

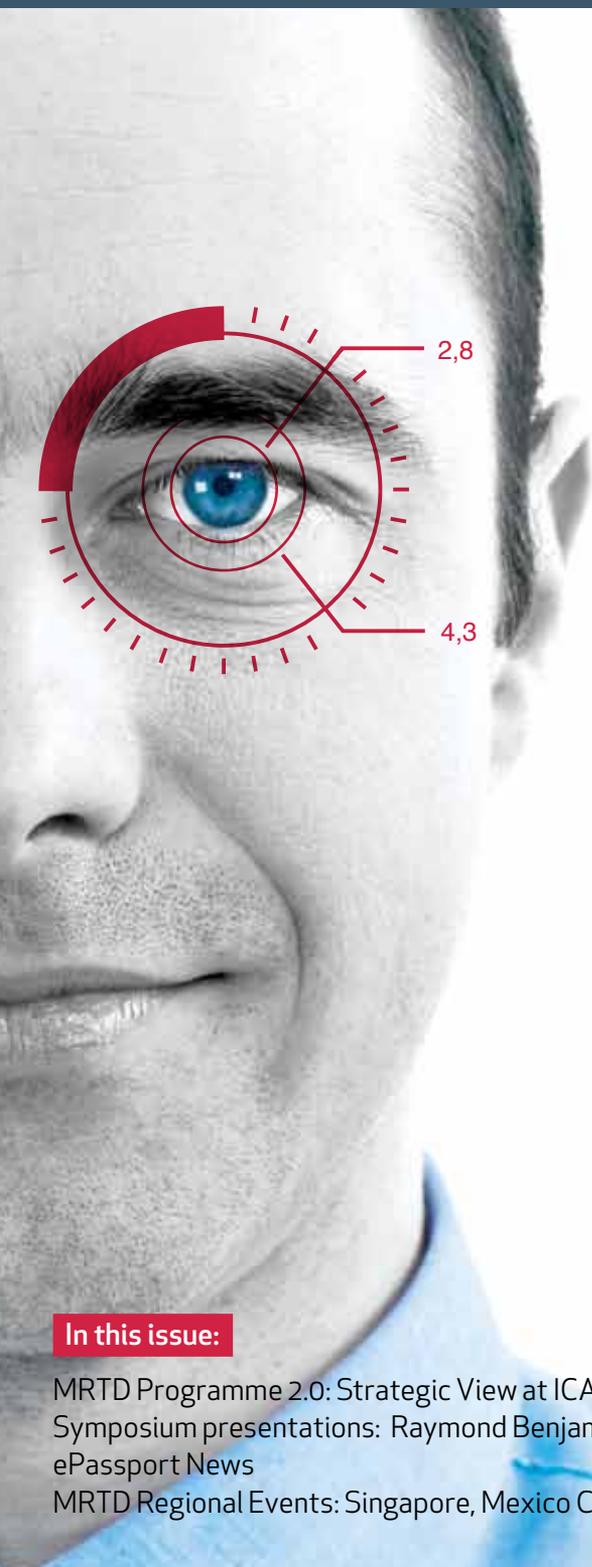
# ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION



Vol. 7, No. 1 – Spring 2012

# MRTD REPORT



## THINKING STRATEGICALLY

The Seventh MRTD Symposium highlighted the need for **a strategic vision** to the MRTD Programme's next phase in tandem with the new ICAO Traveller Identification Strategy currently under development.

### In this issue:

MRTD Programme 2.0: Strategic View at ICAO's Role in Traveller Identification  
Symposium presentations: Raymond Benjamin, Jim Marriott, Philip Baum, Barry J. Kefauver  
ePassport News  
MRTD Regional Events: Singapore, Mexico City and Qatar



Global Enterprise Technologies Corp.

230 Third Ave., Waltham, MA 02451 USA

T: +1 781 890 6700

F: +1 781 890 6320

[www.getgroup.com](http://www.getgroup.com)

# GET. Faster

The new eP600 from GET Group is the fastest retransfer printer ever introduced for personalizing ICAO compliant ePassports. With high print resolution, fully automatic book processing, and biometric interface, the eP600 continues the Toppan legend of state-of-the-art printers for both centralized and decentralized passport issuance.



GET. Into the future



ICAO MRTD REPORT  
VOLUME 7, NUMBER 1, 2012

**Editorial**  
MRTD Programme—Aviation Security  
and Facilitation Policy Section  
Editor-in-Chief: Mauricio Siciliano  
Tel: +1 (514) 954-8219 ext. 7068  
E-mail: msiciliano@icao.int

**Content Development**  
KDH Communications  
Senior Editor: Kathlyn Horibe  
Tel: +1 (514) 697-8654  
E-mail: khoribe@videotron.ca

**Production and Design**  
Bang Marketing  
Stéphanie Kennan  
Tel: +1 (514) 849-2264  
E-mail: info@bang-marketing.com  
Web Site: www.bang-marketing.com

**Advertising**  
Keith Miller, Advertising Representative  
Tel: +1 (514) 954 8219, ext. 6293  
Fax: +1 (514) 954 6769  
E-mail: kmiller@icao.int

**Submissions**  
The *MRTD Report* encourages submissions from interested individuals, organizations and States wishing to share updates, perspectives or analysis related to global civil aviation. For further information on submission deadlines and planned issue topics for future editions of the *MRTD Report*, please contact Mauricio Siciliano, Editor-in-Chief, at: msiciliano@icao.int.

Opinions expressed in signed articles or in advertisements appearing in the *ICAO MRTD Report* represent the author's or advertiser's opinion and do not necessarily reflect the views of ICAO. The mention of specific companies or products in articles or advertisements does not imply that they are endorsed or recommended by ICAO in preference to others of a similar nature which are not mentioned or advertised.

The publishers extend their thanks to the companies, organizations and photographers who graciously supplied photographs for this issue.

**Published by**  
International Civil Aviation Organization (ICAO)  
999 University Street  
Montréal, Québec  
Canada H3C 5H7

The objective of the *ICAO MRTD Report* is to provide a comprehensive account of new developments, trends, innovations and applications in the field of MRTDs to the ICAO Member States and the international aeronautical and security communities.

Copyright © 2012  
International Civil Aviation Organization

Printed by ICAO

# Contents

3

## **MRTD Programme 2.0: Strategic View at ICAO's Role in Traveller Identification**

*MRTD Report* Editor-in-Chief Mauricio Siciliano reports that a new Strategy is being conceived to reposition and renew the MRTD Programme to enhance its relevance in emerging security and facilitation challenges.

4

## **Seventh MRTD Symposium: Exploring All Avenues to Enhance Aviation Security Worldwide**

In his opening remarks to the Seventh MRTD Symposium, ICAO Secretary General Raymond Benjamin underlined his priority to assist States in strengthening travel document and border security systems and encouraged all States that issue ePassports to take advantage of the ICAO Public Key Directory to ensure reliable identity management, border controls and enhanced aviation security.

8

## **Seventh MRTD Symposium: Strengthening ICAO's Role in Building MRTD and Border Security Capacity**

In view of the development of the new Traveller Identification Strategy, Boubacar Djibo, Director of the ICAO Air Transport Bureau, provides an update and speaks not only of the necessity to explore new ways of providing technical assistance to States in need, but also of ICAO's readiness to strengthen its role in MRTD and border security capacity building efforts worldwide.

10

## **Seventh MRTD Symposium: MRTD Programme at a Crossroads**

Jim Marriott, Chief, ICAO Aviation Security Branch, suggested ways in which the MRTD Programme can be reinvigorated to strengthen its relevance to the needs of ICAO Member States. He urged States to take an active role in shaping its future by sharing issues, needs and ideas on a new strategy for the MRTD Programme.

## **14 - ePassport News: MRTD Updates from Around the World**

16

## **Seventh MRTD Symposium: A Comprehensive Approach to Aviation Security Incidents**

Philip Baum, Managing Director of Green Light Ltd., outlines the history of airline sabotage, highlights the 12 most significant aviation security breaches since 9/11 and recommends measures that should be taken to counter any future threats to aviation.

20

## **Seventh MRTD Symposium: Summary and Conclusions**

Barry J. Kefauver, ISO Representative, in his closing remarks to the Seventh MRTD Symposium, stressed that the role, relevance and mandate of the MRTD Programme needs sharpened clarity as the evolution of machine readable travel documents is at a crossroads and, moving forward, partnering relationships must be strengthened and renewed to tackle the global nature of the myriad issues facing the travel document community.

25

## **Sharing Best Practices on MRTDs, Biometrics and Border Security**

Review of MRTD Regional Events held in Singapore, Mexico City and Qatar in 2011 to promote ICAO security standards, specifications and best practices for the issuance and use of MRTDs and biometrics and identify future capacity-building and assistance planning.



## Technical Advisory Group on Machine Readable Travel Documents (TAG/MRTD)

Member	Nominated by	Member	Nominated by
Mr. G. K. McDonald	Australia	Mr. J. Verschuren	Netherlands
Ms. M. Cabello	Canada	Ms. A. Offenberger	New Zealand
Mr. M. Vacek	Chile	Ms. I.O. Sosina	Nigeria
Ms. M. Pujau-Bosq	Czech Republic	Mr. Y. Xuefeng	People's Republic of China
Dr. E. Brauer	France	Mr. C. Ferreira Gonçalves	Portugal
Mr. A. Manickam	Germany	Mr. O. Demidov	Russian Federation
Mr. J. Nugent	India	Mr. S. Tilling	Sweden
Mr. H. Shimizu	Ireland	Mr. R. Vanek	Switzerland
	Japan	Mrs. K. Mitchinson	United Kingdom
		Mr. M. Holly	United States

The TAG/MRTD is appointed by the Secretariat, which reports on its progress to the Air Transport Committee.

The TAG/MRTD develops specifications for machine readable passports, visas and official travel documents, electronic machine readable travel documents and guidance material to assist States in implementing these specifications and exploiting modern techniques in inspection systems

### Observer organizations

Airports Council International (ACI)

International Air Transport Association (IATA)

International Criminal Police Organization (INTERPOL)

International Labour Organization (ILO)

International Organization for Standardization (ISO)

Organization for Security and Cooperation in Europe (OSCE)

International Organization for Migration (IOM)

United Nations (UN)

Organization of American States (OAS) - Inter-American Committee on Terrorism (CICTE)

## ICAO's Global Presence

North American  
Central American  
and Caribbean  
(NACC) Office,  
Mexico City

South American  
(SAM) Office,  
Lima

Western and  
Central African  
(WACAF) Office,  
Dakar

European and  
North Atlantic  
(EUR/NAT) Office,  
Paris

Middle East  
(MID) Office,  
Cairo

Eastern and  
Southern African  
(ESAF) Office,  
Nairobi

Asia and Pacific  
(APAC) Office,  
Bangkok



# MRTD PROGRAMME 2.0: STRATEGIC VIEW AT ICAO'S ROLE IN TRAVELLER IDENTIFICATION



The MRTD Programme is on solid track. It has achieved state-of-the-art global MRTD specifications that are being continuously updated and developed by the Technical Advisory Group's New Technologies Working Group (NTWG), which is responding to the evolving needs of States and incorporating the latest

technologies. It has been intensifying its efforts in offering assistance to States through project development, advocacy and technical advice, attracting funding from donor agencies and relying on top expertise provided by members of the TAG and its working groups.

Still, the Programme has enormous potential to grow, deepen and enhance its relevance to the needs of Member States and the evolving international security environment. Despite its successes in the core business areas, there is still an untapped opportunity to embrace the Programme's full potential as catalyst and synergetic player to enhance comprehensive security globally, such as exploring links and integrating closer with aviation security, border security, law enforcement and global counter-terrorism efforts.

Also, the Programme must provide more complete security and facilitation advantages so knowledge about passenger flows and the identities of passengers and cargo consigners can further enhance Member States' intelligence-led border control operations and integrated border management. Finally—but very importantly—save for a few isolated examples, travel identification matters are yet to move beyond technical specifications to a policy level, to evolve into comprehensive ICAO Standards and Recommended Practices in the Annexes to the Chicago Convention.

In order to maximize and accelerate the many positive benefits that flow to Member States from ICAO's leadership, collaboration and assistance on traveller identification, ICAO recognizes the need to adopt a coherent strategic view and reposition and renew the Programme to ensure that it can meet evolving needs and expanding opportunities more effectively.

With this goal in mind, ICAO senior management announced during the Seventh MRTD Symposium that a strategy exercise had been launched to better define the scope of the new Traveller

Identification Programme, a Strategy that would incorporate all existing strengths of the current MRTD Programme but with better capacity to meet the current and emerging security and facilitation expectations of Member States.

The proposed ICAO Strategy on Traveller Identification aims at defining the scope and future strategic direction of the Programme in order to affirm its relevance to on-going global security challenges and to outline the resources needed to achieve these objectives. The strategic review exercise was started in 2011 with a view to exploring the driving forces in the international environment and enhancing the relevance of the MRTD Programme in emerging security and facilitation challenges.

The main objectives of the Strategy are to:

- clarify and affirm ICAO's mandate for global leadership and assistance in secure, reliable and functional traveller identification;
- establish a long-term strategic framework for the Programme, including its objectives and guiding principles, roles and outcomes, institutional partnerships and collaboration mechanisms;
- establish priority themes, initiatives and outcomes for the next three to five years;
- determine the full range of elements required to ensure the success of the MRTD Programme; and
- identify the level of resources required by the Programme and recommended funding arrangements.

In particular, the Strategy intends to raise the profile of the MRTD Programme and strengthen its sustainability; reinforce the Programme's delivery capacity in critical areas such as policy development, capacity-building, audit and evaluation, communications, advisory and working groups, quality management, oversight, etc.; and address priority needs and evolving opportunities. Particular attention will be paid to enhancing the MRTD Programme's capacity to provide technical assistance to States in the areas of travel document security and identity management.

The Strategy, which is being developed in collaboration with States and other relevant stakeholders, will be presented to the High-level Conference on Aviation Security in September 2012 and to the 38<sup>th</sup> Session of the ICAO Assembly in 2013.

Stay tuned. MRTD Programme 2.0 will see the light soon. ■



Raymond Benjamin, *ICAO Secretary General*

# EXPLORING ALL AVENUES TO ENHANCE AVIATION SECURITY WORLDWIDE

 The Seventh ICAO Symposium and Exhibition on MRTDs, Biometrics and Security Standards was held at ICAO Headquarters from 12 to 15 September 2011. It was attended by 557 participants from 93 Member States and 12 international organizations. The focus of this event was global measures to combat terrorism and trans-border crime since 9/11, with particular reference to travel documents and border security.

The meeting benefited from keynote presentations by the Executive Director of the United Nations Counter-Terrorism Executive Directorate (UN CTED), Under Secretary of the United States Department of Homeland Security, the Special Representative of the Chairperson of the Commission on Counter Terrorism Cooperation of the African Union and other senior representatives from government agencies, international and regional organizations and private sector experts.

The 2011 Symposium highlighted ICAO's leading international role in the development of MRTDs and border controls to combat terrorism, strengthen aviation and border security and increase the effectiveness and efficiency of passenger clearance procedures at airports and border crossings.

In his opening remarks to the Symposium, ICAO Secretary General Raymond Benjamin acknowledged the success of the MRTD Programme and the dedication of the TAG/MRTD and its Working Groups, underlined his priority to assist States in strengthening their travel document and border security systems and encouraged all States that issue ePassports to take advantage of the ICAO Public Key Directory to ensure reliable identity management, border controls and enhanced aviation security.

The Secretary General, reflecting upon lessons learned during the decade after 9/11, stressed the importance of exploring further how the MRTD Programme can do even more to strengthen aviation security and enhance facilitated passenger clearance procedures at airports and other border crossings.

This year's Symposium coincides with the 10<sup>th</sup> anniversary of 9/11. Such timing compels us to both reflect on what has been achieved over the decade and to look ahead at what can be done to further enhance aviation security worldwide.

Our track record since 9/11 in strengthening the global security net is good. We are better at anticipating, detecting, intercepting and protecting against terrorist attacks. And we respond more appropriately when attacks occur or are attempted.

But you and I know that our work is never done. We must continually reinforce and adapt our strategies to provide the highest level of aviation security, while ensuring optimum efficiency in the movement of people and goods.

To that end, we must explore all avenues. Together with regulatory, industry and law enforcement partners, we will examine every option that can further contribute to the sustainability of the global air transport system.

In this collective effort, the ICAO MRTD Programme plays a critical role. Over the years, through a remarkable spirit of cooperation which I want to acknowledge here this afternoon, we developed and implemented a robust framework of technical specifications for machine readable travel documents, including ePassports enhanced with biometric identification. Practically all States now issue machine readable passports and more than 100 issue ePassports.

In today's heightened security environment, however, we must consider how the MRTD Programme can do even more to strengthen aviation security and increase the effectiveness and efficiency of passenger clearance procedures at airports and border crossings.



From Left to right: Roberto Kobeh González, President of the ICAO Council; Rand Beers, Under Secretary of the Department of Homeland Security, USA; Raymond Benjamin, Secretary General of ICAO.

The way forward is clear.

We first need to sharpen our focus on preventing identity fraud, as we maintain our traditional emphasis on document security. Taking cargo as an example, we have to consider the entire supply chain in creating a person's official identity, from the initial production of identity documentation through distribution and disposition—in short, from birth to death.

We must go this route because of the success of our MRTD Programme in making passports and other travel documents much harder to counterfeit. Terrorists have had to exploit weaknesses much earlier in the production process of identity documents and that's where we have to hit next.

This is an enormous challenge and it's an expensive one, as are other elements of effective national security systems.

We must therefore do a better job of helping States with their capacity-building projects, so as to promote more timely compliance with MRTD requirements and stronger identity management systems.

I have made this one of my priorities. In revamping the ICAO security programme, I have insisted that it includes a strong assistance component. I want to make sure that we channel assistance capabilities to Member States with the greatest need for support in meeting their obligations, including MRTD activities. I want States to know that they can count on ICAO every step of the way.

Having said this, I also want to stress the following.

In our efforts to prevent terrorists from moving freely between States, information contained in MRTDs is checked against databases to establish whether a passenger is

considered a security threat. While this process must conform to the respective laws of States, the ICAO Assembly has observed the need to ensure the protection of passengers' privacy and civil liberties.

I therefore take this opportunity to encourage all States to issue electronic Passports and to join the Public Key Directory, the passport validation service administered by ICAO. These elements are demonstrating their effectiveness in preventing identity fraud and assuring reliable identity management, a cornerstone for intelligence-based aviation security.

Clearly, the MRTD Programme is making great strides in advancing both aviation security and facilitation objectives. More can and will be done to tighten the connexion between security and capacity building, so that the MRTD Programme is even more relevant to stakeholders—States, industry and passengers.

This is what this Symposium is all about.

In this hall, we have the greatest concentration of experts on travel documents and border security in the world. Your contribution to defining the role for MRTDs in the comprehensive global security framework is critical.

In that spirit of cooperation, I want to express my sincere appreciation for the guidance provided over the years by the Technical Advisory Group (TAG) on MRTDs. The on-going involvement of this group has proven essential to the success of the ICAO MRTD Programme. Allow me to highlight, in particular, the TAG/MRTD New Technologies Working Group whose dedication to the task ensures that MRTD specifications remain state-of-the-art.

At the same time, the working group concerned with promoting the worldwide implementation of MRTD programmes through capacity-building activities has been making real progress in this area. It has become a valuable international intermediary for matching the needs of States with available technical expertise and donor funding.

My congratulations also to the Public Key Directory board members. Without their knowledge and managerial skills in the administration of the PKD, ICAO would not be able to realize, to the extent it would like, its goal of helping States enhance ePassport and border control security.

To all of our friends and partners and to all of you in this room, thank you for having taken the time to join us here for what promises to be a very stimulating Symposium. ■



**tru/window™ LOCK**  
A new dimension in photo-protection

INNOVATIONS IN SECURITY  
IDENTITY SOLUTIONS, SWISS MADE

**Secure documents in polycarbonate**

- Passport datapage
- Identity card
- Residence permit
- Crew member certificate
- Driving licence
- Tachograph cards



Secure, unless you  
look the other way.

Thanks to the KINEGRAM®, the authenticity of government documents can be checked by the naked eye.

DVD Kinegram AG | Member of the KURZ Group | Zählerweg 12 | CH-6301 Zug | Switzerland  
Tel. +41 41 724 47 00 | Fax +41 41 724 49 11 | mail@kinegram.com | www.kinegram.com

**KINEGRAM**



**Boubacar Djibo**, *Director of the ICAO Air Transport Bureau*

# STRENGTHENING ICAO'S ROLE IN BUILDING MRTD AND BORDER SECURITY CAPACITY

 The Seventh MRTD Symposium was for many an opportunity to assess what had been accomplished and to realize that States often struggle to implement ICAO MRTD specifications due to lack of technical expertise or financial constraints.

In view of the development of the new Traveller Identification Strategy, Boubacar Djibo, Director of the ICAO Air Transport Bureau, provides an update and speaks not only of the necessity to explore new ways of providing technical assistance to States in need, but also of ICAO's readiness to strengthen its role in MRTD and border security capacity-building efforts worldwide.

The Air Transport Bureau is currently developing a strategy for a comprehensive and cohesive Traveller Identification Programme. The Strategy, which charts a course for the future directions and priorities of ICAO's involvement in traveller identification, proposes a comprehensive approach to the framing, planning, management and coordination of the *full* range of ICAO's interests and activities related to passports and other traveller identification, which include the existing Machine Readable Travel Documents (MRTD) Programme.

The Strategy sets out nine major objectives where investments and efforts are needed to ensure that ICAO can maximize opportunities to strengthen traveller identification globally. One of these objectives is building capacity as an integral component of security and facilitation. It involves the provision of assistance and support by ICAO to its Member States to enable them to improve their development and use of secure traveller identification products, technologies, tools and processes, including compliance with ICAO Standards and implementation of ICAO specifications and best practices in this area.

Capacity-building initiatives, which will require efforts and investment, include:

- New training programmes on priority aspects of secure traveller identification, its applications and benefits;
- Needs assessments at State and regional levels to identify, assess, plan and coordinate responses to deficiencies;
- Building awareness and commitment by planning and conducting pilot projects on aspects of traveller identification;
- Structuring partnerships and collaborative arrangements with international and regional organizations, donor States and other funders, as well as other players with resources and expertise to contribute to capacity building and implementation.

Such activities will be planned, implemented and coordinated within the context of AVSEC's overall framework and strategy for assistance and capacity building, spanning the full range of security, facilitation and other interests and needs.

In terms of providing assistance to enhance security, Kofi Annan, the former UN Secretary-General, put it this way, "We will not

## Increased and more effective capacity-building assistance is a prerequisite for increased security.

enjoy security without development, we will not enjoy development without security and we will not enjoy either without respect for human rights."

This thought-provoking statement highlights the nexus between security and international development and impresses upon us the need to boldly contemplate new ways of providing technical assistance to States in need. It is also a powerful reminder that border security does not exist in a vacuum and is not simply an isolated technical matter in some distant land. In this interconnected world, a breach of security on the other side of the planet may just as well be next door.

Increased and more effective capacity-building assistance is a prerequisite for increased security. Weaknesses in travel document security constitute a global security challenge and States must adjust their international development efforts to address it in a proactive manner. They must address it with political will and a strong commitment to action.

To make progress on MRTD-related implementation and capacity-building matters, it is imperative for States to support the development and implementation of the new 'Traveller Identification Strategy', and related programme operating plan and budget during the AVSEC Conference to be held at ICAO Headquarters from 12-14 September 2012. Only in this way will ICAO be able to establish a cohesive action plan that will link those in need with governments and international organizations that have international development and security funds available.

In the meantime, I invite States that require assistance with capacity-building to contact ICAO to address their concerns. The MRTD Programme, its TAG/MRTD Implementation and Capacity-Building Working Group and ICAO's Technical Co-operation Bureau stand ready to address these issues and intensify their role in greater MRTD capacity building worldwide. ■



**Jim Marriott, Chief, ICAO Aviation Security Branch**

# MRTD PROGRAMME AT A CROSSROADS

✈ After a series of regional conferences to promote full implementation of the Declaration on Aviation Security, the ICAO High-level Aviation Security Conference will convene in September 2012 to make recommendations on policy, programme development and implementation to the 38<sup>th</sup> ICAO Assembly in 2013. The Assembly's decisions will shape the MRTD Programme's strategic direction and budget for the next triennium.

At the Seventh ICAO Symposium on MRTDs, Biometrics and Security Standards, Jim Marriott, Chief, ICAO Aviation Security Branch, suggested ways in which the MRTD Programme can be reinvigorated to strengthen its relevance to the needs of ICAO Member States. He urged States to take an active role in shaping its future by sharing issues, needs and ideas on a new strategy for the MRTD Programme.

The ICAO MRTD Programme finds its organizational home in the Aviation Security Branch of ICAO and so, as Chief of the Branch, I am very pleased to welcome you to the Symposium and to ICAO. Although unable to attend the Sixth Symposium and Exhibition because of other commitments, I have nevertheless made every effort since joining ICAO last year to broaden and deepen my understanding of the MRTD Programme. To the ICAO MRTD team and many of you, thanks for assisting my transition into ICAO.

In a complex and truly global field of activity that is absolutely essential to international security and transportation facilitation, the MRTD Programme has an impressive record of achievements.

I am struck by:

- The state-of-the-art global specifications that are further developed as State travel document programme needs and technology advance;
- The needs of States for assistance, the actions of States and international organizations to support capacity-building and the gap between the level of assistance available and the level needed;
- Whether the level of investment by States, international organizations and regional organizations in international cooperation that has been the foundation for MRTD Programme success can be sustained and how the ICAO Secretariat's role should be defined; and
- The unique and truly successful model of public sector-private sector partnership demonstrated through events such as this annual Symposium and the New Technologies Working Group's Request for Information initiative and whether we can build on these.

I am also struck by:

- The policy, technical and implementation challenges with us today and that lay ahead in identity management and border security; and
- The need for global leadership to harness and guide collective action.

ICAO is, of course, first and foremost an organization focused on international civil aviation. The significance of travel documents to aviation security was emphasized in the Declaration on Aviation Security unanimously adopted by the 37<sup>th</sup> ICAO Assembly last October. The Declaration sets out a number of far-reaching commitments to enhance aviation security through international cooperation, including promoting enhanced travel document security and the validation thereof using the ICAO Public Key Directory in conjunction with biometric information and, reporting on a regular basis, lost and stolen passports to the INTERPOL Lost and Stolen Documents Database.

In the coming months, ICAO will convene a series of regional conferences on aviation security, the objective of which is to promote full implementation of the Assembly Declaration. These regional conferences will lead to an ICAO High-level Aviation Security Conference planned for September 2012 in this room. This High-level Conference will produce recommendations to guide ICAO policy and programme development and implementation and prepare for the 38<sup>th</sup> ICAO Assembly in 2013. The Assembly can be expected to make policy and budget decisions for the coming 2014 to 2017 triennium, including policy and budget decisions affecting the MRTD Programme.

So, as we look to the years ahead, the MRTD Programme—your Programme—is at a crossroads. It can proceed as it is, continuing the excellent work that is underway, planned and distantly envisaged to contribute to robust travel documents, international security and facilitated transportation. Or the MRTD Programme

can seek out opportunities to be reinvigorated and be positioned to more fully support the needs of ICAO States. How can this be done?

*First*, the mandate of ICAO's travel document programme can be confirmed unequivocally. The ICAO MRTD Programme in its current form traces its mandate to the provisions of the Convention on International Civil Aviation aimed at preventing "...unnecessary delays to aircraft, crews, passengers and cargo, especially in the administration of the laws relating to immigration, quarantine, customs and clearance."

Neither the Convention nor the technical provisions of Annex 9 Facilitation nor ICAO's key policy statement on security, the Consolidated Statement of Continuing ICAO Policies Related to the Safeguarding of International Civil Aviation Against Acts of Unlawful Interference, fully establish the strategic policy parameters of the MRTD Programme.

As a matter of good governance and management, I would suggest that the mandate must be much more clearly spelled out in order to advance the Programme under a complete and solid framework. Clarity of the mandate will assist in the identification of appropriate funding levels.

*Second*, ICAO's experience with aviation security, namely, with the origins, development and implementation of Annex 17 Security, provides some useful lessons learned that may be very helpful for the continuing development of the MRTD Programme.

Annex 17 was conceived in the early days of escalating security threats and risks to international civil aviation security. Those who framed its original provisions recognized that a successful global aviation security programme would require Standards and Recommended Practices of a technical nature to drive the screening of passengers and their belongings, the establishment and control of restricted areas at airports and actions to be taken when acts of unlawful interference are perpetrated.

They also recognized that the international regulatory framework should drive States:

- To clearly define and allocate responsibility for aviation security at the State level;
- To establish suitable and effective organizational arrangements;
- To ensure the proper training of aviation security personnel;
- To require cooperation between States and between the multiple government and industry stakeholders;
- To document national, air operator and airport security programmes in order to promote transparency and comprehensive implementation; and
- To prepare for contingencies that are inevitably part of the operational reality of civil aviation security.

Today Annex 17 establishes a well-rounded suite of technical and strategic Standards and Recommended Practices. The Aviation Security Panel regularly reviews Annex 17 in order to keep the international regulatory framework current and relevant.

## ICAO's experience with aviation security, namely, with the origins, development and implementation of Annex 17 Security, provides some useful lessons learned that may be very helpful for the continuing development of the MRTD Programme.

Since 2002, ICAO has carried out systematic and rigorous aviation security audits under the Universal Security Audit Programme. These audits are a key component of ICAO's efforts to assist States by identifying and prioritizing deficiencies in need of remedial action. They also serve to focus ICAO's aviation security Implementation Support and Development Programme on the States in most need of assistance and on the deficiencies most critical to aviation security programme success.

By comparison and, with the greatest respect for all that has been accomplished under the MRTD Programme and the Facilitation Programme, the international regulatory framework for travel documents in Annex 9 places its emphasis on familiar technical matters, like issuing ICAO compliant passports. Therefore, I am

suggesting that challenges surrounding travel document reliability, integrity, security and implementation we face today and in the future may benefit from new international regulatory tools.

*Third*, like in any organization, the extent of ICAO's role in the travel document sphere is governed by the level and source of resources available. The current funding model for the MRTD Programme results in the minority of the Programme budget coming from the so-called Regular Programme Budget, which is funded by the assessment paid by ICAO's Member States. The majority of funding comes from extra-budgetary sources, like the revenues derived from MRTD events held under ICAO auspices.

This model is very similar to the way in which the Aviation Security Programme was funded. For many years, ICAO had a large dependence on extra-budgetary voluntary contributions from States to fund the Aviation Security Programme. States recognized, however, that a global programme of high importance requires budget certainty so that activities can be planned and executed without the significant risk of insufficient funds being offered to or generated by ICAO.

Over approximately six years, ICAO transitioned away from an Aviation Security Programme funding formula that was subject to much uncertainty year after year. Since January 1, 2011, the Programme is funded 100 per cent by the Regular Programme Budget. Voluntary contributions are still made available by States and gratefully accepted by ICAO in order to accomplish even more.

The move to a predictable, stable and adequate funding base was driven by States that recognized a need based on their own experience that a programme essential for international security and the sustainability of air transport should not be revenue dependent.

So my question to you is this: do States want budget certainty and an adequate level of ICAO funding for the MRTD Programme? If the answer is yes, the work to achieve this must begin now.



Fourth, the relevant State authorities having an interest in the various aspects of the international travel document programme—Ministries of Interior and Foreign Affairs, Passport Offices, civil registries, national security agencies and immigration, customs and border control agencies—must fully engage their representatives at ICAO to support informed policy and budget debate and decision-making at ICAO.

You will appreciate that the vast majority of ICAO's business deals directly with highly technical aviation matters. Consequently, State representation in policy and budget decision-making tends to be aviation focused. It is fed by inputs from Civil Aviation Authorities and State authorities responsible for aviation security and environmental matters if they are not the Civil Aviation Authority. As matters related to MRTDs are typically outside the competence of civil aviation authorities, my challenge to you is to engage your representation in policy and budget decision-making at ICAO in order to ensure advocacy of your whole-of-government position on the full range of MRTD issues.

I cannot stress strongly enough that ICAO is your organization and responsibility for ICAO's MRTD Programme lies with Member States and the Secretariat. You must take an active role in shaping its future, enabling it to make steady and deliberate progress toward achieving all objectives. The ICAO Secretariat is here to support you.

In recent weeks, the Secretariat has launched a project to develop an MRTD Programme Strategy. We intend for the Strategy:

- To set out the objectives and priorities of the MRTD Programme and a work plan to tackle them;
- To describe the full range of elements required to assure the success of the MRTD Programme;
- To identify the level of resources required by the MRTD Programme and recommended funding arrangements;
- To be developed in collaboration with you; and
- To be a key document for the planned High-level Aviation Security Conference in September 2012 and the 38<sup>th</sup> ICAO Assembly in 2013.

This Symposium is a valuable working forum that brings together government and industry representatives from around the world to focus on the continuing evolution of the MRTD Programme. On the final day of the Symposium, we will have a discussion panel on the strategic directions of the ICAO MRTD Programme. Our aim for the discussion panel is to open a dialogue between ICAO senior management and MRTD community stakeholders to receive your input to the MRTD Programme Strategy.

You are invited to share your issues, needs, suggestions and ideas or to ask questions about matters of interest or concern related to the ICAO MRTD Programme. While the feedback and questions from the MRTD community will serve as the basis for panel discussions, the issues raised will also provide useful input for researching and developing the newly-emerging MRTD Programme Strategy.

Symposium participants are invited to reflect on matters of importance and submit written suggestions or questions to the panel. A box for suggestions and questions is available at the entrance into the Assembly Hall during the Symposium. Symposium participants are, of course, also welcome to contribute with ideas or ask questions orally during the panel discussions.

The MRTD Programme is at a crossroads. I hope that my remarks will provoke your thinking about what should be the future of the MRTD Programme, encourage you to participate in shaping the MRTD Programme and assure you that ICAO is very serious about working with you on this important matter.

I sincerely thank you for having taken the time to join us here and I wish you a very successful and productive MRTD Symposium. ■

**DILETTA ID-Systems**  
Industriestrasse 25-27  
64569 Nauheim  
Germany

Tel. +49 / 6152 / 1804-00  
Fax. +49 / 6152 / 1804-22

info@diletta.com  
www.diletta.com



### DILETTA ePassport Printer



- Integrated RFID Reader / Writer
- Integrated Camera System
- Integrated OCR and Barcode Reader
- Convenient Front Loading System
- Prints every page of a 4 up to 100 pages passport
- Over 30000 installations in more than 100 countries

### High Security Inks

- High Security Inks
- Full Colour Invisible UV Inks
- 365 nm and 254 nm
- Country Specific DNA Inks



### DILETTA ePassport Laminator



- Full Front Operation
- Only 8 - 15 seconds per passport
- No Damage of Contactless Chip
- Energy Saving
- Laminates every page of a 4 - 100 pages passport
- Separately Adjustable Temperatures up to 200°C

### DILETTA Visa Printer



- Integrated RFID Reader / Writer
- Integrated OCR and Barcode Reader for high volume visa production

# e-PASSPORT NEWS



## **Canada and US**

Action plan designed to speed up legitimate trade and travel and improve security in North America will be implemented. The Action Plan on Perimeter Security and Economic Competiveness includes harmonizing border controls for people and cargo and integrating cross-border law enforcement.

## **Canada**

This year, Passport Canada will start issuing higher security electronic passports or ePassports. Canadians can either acquire a new security-enhanced ePassport that is valid for five years or, starting in 2013, a 10-year ePassport.

## **United Kingdom**

With installation of ePassport gates at Heathrow and Gatwick airports, automated border controls now total 15 transport terminals across the UK, including all major airports. Gates are operated by facial recognition technology that compares travellers' faces to photographs on passport chips.

## **US**

President Obama announced new initiatives to significantly increase travel and tourism in the US, such as improving secure visa processing, simplifying visa processing for low-risk individuals and expanding the Global Entry Trusted Traveller Programme.

## **St. Kitts and Nevis**

New ePassports, which started being issued 5 January 2012, contain biometric data and other improved security features to prevent fraud and identity theft, said Ministry of Foreign Affairs, Homeland Security, Labour and Social Security.

## **Brazil**

Regional Seminar on MRTDs, Biometrics and Border Security 17–19 April in Rio de Janeiro will focus on ePassports, including advantages and challenges of using biometric data in travel documents, implementing and reading ePassports, technical specifications and procurement issues.

## e-PASSPORT AND BIOMETRICS STATISTICS\*

- > Approximately **345,039,000 ePassports** have been issued with 339,976,000 ePassports in circulation
- > **93 States** issue ePassports
- > **56 States** use **biometrics** as part of border management
- > **45 States** use **faces and fingerprints** as the stored biometrics
- > **35 States** use **facial images** as the stored biometric
- > **21 additional States** plan to issue ePassports within the **next 12 to 48 months**
- > **15 States** currently use an **Automated Border Control (ABC) system** with ePassport as the required token
- > **14 States** currently using **facial images** plan to begin including fingerprints

### Armenia

ePassports and eID cards were delivered in first quarter 2012. Over the next five years, 300,000 biometric passports with fingerprint and photographic data will be issued.

### Saudi Arabia

To improve border security, new measures, such as equipping border guards with radar, cameras and marine sensors that detect ships, were announced. Almost complete is installation of the northern border security fence. Installation of the southern border fence will include equipment like multiple task radars, visual cameras, laser search machines, marine sensors.

### Sri Lanka

From 1 January 2012, short-term visitors and transit passengers to Sri Lanka must apply online for an eVisa after the visa on arrival facility was closed for all but two countries.

### Indonesia

Indonesia started issuing new ePassports. Ministry of Justice and Human Rights stressed importance of biometric data in chips to prevent identity fraud.

### New Zealand

New Zealand Customs and IBM inked a deal to implement a Joint Border Management System (JBMS) that will improve border processing for traders and travellers and make border agencies more efficient.

# A COMPREHENSIVE APPROACH TO AVIATION SECURITY INCIDENTS



## PHILIP BAUM

Philip Baum is Managing Director of Green Light Ltd., a London-based aviation security training and consultancy company ([www.avsec.com](http://www.avsec.com)) that specializes in Hijacker and Disruptive Passenger Management courses and the delivery of Passenger Profiling solutions. Also the Editor of Aviation Security International, he has interviewed persons from government ministers to hijackers (including Leila Khaled) and comments on security issues for CNN, Sky News and BBC. He is an IATA accredited security instructor and has developed IATA's in-flight security programmes. In January 2010, he appeared as an expert witness before the UK's House of Commons Home Affairs Inquiry into Airport Security.

✈ In this adaptation of the presentation he gave at the Seventh MRTD Symposium, Philip Baum outlines the history of attacks against aviation, highlights the 12 most significant security breaches since 11 September 2001 and recommends measures that should be taken to counter any future threats to the industry. Baum is Managing Director of Green Light Ltd., the London-based aviation security training and consultancy company.

Last year was not only the 10<sup>th</sup> anniversary of 9/11 but also the 80<sup>th</sup> anniversary of the very first attack against civil aviation. This event occurred in February 1931 in Peru when Capt. Byron Rickards became the first pilot to be hijacked. He was also the first pilot to be hijacked twice, suffering a similar fate a few years later.

Approximately 30 years later, a series of Cuban hijack incidents occurred in the late 1950s and the 1960s. As a result, US airports started to introduce metal detection technology for screening individuals and X-ray for inspecting their carry-on items. By the late 1960s, in the aftermath of the hijacking of an El Al airliner in Europe, such screening became the norm for international flights in many parts of the world. After the sabotage of Air India 182 and Pan Am 103, in 1985 and 1988 respectively, hold baggage screening was introduced—an interesting measure given that luggage loaded onto the Pan Am flight had already been X-rayed!

Then on 11 September 2001, four aircraft were hijacked by suicidal individuals and used as weapons of mass destruction to target New York and Washington, DC.

After that event, cockpit doors were reinforced and locked. In addition, because the terrorists had used box cutters in the attacks, 'sharps' were banned from carry-on luggage. ICAO issued a list of prohibited items, such as knives, screwdrivers, metal cutlery, that was intended to provide guidance only. It was left up to individual States to establish their own prohibited items list.

## THE 12 MOST SIGNIFICANT EVENTS POST 9/11

Since that fateful day in September 2001, there have been, what I consider, 12 significant AVSEC incidents and one major plot.

### *22 December 2001, American Airlines, Paris–Miami*

Richard Colvin Reid, known as the shoe bomber, hid explosives in his shoes, which he tried unsuccessfully to light with a match. Fortunately the device did not detonate. As a result, in the US and in many other countries, travellers have to remove their shoes at security checkpoints so they can be X-rayed.

### *7 May 2002, China Northern Airlines, Beijing–Dalian*

Zhang Pilin ignited gasoline in the passenger cabin, causing the airplane to crash, killing all passengers and crew. On the day of travel, Pilin had purchased seven insurance policies totalling US\$170,000 and, even though he was reported to have been behaving strangely at both airports, aviation security failed that day as nobody intercepted or dealt with him.

*28 November 2002, Arkia Israel Airlines, Mombasa–Tel Aviv*

Two surface-to-air missiles were launched at an aircraft shortly after take-off. Fortunately the missiles were fired too close to the airplane to lock onto its engines. As a result, there were discussions about deploying directional infrared counter measures (DIRCM) on board aircraft. This system protects the plane from heat-seeking missiles but it was considered too expensive to install on all commercial aircraft.

*29 May 2003, Qantas, Melbourne–Launceston*

David Mark Robinson stabbed two crew members with wooden stakes in an attempt to get into the flight deck. He wanted to crash the plane into the Walls of Jerusalem National Park in Tasmania to give the passengers and the aircraft as a present to the devil, who he believed lives there. Robinson understood the limitations of archway metal detectors inasmuch as they can only detect metal. Wooden stakes, however sharp, like glass and ceramic weapons, let alone explosives, were undetectable.

*24 August 2004, Moscow Domodedovo Airport, Russia*

Two flights were destroyed within three minutes of each other, killing everybody on board. Both airplanes had departed from Moscow's Domodedovo Airport. The bombers were Chechen 'black widows' who had boarded the aircraft at the last moment after paying bribes at the airport. They were identified as behaving strangely

before they boarded. Despite the significance of this attack, there was no global change in aviation security policy.

*29 September 2004, Kato Airlines, Narvik–Bodo*

Shortly before the airplane landed in Bodo, a man charged into the cockpit with an axe and attacked the captain and first officer. He was facing deportation from Norway and this attack was a suicide bid. Few people in the industry are even aware of this incident because it was a domestic flight operating in the north of Norway and, consequently, there was no international change in policy. In Norway, however, screening began for passengers boarding domestic flights the very next day.

*10 August 2006, UK*

The intention of this terrorist plot was to detonate liquid explosives on board at least 10 aircraft travelling from the UK to the United States and Canada. Fortunately the British security services discovered the plot and foiled it. Limitations were instituted on carry-on baggage and bans and limitations were introduced on liquids, aerosols and gels—described as being the 'new threat'. But liquid explosives were not new. In 1987, Korean Airlines Flight 858 was destroyed using liquid explosives. In 1994 as a test for the Bojinka plot, Ramzi Yousef utilized an 'X-ray-proof' bomb, using nitro-glycerine as the main charge, on a Philippine Airlines flight. Even back in 1933, in the first confirmed attack of aerial sabotage, a United Airlines flight was downed using nitro-glycerine.

# NEW GENERATIONS OF TECHNOLOGY AND SOLUTIONS



Take advantage of the latest in government ID management technology. Implement a central citizen and document register containing all personal and biometric data as well as complete document life cycle information to enable secure enrollment and identification of citizens.

Leverage your investment in ID issuance infrastructure to fulfill all your ID solution requirements (ID cards, ePassports, driver's licenses, voter registration card, census and more). Increase security with the latest ID verification applications to connect border and police control stations to national and international biometric databases and blacklists. Introduce intelligent government ID management with Mühlbauer SECURITY turnkey solutions. Apply Mühlbauer's latest smart eID chip applet and middleware for your comprehensive eID and eGovernment projects. We have performed hundreds of government ID projects worldwide and we have the knowledge and experience to help you enter the world of smart government ID.

[www.muehlbauer.de/solutions](http://www.muehlbauer.de/solutions)



*3 October 2006, Turkish Airlines, Tirana–Istanbul*

Hakan Ekinci hijacked a plane because he wanted to speak to the Pope about asylum in Italy. He didn't want to serve in the Turkish army and was facing deportation from Albania back to Turkey. He had no weapons, he had no explosives. Fortunately the crew managed the incident reasonably well and the plane landed safely in Italy.

*30 June 2007, Glasgow Airport, Scotland*

A Jeep Cherokee loaded with propane canisters was driven into the doors of Glasgow International Airport and exploded on impact. Security bollards outside the entrance stopped the car from entering the terminal. Luck again played a part in this incident in that the terrorists did not get the right angle of entry into the airport. Had the vehicle managed to get through the doors, the death toll could have been considerably higher. There was no real global change in policy, although there were discussions about placing barriers or bollards outside of airports.

*7 March 2008, China Southern Airlines, Urumqi–Beijing*

In this incident, Guzalınur Turdi attempted to set off an improvised incendiary device—soft drinks cans filled with gasoline—on board the aircraft. Fortunately, the air crew realized something was wrong when they smelled petrol and she was overpowered.

*25 December 2009, Northwest Airlines, Amsterdam–Detroit*

Umar Farouk Abdulmutallab concealed plastic explosives in his underwear and tried to detonate them. There was an explosion and fire, but fortunately the device did not function as intended. As a result of the incident, the installation of advanced imaging

technology (body scanners) increased in major US airports and in many airports in Europe. These scanners, predominantly using backscatter X-ray or millimetre wave imaging technologies, have a greater chance of identifying concealments made beneath clothing, but they cannot see through bodies. This latter type of imaging system, known as transmission X-ray, is in use by customs organizations in many parts of the world.

*29 October 2010, UK and UAE Cargo Bombs*

As a result of intelligence received from Saudi Arabia, improvised explosive devices were found in two packages en route from Yemen to the United States. The bombs were discovered in transit facilities in the UK and Dubai. British explosive experts searched the package at East Midlands Airport with explosives detection equipment and sniffer dogs but no explosives were found. The package was cleared. Meanwhile, in Dubai, a bomb was found in a computer printer cartridge in the second package. This package had been transported on two passenger flights before arriving in Dubai. The package in the UK was, based on the intelligence received from Dubai, re-examined and the bomb was found.

As a result, many regulators started talking about the need for X-ray examination of cargo. This was somewhat strange given that, even with specific intelligence about the possibility of a bomb in the East Midlands package, X-ray had failed to reveal the device. Furthermore X-ray has yet to detect an improvised explosive device being loaded onto a flight in the baggage compartment, let alone cargo with the greater challenges of size and density that poses.

*24 January 2011, Moscow Domodedovo Airport, Russia, Suicide Bomb*

A suicide bomb attack occurred in the international arrivals hall of Domodedovo Airport, Moscow's busiest airport. Magomed Yevloyev concealed an explosive device under his coat and passed through a security checkpoint at the terminal entrance. Again, the system failed and 37 people were killed and hundreds injured.

### COMMON THEME

Aside from the tragic incidents in China and Russia, generally luck has been on our side since 11 September 2001. Luck and the heroic efforts of air crew who have often been the people saving the day. There is, however, one common theme: airport security did not prevent these attacks, despite the billions of dollars spent on checkpoints. That is not to say checkpoints are a waste of time as their deterrent effect may be significant. However, we cannot continue to rely on 'luck'. We must find a way to prevent incidents on the ground rather than rely on the crew to do so in the skies.

There is another common theme. I have indicated that, after most of the post 9/11 attacks, there was no global change in aviation security regulation. Policy did change, however, after 9/11 itself, after Richard Reid, after the liquid explosive plot and after the Christmas Day bombing—all incidents that

affected the US. Indeed, the only time global policy has changed, or our modus operandi has been altered, has been when flights to, from or in the United States were the target. When airplanes were the target in Asia, Australasia, Africa or in Europe, the status quo was maintained. The industry needs to remember—I don't need to remind ICAO—that this is a global industry.

The industry must think about how the money is being invested and if the money is being spent wisely. Is technology the solution? In part, yes. But vast sums are going towards funding technology that has yet to be proven effective in an operational environment. Meanwhile, we keep hearing about the importance of human factors but, in comparison to the investment in technology, there has been very limited investment in the people who will really make the difference between success and failure.

### THE FUTURE

The industry must consider the possibility of future threats, such as a chemical or biological weapons attack. Recently, there has been a lot of online chatter about a cyber-attack against the aviation system. I receive reports almost every week about people working in airports who are involved in criminal activity. Think back to 2001, to the anthrax attacks in the United States. It is believed that insiders with access to the anthrax were responsible for those attacks. The insider threat is very real, yet not taken seriously.

The industry has to face the fact that in the same way drug traffickers smuggle things internally in their bodies so might terrorists. Prisons are regarded as one of most highly secure environments where customer service is not a priority and where rigorous inspections are made of those who enter. Yet speak to a prison governor and he will tell you what people manage to smuggle into prisons on a daily basis. Airports are child's play in comparison.

And let's not forget about the unruly passengers who pose a daily challenge to the industry. They will not be detected on the basis of their travel documents and will, one day, be the cause of the loss of an aircraft.

### CHECKPOINT OF THE FUTURE

I welcome the international move towards the Checkpoint of the Future, which is designed to differentiate between types of passengers based on what governments know of them. But the industry cannot rely 100 per cent on the checkpoint, even the Checkpoint of the Future, unless it starts to look at behaviour.

The Checkpoint of the Future will divide people up into three categories: a high security lane, regular lanes and a trusted traveller lane for people deemed trusted on the basis of government checks (rather than on membership in frequent flyer programmes). But the industry needs to ensure that added to that process is a live passenger risk assessment, based on an

analysis of behaviour, appearance and luggage and, when necessary, closer scrutiny of travel documents. Ultimately decisions must be made based on what threat the passenger is perceived to pose on the day he or she is travelling. Travel document information, collected at the front end must be fed through to the people working at security checkpoints. At the moment, screeners are working blind.

### FUTURE SYSTEMS

As to the future, the industry needs a system that is unpredictable, a system that works everywhere around the globe, a system that addresses future threats as well as those of yesterday or even just yesterday. The technology needs to be common sense-based, red teamed or tested regularly and there must be zero tolerance for failure.

There are places around the world where people are drilled and they fail and they are re-drilled and they fail and they are re-drilled again and they fail again. And somehow they keep their jobs! The industry must enforce a zero tolerance environment for personnel working at the checkpoints and they must employ people of higher calibre because ultimately it's a human problem. People are the problem not their bags.

### PROFILING

In most of the 12 significant AVSEC incidents I highlighted, profiling might have saved the day. Richard Reid was identified by profiling, China Northern's Zhang Pilin was identified by profiling, the Russian bombers were identified as behaving strangely, in Norway the attacker was talked about before flight departure and even Abdulmutallab's father had reported him. In most of these cases, there was pre-existing passenger data that could have helped. But that data never reached the security checkpoint.

In the case of David Mark Robinson, he had actually tried to enter the flight deck of an aircraft that departed Hobart, Tasmania only four months beforehand. Had the screeners known that before the Qantas flight departed for Launceston perhaps he might have been denied boarding?

On the day before the 10<sup>th</sup> anniversary of 9/11, I was down at Ground Zero in New York. I found it to be a very emotional experience as I met with survivors and family members of those who passed away. In a memorial display was a letter a little girl had posted near the ruins of the World Trade Center in the aftermath of the tragedy. It read:

*Dear Mom. Hi. How are you? I am fine. I am writing this letter to tell you that I am going to wash the dishes tonight. OK? We'll see you later. Love ya. Love your loving, devoted, caring, thoughtful, sincere, kind kid, Jooli.*

Somehow that message from a little girl whose mummy wasn't going to come home said it all. The tragedy was a human story. And the industry needs a human response. ■



Barry J. Kefauver, *ISO Representative*

## MANAGING RISKS AND STRENGTHENING PARTNERSHIPS

✈ The following are the closing remarks of Barry J. Kefauver as presented at the Seventh ICAO Symposium on MRTDs, Biometrics and Security Standards. Reflecting upon the lessons of the 10<sup>th</sup> anniversary of 9/11, Kefauver stressed that the role, relevance and mandate of the MRTD Programme needs sharpened clarity as the evolution of machine readable travel documents is at a crossroads and, moving forward, partnering relationships must be strengthened and renewed to tackle the global nature of the myriad issues facing the travel document community.

The summary of last year's Symposium observed that the focus and content were different from the preceding five symposia. Again, this Seventh Symposium has a much different shape, form and meaning. Last year's format was essentially to look out over the next decade or so and develop a sense of purpose and direction and especially grapple with the needs of governments in the travel document and border control and security arenas.

This year, the primary sum total of the four days of presentations and discussions went towards conceptual anticipation and introspection, seeking a clearer sense of vision in a global frame. These important foundation-building deliberations were well leavened with presentations of technical, operational and how-to-do-it nature.

The 10<sup>th</sup> anniversary of the tragic events of 11 September 2001 provided a very tangible and sobering point of departure that the Symposium met with reflection and expectation. This compelling backdrop of graphic reality brought together as never before the Symposium's thrusts of vision and pragmatics.

With that as an introductory perspective, I will comment on and pull together some of these component pieces and draw them into a cohesive whole. That whole in its entirety looks out over

the coming years in shaping and defining the global role, nature and purposes of machine readable travel documents.

### SUMMARY OF SYMPOSIUM

These past four days have been filled with many issues, concerns, successes, failures, needs and realities, harking back to the past revolving around both before and after 11 September 2001, with the emphasis on lessons learned. And applying those lessons learned to chart the future.

This Symposium, in my view, has posed a challenge to 'summarize'. Usually the presentations and discussions will aggregate themselves into several identifiable themes. This Symposium has covered a wide swath of the past as well as a broad view of the future. While the information shared has many complexions, I will cite what I consider to have been the Symposium's seven recurring threads of emphasis.

First, I will single out the **Workshops** because their intent and content are quite different from the overall Symposium and need to be 'summarized' separately. Both of these formats were driven by the expressed needs of Member States and the content of each was specifically developed to meet those expressed needs. Something I would characterize as capacity-building information in its broadest context.

*Principled*

*Trust*

*Honesty*

*Integrity*

*Independence*

*Reason*

**Principled Secure Solutions Since 1897**

**cbn**  
CANADIAN  
BANK NOTE  
COMPANY, LIMITED

More than 80 nations have engaged CBN as their partner for:

- Travel Documents
- National ID
- Driver Licences
- Civil Registry Documents
- Document Issuing Systems
- Border Management
- Travel Document Readers

Through a consultative approach, we develop and deliver tailored solutions that address the unique challenges encountered by our customers.

[www.cbnco.com](http://www.cbnco.com)  
[identification@cbnco.com](mailto:identification@cbnco.com)



Participants to the Seventh MRTD Symposium.

The procurement Workshop focused on one of the most complicated and difficult areas of deploying machine readable travel document issuance programmes as well as meeting the tendering needs of the border management and control communities. The statement of requirements as captured in a tender or RFP is extremely important in defining the technical and operational end requirements for a successful MRTD Programme. This sets the stage for the technical foundations on which the programme will reside. Done properly, savings in terms of costs as well as time can be substantial.

Conversely, sometimes fatal flaws in this threshold tendering can ruin a well-intentioned procurement. This Workshop was filled with advice and best practices that deserve to be captured in an official ICAO guidance document.

The Workshop that focused on Public Key Infrastructure (PKI) and Public Key Directory (PKD) brought together in one morning's presentations all of the urgent messages of the why and how of the PKD. In my view, one of the most arcane areas of eTravel document foundations, these PKD and PKI matters are finally being recognized as quintessential components of a well-structured programme. This Workshop provided also an extremely clear and easily understood statement of procedure for joining the PKD. Again, as in the other Workshop, this material needs to be codified into a PKD roadmap manual.

*Second*, as it was at last year's Symposium, this year the very clear and increasingly urgent need is to **use the electronic verification and integrity tools**, in particular PKI and PKD, that we have expended so much energy, time and money incorporating into the ePassports. Unless and until they are, the full return on the ePassport investments will not be realized, and, of perhaps greater concern, the use of the inadequately inspected document will yield a dangerous

and false sense of credibility and security. With more than 350 million of these documents in circulation and growing each day, the Symposium in terms of several speakers strongly emphasized that the "e" of ePassport become an upper case letter in our border management vocabulary.

*Third*, over the decade since the tragic 9/11 events, the travel document community has increasingly called upon **partnerships** in order to meet the broadened and relentlessly resource-intensive global demands. The ICAO MRTD Programme is no stranger to the use of partnering in order to reach common goals. For years before and after 9/11, the development and maintenance of Document 9303 has demanded and received the unabiding commitments of governments and the ISO private sector in what has been recognized as a model for government and industry joint endeavours.

However, in the past decade, the forging of cooperative activities has been perhaps the single most important factor in even hoping to meet the demands of the burgeoned global needs of travel documents and both the security as well as the facilitation of the travelling public. While these demands have multiplied, the resources to carry them out have diminished. These partnering relationships must be strengthened and renewed if we are going to be able to meet what must be met in order to accomplish our goals.

We have had some success in partnering to accomplish some of the capacity-building needs that have arisen. Speakers, particularly on the first day, made clear that no nation or single entity alone can possibly address the worldwide challenges that we face. The call from this Symposium was loud and clear that more effective common purpose joint efforts must be the means for us to reach our end results.

*Fourth*, and related to but different from the above emphasis on partnership, the Symposium also spoke strongly to the critical need for **cooperation**. I distinguish this from partnership because as enunciated by this Symposium, cooperation transcends specific activities and goes to a number of programmes and conduct of a continuing and even daily nature.

Several speakers made clear that the threat from many fronts, including terrorism, knows no national or geographic boundaries. The events of 9/11 finally began to open our eyes to such global vulnerabilities and the substance of this year's Symposium only demonstrates that the reach of threats has increased in scope and depth over those intervening years.

Certainly not new, as one speaker acknowledged, the 80<sup>th</sup> anniversary of the first aircraft hijack, the changing face of terrorism, the crucial concern for anticipation rather than reaction and the corollary requirement for information and data sharing are among the most identifiable factors. One speaker

called for all of civil society to become involved materially. One of the more alluring aspects of this Symposium element is that we, in this room, can contribute to go a long way towards this enhanced global cooperation.

*Fifth*, and admitting difficulty deriving a label for this set of themes, I generalize as the **global** nature of the myriad issues facing the travel document community which, by definition, cut across all of the thematic lines of the Symposium content. However, the pervasive nature of this factor and the differing ways in which the speakers noted its importance requires that I single this out as a separate and identifiable Symposium message.

Especially evident in addressing the need for capacity-building, it is clear that the countries of greatest concern are among the most vulnerable and, at the same time, least equipped to deal with what needs to be done. We also need to always keep in mind that it is these same countries that are not able to avail themselves of the round tables of expertise such as NTWG, ICBWG or this Symposium. It is clear from presentations at this Symposium that the global interconnectivities that have always been with us are now at new heights of importance. Resources are always scarce, but we must use what we have as wisely as possible; we must even more carefully choose the highest priorities, but only after having clearly defined our most urgent goals.

*Sixth*, and something of a new and compelling theme for this forum of the Symposium, **risk-based management and decision-making concepts** offer us more effective ways forward to deal with the geometric increases in complexity of identity management and border security. We no longer can simply address every traveller in every context using all of the same ways. Our procedures, processes, technologies and human staff must be tempered by a realistic and comprehensive identification of risk, threat and vulnerability.

We then must objectively assess the potential injury that each of those entails and the probability that such potential could be realized. Only then can we have a framework to anticipate threat and determine the right kinds of responses that will diminish or eliminate harmful results.

These concepts have obvious application in border passenger and cargo screening, but also not-so-obvious association with other MRTD-related activities such as issuance integrity and evidence of identity—the latter often colloquially referred to as 'breeder documents'.

How much vulnerability is associated with accepting a birth certificate as evidence of identity without cross checking the source of issuance of that document? What other risks lie

## CITIZENS DEPEND ON GOVERNMENTS FOR SERVICES AND PROTECTION FROM RISK.

## GOVERNMENTS DEPEND ON DATACARD GROUP FOR THE SAME THING.

SECURE  
ISSUANCE  
ANYWHERE

Safeguarding citizens from risk and providing critical services is priority one for governments worldwide. Datacard Group's priority is to help governments serve their citizens while protecting their programs from cost overruns, security issues and missed deadlines. You get the advice of experts, reliable Datacard® solutions and local, professional support. And our Secure Issuance Anywhere™ platform gives you the

flexibility to issue secure credentials anytime, anywhere through central or distributed issuance. More than 400 secure ID programs in over 100 countries trust Datacard Group. **Find out why at [datacard.com/gov](http://datacard.com/gov)**



DatacardGroup

# In this maelstrom of unknowns and uncertainties, one galvanic constant feeds our cohesion and nurtures our resolve to move forward: ICAO is that centre of the travel document universe.

sequentially in using that identity document for other purposes such as opening a bank account? The answer is, "It depends." And knowing those dependencies so that sound situationally appropriate judgments can be reached comes through risk management.

Finally, *seventh*, a common thread that I heard woven throughout the fabric of the Symposium revolved around the observation that the ICAO MRTD Programme is, using the word from the Symposium, at a **crossroads**. Perhaps, somewhat stung by having, over the past decade, accomplished so much with so little, the demands and consequent expectations on the MRTD resources in ICAO have never been greater. Nor have the opportunities to make significant change ever been greater. Within ICAO's overarching institutional aviation security and safety reasons for being, the fit, role, relevance and mandate of the MRTD Programme needs sharpened clarity to insure full understanding and appreciation of the potential of this very visible constituency-building program.

Throughout the Symposium, but especially in the afternoon of the first day when senior ICAO officials spoke, the work of the MRTD Programme has been applauded and acknowledged as important and much needed. As Symposia usually do, we heard the observation that we have done much, but so much more remains yet to be done. True. But this year, among other senior officials, I heard Secretary General Benjamin pledge his full personal support and commitment to getting this work that remains done. What is the key tangible index of this commitment? Secretary General Benjamin said his intention is to make the MRTD Programme a part of the regular ICAO budget. Subsequent speakers have all expressed commitment such that his trust and confidence will be fulfilled.

## LOOKING TOWARDS THE 20<sup>th</sup> ANNIVERSARY OF 9/11

Just as the 10<sup>th</sup> anniversary of 9/11 has been an occasion for us all to take personal stock and reflect on our own priorities, challenges, frailties, strengths and hopes for the coming years, so is it a time for us of the travel document community to do the same thing. I would characterize this Symposium in its totality as the frame in which the substance of our canvas can begin to be painted.

There have been alternative avenues presented to the MRTD Programme in the past. Choosing to incorporate biometrics into passports entailed great risk; storing that data on a contactless chip in a paper document made that risk greater by magnitudes. The risks were weighed in terms of the anticipated benefits and the fact that we have over 350 million chip-based biometric passports in circulation bears witness to the veracity of those decisions.

Now we are at another important phase of the MRTD evolution, referred to in this Symposium as a crossroad. The future abounds with unknowns. Before 9/11, after 9/11 and likely for all time, we have faced and will face uncertainties and dilemmas. But as long as we face them together, as we have in the past, we will prevail.

In this maelstrom of unknowns and uncertainties, one galvanic constant feeds our cohesion and nurtures our resolve to move forward: ICAO is that centre of the travel document universe. We have had challenges in the past and we know we will have more yet to come. We have taken risks in the past and we will have to take more. We have fought for needed resources over the years and we must continue to fight harder. We have argued stridently among ourselves and we have found common ground in order to move forward together with singularity of purpose and direction. Let us resolve that this Seventh Symposium ushers in renewed cooperation and unparalleled accomplishment. I thank all of you for your time and attention throughout the Symposium and I look forward to our next steps. ■





# SHARING BEST PRACTICES ON MRTDS, BIOMETRICS AND BORDER SECURITY

✈ The evolving aviation security debate has recently moved beyond passenger screening to take into account border security matters such as identity management, inter-agency cooperation, data sharing and combatting identity fraud. These new approaches were triggered in part by the failed Northwest Airlines bombing plot on 25 December 2010 that highlighted the need to identify and stop perpetrators before they engage in attacks against aviation.

The ICAO Declaration on Aviation Security, unanimously adopted at the ICAO 37<sup>th</sup> Assembly, places particular emphasis on the collection, analysis and timely sharing of information and urges States to share best practices in areas such as travel document security, fraud detection and effective border controls.

As a result, ICAO held three Regional Events on Machine Readable Travel Documents (MRTD), Biometrics and Border Security in Singapore, Mexico City and Qatar in 2011. The events were designed to promote the ICAO security standards, specifications and best practices for the issuance and use of MRTDs and biometrics and identify MRTD-related gaps in the region for future capacity-building and assistance planning. The events also promoted MRTD and eMRTD standards and specification compliance and participation in the ICAO Public Key Directory (PKD).

## FOCUS ON SINGAPORE

Hosted by the Civil Aviation Authority of Singapore, ICAO held a three-day Regional Seminar on MRTD, Biometrics and Security Standards at the end of November in Singapore. The Seminar was the first MRTD event organized in the Asia-Pacific Region.

Over 130 government officials from 35 States attended the Seminar. Most participants were from Asia but also from Africa, South America and the Middle East. These participating officials represented passport and immigration offices, police and border guards, ministries of interior and foreign affairs, airport authorities, airlines and embassy staff.

Highlighting ICAO's leadership in MRTD and biometrics, the Seminar provided expertise and technical guidance on MRTD standards and specifications and related border security matters. Being the sole UN agency in charge of the development and maintenance of standards and specifications for the issuance of travel documents, ICAO assists States in promoting an inter-agency and cross-border dialogue on issues related to MRTD, identity management, security and border control. The ICAO Regional Office in Bangkok will continue playing a preponderant role in providing the assistance required.

In regard to the importance of participating in the ICAO PKD, a specialized workshop was devoted to the policy and technical aspects of the PKD, its central role in ensuring the security of ePassports and the practicalities of participating in the PKD.

Participation from the Implementation and Capacity-Building Working Group (ICBWG) Chair, experts from the Technical Advisory Group on MRTD (TAG/MRTD), the PKD Board and partner organizations provided appropriate advocacy, expertise and ICAO leadership.



Attentive listeners at the Singapore Regional Seminar, which provided expertise and technical guidance on MRTD standards and specifications and related border security matters.

Bilateral meetings promoting ICAO assistance and possible technical cooperation projects were held with several State representatives from Iran, the International Organization for Migration (IOM) Mission in Timor-Leste, the Ivory Coast, Argentina and Ecuador. Complementing the Seminar were eight exhibitors who highlighted products and services related to MRTD, biometric identification, security applications and border inspections systems.

## FOCUS ON MEXICO

In December, a Workshop was organized in Mexico City by ICAO and the Organization of American States' (OAS) Secretariat of the Inter-American Committee against Terrorism (CITE). Hosted by the Government of Mexico, this Sub-Regional Workshop was the first event implemented under the OAS-CICTE and ICAO joint project, Capacity-Building Travel Document Security and Identity Management in the Americas, funded by the Canadian government. Participants included 32 government officials who represented the national passport issuing offices, civil registries and migration agencies of the Dominican Republic and Mexico.

An official welcome was given by the Minister Counsellor of the Canadian Embassy in Mexico, the Deputy Director General of the Department of Global Matters in Mexico, the Director General of Airports and Auxiliary Services, the OAS representative in Mexico and the ICAO AVSEC Regional Officer.

The Workshop focused on four main areas: travel document security and identity management; assessing security of handling and issuance of travel documents by using the ICAO guide; evidence of identity; and border control. The event also promoted compliance with ICAO Document 9303 in preventing document fraud, terrorism and transnational crime.

In particular, the sessions addressed the issuance of secure MRTDs according to ICAO standards and specifications, the vulnerabilities and challenges in the issuance process and identity management and the technical knowledge and security awareness enhancement of civil registry, migration and passport staff. There was a hands-on



Yap Ong Heng, Director-General, Singapore Civil Aviation Authority, welcomed participants to the Asia-Pacific Region's first Regional Seminar on MRTD, Biometrics and Border Security.

session on using the ICAO Guide and a self-assessment using the Guide for assessing security in the handling and issuance of travel documents. Other topics included the advantages of improving inter-agency cooperation between civil registries, passport, border control and related agencies.

Invited experts led topical and case study presentations and facilitated round table discussions. In addition, participants from Mexico and the Dominican Republic gave presentations on travel document security and identity management in their countries. They highlighted key challenges, capacity gaps, on-going initiatives and best practices.

Participants addressed the need to improve and centralize the information management in their State in order to increase the interoperability and collaboration among national, regional and international agencies. They highlighted the importance for States to work together with international organizations such as INTERPOL, the IOM, the OAS and ICAO and expressed the need for further technical assistance in order to verify and improve compliance with MRTD standards and specifications. This technical assistance is in alignment with the capacity-building work of the ICBWG of the TAG/MRTD.

Opportunities are being explored with the OAS-CICTE on how to intensify MRTD and border security technical assistance and

vocational training in the Americas. Other project activities in early 2012 include a Regional Workshop in Panama and a MRTD assessment in the Dominican Republic.

#### FOCUS ON QATAR

ICAO, with the support of the Government of Qatar and hosted by the Civil Aviation Authority of Qatar, held a three-day Regional Seminar on MRTD, Biometrics and Security Standards at the end of October in Doha. It was the first MRTD event organized in the Middle East Region and in attendance were over 110 government officials from 40 States in Africa and the Middle East.



Ibrahim Abdul Qadir, Qatar Civil Aviation Authority Deputy Chairman and Director of the Air Safety Department, who attended the first MRTD event held in the Middle East Region.

**Entrust** Securing Digital Identities & Information



# < Let's Talk ePassport

**Entrust** is the leader in ePassport PKI

**Standing guard.** Entrust ePassport security solutions are the most scalable, interoperable and proven in the world.

As the global PKI leader, Entrust provides trusted security solutions for first-generation (BAC) & second-generation (EAC) ePassport environments. In fact, Entrust is the No. 1 provider of ePassport security solutions and is leading the migration to the EAC standard.

No matter if you're just beginning development or evolving your ePassport strategy, Entrust is the choice for ePassport security.

Visit [entrust.com/epassport](http://entrust.com/epassport)

Participating agencies included passport and immigration offices, police and border guards, ministries of interior and foreign affairs, airport authorities, airlines and embassies.

The Seminar provided a forum for discussing the development of the 'Arabic Transliteration Rules', which are to be included in Document 9303.

In addition to MRTD specifications, there were numerous presentations on immigration and border control challenges and travel document fraud. Seminar participants also were briefed on the status and progress of the MRTD Programme and the importance of participating in the ICAO PKD.

The Seminar provided information to States in the region on the lessons learned and guidance on the MRTD field of expertise. The event served as a platform to emphasize the fact that complying with ICAO's MRTD standards is tantamount to complying with ICAO standards and UN counter-terrorism resolutions. Expert speakers from the ICBWG, the New Technologies Working Group (NTWG) and partner organizations were crucial in providing appropriate advocacy, expertise and ICAO leadership.

Bilateral meetings were held with authorities from Saudi Arabia, Oman and Qatar to explore the options of ICAO assistance and



ICAO, with the support of the Government of Qatar, held a Regional Seminar on MRTD, Biometrics and Border Security, from left to right: David Philp, Chair ICBWG; Saleh Abdulla Haroon, NCAA Qatar; Mauricio Siciliano, ICAO MRTD Officer; Mohamed Khonji, ICAO Regional Director, Cairo; Ian Gilchrist, NCAA Qatar; Erik Slavenas, ICAO MRTD Officer.

the possibility of new technical cooperation projects. Eleven exhibitors complemented the Seminar, highlighting the products and services related to MRTDs, biometric identification, security applications and border inspections systems. ■



## SHE CAN PLAY MANY ROLES ON STAGE.

But when shopping or closing contracts online she only has one role and one identity. One that she can legally verify at any time – quickly and securely with the help of Bundesdruckerei's electronic ID services. [www.bundesdruckerei.de](http://www.bundesdruckerei.de)



Mark Your Calendar

# MRTD EVENTS 2012

## Eighth Symposium and Exhibition on MRTDs, Biometrics and Security Standards

Montreal, Canada, 10 - 12 October 2012

For information and registration:

[www.icao.int/meetings/mrtd-symposium-2012](http://www.icao.int/meetings/mrtd-symposium-2012)

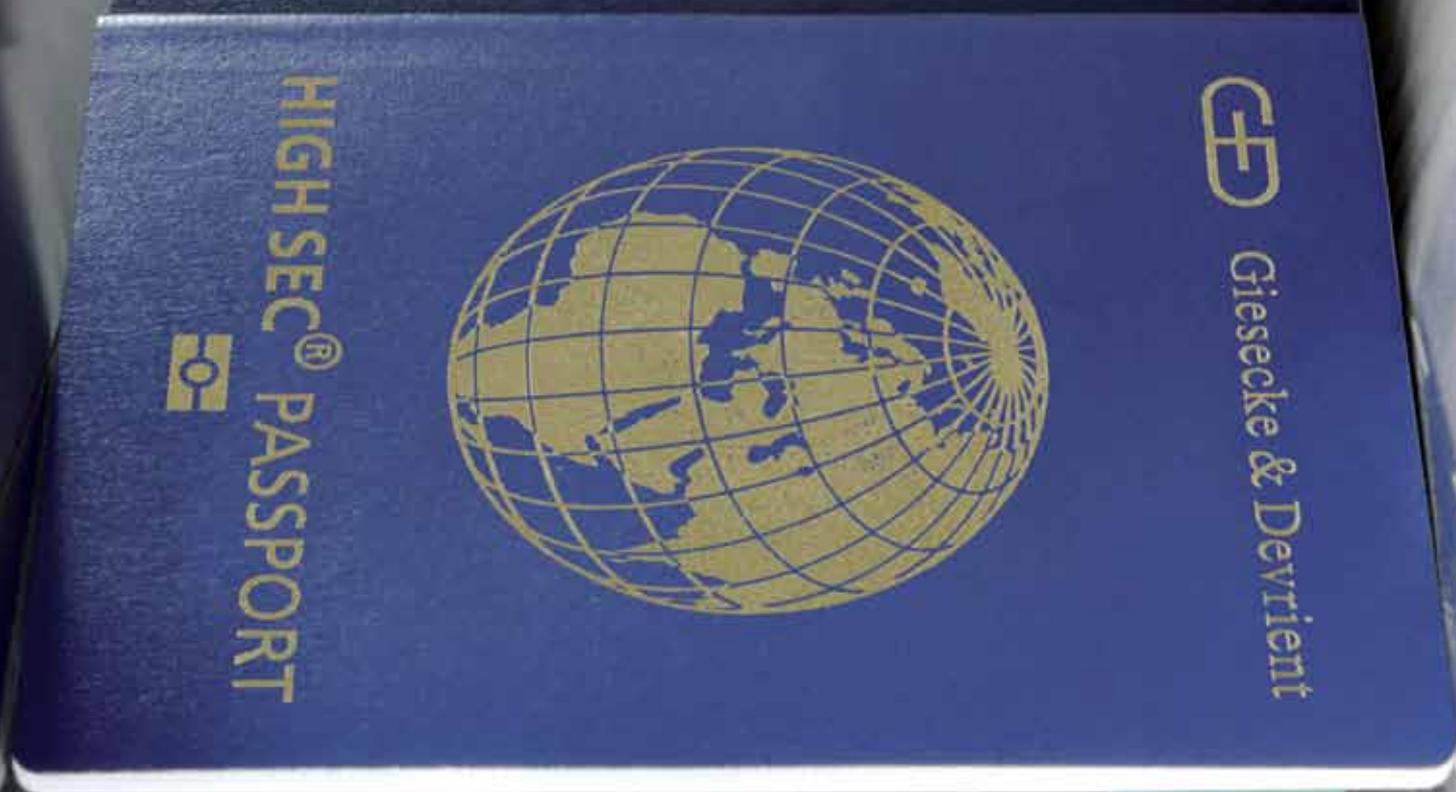
## Regional Seminar on MRTDs, Biometrics and Border Security

Rio de Janeiro, Brazil, 17 - 19 April 2012

For information and registration:

[www.icao.int/Meetings/mrtd-brazil2012](http://www.icao.int/Meetings/mrtd-brazil2012)

Always one step ahead –  
identification systems from G&D



**Creating Confidence.** G&D is a leading company in smart chip-based solutions for secure ID documents and passports, and boasts in-depth experience in the field of high-security documents. We supply entire nations with passport and border control systems, ID card solutions and have become a trusted adviser and supplier to governments. We also provide customized document features, card operating systems and technology for integrating state-of-the-art security features into ID documents. G&D will find the best solution for your individual needs. We define requirements together with you and offer tailor-made, effectively protected products that meet international standards. ID system implementation by G&D – individual, international and secure. [www.gi-de.com](http://www.gi-de.com)



Giesecke & Devrient  
Creating Confidence.