PKI carried out by the NTWG since TAG/MRTD-13.
- 3.9.2 PKI deals with modern encryption technologies and practices. These have great potential for MRTDs, where the security of the documents themselves and the trusted identities of the rightful bearers can be augmented by data integrity and authentication techniques as a counter-measure to threats posed by modern counterfeiting technologies. Increased document data security through PKI means is also critical to accommodate the legislative requirements and new policies of many States. In addition, the implementation of digital signatures on MRTDs worldwide implies some unique infrastructures, multilateral agreements and standards that are similar to those standards developed for MRTDs themselves.
- 3.9.3 During the discussion, the question of a possible role for ICAO in facilitating the operational implementation of the programme, was raised. The PKI proposal involves ICAO in an administrative role important to the setting up of the scheme, to involve some sort of arrangement by which the project would be funded entirely by the participants. It was explained that ICAO would be the repository of *public* keys issued by States, not the *private* keys. The intention was that ICAO would be the neutral public sector entity which would facilitate a State's distribution of its public keys. Further, following a query from the representative of the ILO, it was made clear that if the same authority in a State issued both passports and Seafarers' Identity Documents, then one key would be valid for both; else, two public keys would be required. It was emphasized that the creation of a PKI repository, though difficult to establish, is crucial for the successful implementation of both the deployment of biometrics in travel documents and the use of contactless IC(s) in MRTDs.
- 3.9.4 The TAG/MRTD supported the continued advancement of this work by the NTWG and accepted the PKI Technical Report and its recommended methodologies as the proper approach to implementation.
- 3.9.5 The TAG/MRTD agreed to proceed with the programme in accordance with the recommendations as set out in para 2.4 of WP/12.

3.10 *Report on the 2001/02 RFI*

- 3.10.1 WP/8, in providing the final report on the 2001/02 NTWG Request for Information (RFI) initiative, presented the key findings from the RFI presentations made by vendors of MRTD-related technologies at TAG/MRTD-13 meeting in February 2002.
- 3.10.2 The TAG/MRTD noted the findings and conclusions of the RFI report and approved the continuation of the RFI programme. It was agreed that the information set out in WP/8 only (and not the RFI Summary Report) could be posted on the ICAO web site for the information of the public. The TAG/MRTD also noted that the next RFI initiative is scheduled for the Fall of 2004.

3.11 Privacy and facilitation

- 3.11.1 The issue of privacy and the use of biometric data in MRTDs formed the subject-matter of WP/14. The use of biometric technologies to store biological data of individuals in travel documents raises particular privacy responsibilities that will be common across all users of the data. The working paper reported on a selected number of privacy guidelines and laws that were surveyed, discussed the issues raised in the examination, and proposed strategies for addressing the privacy issues raised with relation to the deployment of biometric technologies in MRTDs.
- 3.11.2 The paper was supported generally by the participants. It was decided that the Secretariat will take the coordinating role in furthering the work on this subject. The TAG/MRTD therefore adopted privacy as an ongoing work item.

3.12 Continuing work on information sharing on lost, stolen and invalid travel documents

- 3.12.1 Ms. Ivanka Spadina, observer from INTERPOL, gave a presentation on that Organization's system for operating a database on lost or stolen passports.
- 3.12.2 WP/10 described the preliminary research work undertaken by the NTWG into the opportunities for an electronic, global, interoperable data interchange in relation to lost, stolen and invalid passports.
- 3.12.3 During the discussion doubts were raised about the usefulness about one large database as opposed to bilateral exchanges of information. It was recommended that this latter aspect required greater investigation. Although participants supported the project generally, it was agreed that more work needs to be done.
- 3.12.4 The TAG/MRTD approved the continuation of the ongoing work on this subject and the development of a technical report on these matters and decided that the report would be guided by, but not limited to, the suggested table of contents attached to WP/10.

3.13 Continuing work on Advance Passenger Information (API) systems

- 3.13.1 WP/9 described the ongoing preliminary work being undertaken by the NTWG on the topic of API, i.e. the electronic transmission of passengers and crew data (e.g. flight detail, bio-data and travel document information) from the country of departure, normally through carriers such as airlines, to border control authorities prior to arrival at the destination. API is a very effective means of risk mitigation in border control and also of facilitation of passengers.
- 3.13.2 The TAG/MRTD approved the continuation of the development work on the systems engineering aspects of API being carried out by the NTWG, and the subsequent development of a full technical report on the matter.

3.14 Recommendation of the TAG/MRTD to the Air Transport Committee of ICAO

3.14.1 At the conclusion of agenda item 3, the TAG/MRTD adopted a recommendation to the Air Transport Committee as follows:

"TAG/14, having reviewed carefully the excellent work of the NTWG and its experts on all issues associated with the introduction of a system for internationally interoperable biometrics into Machine Readable Travel Documents, approves the work and specifications developed by the NTWG and recommends final endorsement of these specifications by the Air Transport Committee. TAG/14 views such timely and final endorsement of these specifications as being an essential element in the effort by ICAO to strengthen the security of MRTDs and their international acceptability."

4. **AGENDA ITEM 4**

Education and promotion of MRTDs

- 4.1 Report by the Education and Promotion Working Group (EPWG)
- 4.1.1 The Chairman of the Education and Promotion Working Group presented WP/25, which described the work being carried out by the revitalized group.
- 4.1.2 The TAG/MRTD took note of the issues under discussion, approved the work plan submitted by the EPWG and encouraged delegations to participate in the work of the group.
- 4.2 Terms of Reference of the EPWG
- 4.2.1 WP/26 set out the revised Terms of Reference of the EPWG.
- 4.2.2 The TAG/MRTD took note of the goal and methods of the EPWG set out in para 2 of the paper and accepted them as the group's Terms of Reference.
- 4.3 TAG/MRTD Web site
- 4.3.1 Mr. Mauricio Siciliano from the Secretariat made a presentation on the new "MRTDs" web site, now under development in ICAO.

5. AGENDA ITEM 5

Facilitation and security issues related to work of the TAG/MRTD

5.1 *Marking of used documents*

- 5.1.1 The Chairman of DCFWG introduced WP/21 on the marking of travel documents that become invalid. This happens when they expire or are seized by border authorities because they are found to be misused or altered. The paper suggested various ways in which documents, particularly paper documents, could be "marked" to indicate their invalidity.
- 5.1.2 The TAG/MRTD noted the work done to date and endorsed the procedures enumerated in the working paper for subsequent adaptation to proposed SARPs inclusion in Annex 9, *Facilitation*.

5.2 Agenda for the Twelfth Session of the Facilitation Division (FAL/12)

5.2.1 The Secretary presented IP/3, to which was attached the final draft agenda for FAL/12, and which invited the TAG/MRTD to consider the contribution it wished to make in the planning of the Division and in the preparation of documentation under relevant items of the agenda. The TAG/MRTD took note.

6. **AGENDA ITEM 6**

Project reports by members and observers

- 6.1 Dr. Ashok K. Amrohi, the Member from India, made a presentation on the "Implementation of MRTDs in India".
- 6.2 Mr. Hugh A. Thomas, the Observer from Jamaica, presented IP/2, which was a report on the implementation of the MRTDs in his country.
- 6.3 Mr. Ron Seguss, the Adviser from Canada, made a presentation on "Canada's New Digital Passport".
- 6.4 Mr. Bob Nash, the Australian head of delegation, made a presentation on "Passports Australia: Country Update".
- 6.5 Mr. Hee-Ju Choi, the Observer from the Republic of Korea, made a presentation the new immigration control project introduced in his country.
- 6.6 Ms. Melanie Lauckner, the Observer from IATA, made a presentation on the Simplifying Passenger Travel (SPT) Project.

7. WORKING GROUPS' PARTICIPANTS

a) Document Content and Format Working Group

Mr. John Mercer (Chairman)

Ms. Isabel Baltazar

Mr. Sjef Broekhaar

Dr. Ashok K. Amrohi

Mr. Olivier Barbier

Mr. Hong Changsuk

Mr. Dani Appave

Mr. Otto Bernecker

Mr. Dani Appave Mr. Otto Bernecker Mr. K.S. Bains Mr. Ugis Bisenieks

Mr. Malcolm Cuthbertson
Mr. Michael Ronayne
Mr. Edgar Friedrich
Mr. Mauricio Siciliano
Mr. Pierre Garcia
Ms. Lesley Soper
Mr. Alexei Gerasimenko
Ms. Olivia Strese
Mr. Steven Grant
Ms. Muriel Sylvan
Mr. Klen Jäärats
Mr. Milos Vacek
Mr. Susumu Kitamura
Mr. Jüri Voore

Ms. Silvia Kolligs Mr. Manabu Yamakoshi Mr. John Neary Mr. Jeong Yoon-Hoe Mr. Jacques Régnier

b) New Technologies Working Group

Mr. Gary K. McDonald (Chairman) Mr. Alexei Gerasimenko Mr. Axel Munde Ms. Raimonda Admine Mr. Graham Hanna Mr. Bob Nash Mr. Ashok K. Amrohi Ms. Frances Head Mr. John Neary Mr. Dani Appave Mr. Rod Heitmever Mr. John Osborne Mr. David Philp Mr. Philipp B~eltig Mr. Bernard Herdan Mr. Chuck Baggeroer Mr. Michael Ronayne Mr. R. Michael Holly Mr. Ugis Bisenieks Mr. Guilherme Santos Mr. Klen Jäärats Mr. Sjef Broekhaar Mr. Barry J. Kefauver Mr. Joel F. Shaw Mr. Charles Chatwin Mr. Susumu Kitamura Ms. Lesley Soper Mr. Hee-joo Choi Ms. Silvia Kolligs Ms. Ivanka Spadina Mr. John G. Cook Mr. Charles Stevens Mr. Shonnie Lyon Mr. John Davies Ms. Elizaveta Makeeva Ms. Olivia Strese Mr. Richard Martin Mr. Gary Strong Mr. Oleg Demidov Mr. Norbert Frauboese Mr. Richard McClevey Mr. Jüri Voore Mr. Edgar Friedrich Mr. Frank E. Moss Mr. Manabu Yamakoshi

c) Education and Promotion Working Group

Mr. John M. Hotchner (Chairman)
Mr. Robin Chalmers
Mr. Hans Hauck
Mr. K.S. Bains
Mr. Malcolm Cuthbertson
Mr. Steven Grant
Mr. Hans Hauck
Ms. Susan Jessop
Ms. Annette Offenberger

TECHNICAL ADVISORY GROUP ON MACHINE READABLE TRAVEL DOCUMENTS

Fourteenth Meeting (Montreal, 6 to 9 May 2003)

AGENDA

Welcome, introduction, opening formalities and election of chairman and vice-chairman.

- 1. Review of new and recent developments related to specifications for MRTDs
 - Tutorials will be presented by selected experts to update members and observers on current issues, new specifications and technical reports (guidance material). Topics to be addressed include development of a proposed, interoperable approach to biometrics; present and future technological challenges; new specifications in Doc 9303, Parts 1, 2 and 3; recent legislative initiatives; and related actions in ICAO and other international bodies.
- 2. Development of specifications and guidance material
 - 2.1 Final working draft, *Machine Readable Visas*, Doc 9303, Part 2, 3rd Edition
 - 2.2 Other developmental work of the Document Content and Format Working Group
- 3. New technologies and related issues
 - 3.1 Deployment of biometrics in travel documents
 - 3.2 Other work of the New Technologies Working Group
- 4. Education and promotion of MRTDs
 - 4.1 Report of the Education and Promotion Working Group
 - 4.2 Other proposals and recommendations for the promotion of MRTDs
- 5. Facilitation and security issues related to the work of the TAG-MRTD
- 6. Project reports by members and observers
- 7. Any other business

TECHNICAL ADVISORY GROUP ON MACHINE READABLE TRAVEL DOCUMENTS

Fourteenth Meeting (Montreal, 6 to 9 May 2003)

LIST OF WORKING PAPERS SUBMITTED TO THE MEETING

Working Paper Number	Agenda Item	Subject	Presented by
1	_	Agenda	Secretary
2	2, 2.1	Development of new editions of ICAO Doc 9303	DCFWG
3, App.	2, 2.2	G-8 proposal for minimum security measures for handling and issuance of passports	DCFWG
4	2, 2.2	Methodology for quality assurance of Machine Readable Travel Documents (MRTDs)	DCFWG
5, Corr.	2, 2.2	Seafarers' identification document and cooperation with International Labour Organization	DCFWG
6	2, 2.2	Steganography	DCFWG
7	3, 3.1	Technical Report on Biometrics Deployment in Machine Readable Travel Documents	NTWG
8, App.	3, 3.2	Report on the ICAO 2001/02 Request for Information (RFI) Initiative	NTWG
9	3, 3.2	Proposal for continuing work by the NTWG on information sharing between Contracting States in relation to Advanced Passenger Information (API)	NTWG
10, App.	3, 3.2	Proposal for continuing work by the NTWG on information sharing between Contracting States in relation to lost, stolen and invalid travel documents	NTWG
11	3, 3.1	2-D (high density) barcodes	NTWG
12	3, 3.1	Proposal for continuing work by the NTWG on PKI enabled digital signatures for MRTDs	NTWG
13, App.	3, 3.1	Biometric testing reports	NTWG
14	3, 3.1	Privacy and facilitation	NTWG
15	3, 3.2	A strategy for travel documents using advanced technologies – NTWG vision for biometric enabled passports	NTWG

TAG-MRTD/14 REPORT **APPENDIX C**

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16	3, 3.2	Adoption of contactless IC(s) as the capacity expansion technology to ensure global interoperability of MRTDs	NTWG
17		[Number missed]	NTWG
18, App.	3, 3.1	Intellectual property issues associated with use of biometrics based on IRIS	NTWG
19	3, 3.2	Report of the New Technologies Working Group	NTWG
20	2, 2.2	Stock numbers of passports and travel documents in the machine readable zone	DCFWG
21	5	Marking of used documents	DCFWG
22, App.	2, 2.2	Durability	DCFWG & ISO SC17 WG3 TF2
23	2, 2.2	Comments on the MRP data page thickness conforming to ICAO Doc 9303 MRTD	DCFWG
24	2, 2.2	Report of the Document Content and Format Working Group	DCFWG & ISO SC17 WG3 TF2
25	4, 4.1	Report by the Education and Promotion Working Group	EPWG
26	4	Terms of reference of the Education and Promotion Working Group	EPWG

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LIST OF INFORMATION PAPERS SUBMITTED TO THE MEETING

Information Paper Number	Agenda Item	Subject	Presented by
1	3	First edition of technical report on development of a logical data structure (LDS) for optional capacity expansion technologies on machine readable travel documents (MRTDs)	NTWG
2	6	Country report - Jamaica	H.A. Thomas
3	5	Agenda for the 12th Session of the Facilitation Division (FAL/12)	Secretary